

Corporate Valuation



**MGT335 Corporate Finance
Spring 2020**

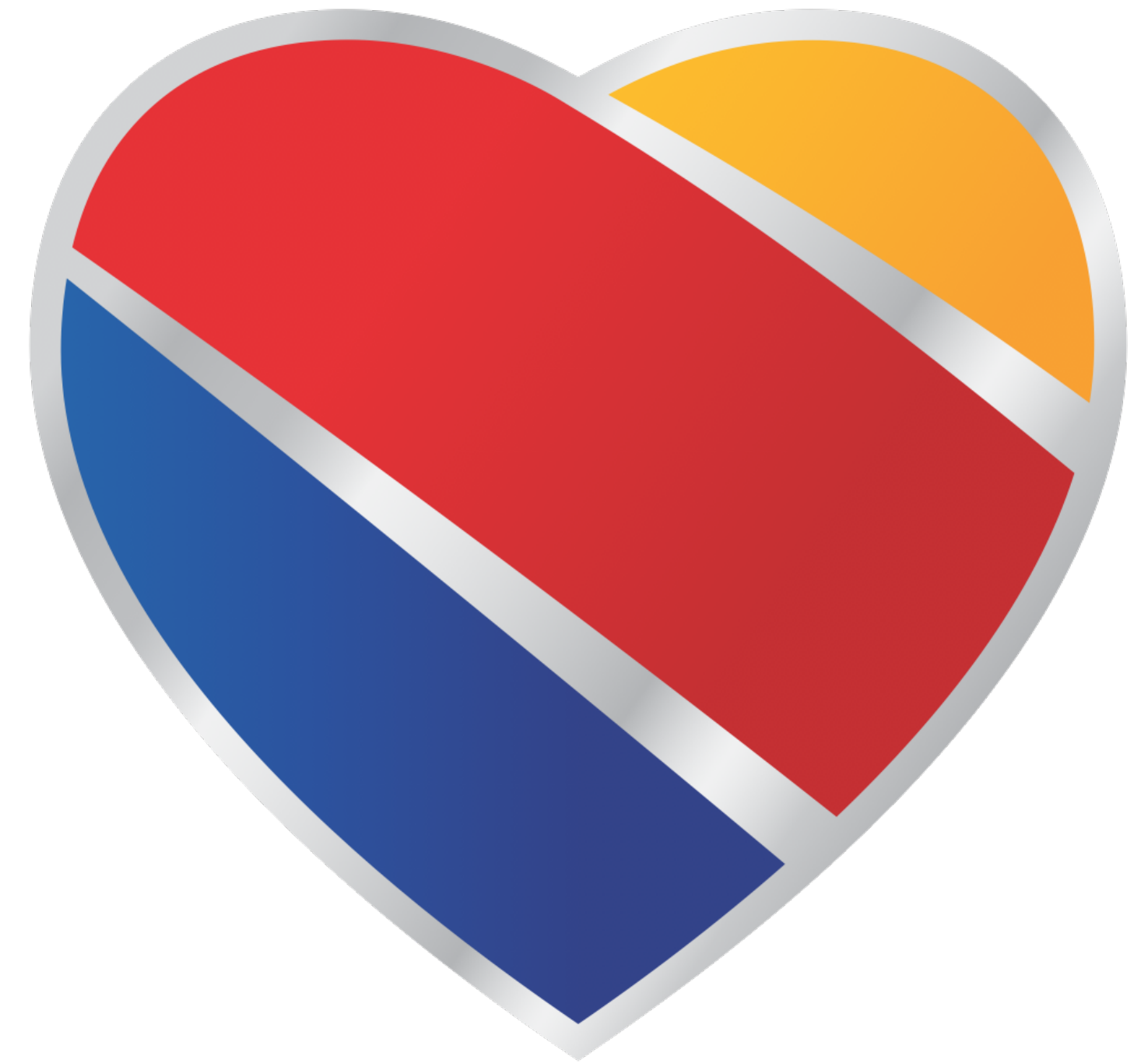
Hayato Ichikawa ,Daniel Pinedo, Jacquelyn Thropay, Rosrena Wong

Recommendation

- Southwest is a low-cost carrier leader
- Capital structure of low leverage, high cash resources, and share repurchases
- Uniquely able to endure the current hardships in the industry within guiding limitations

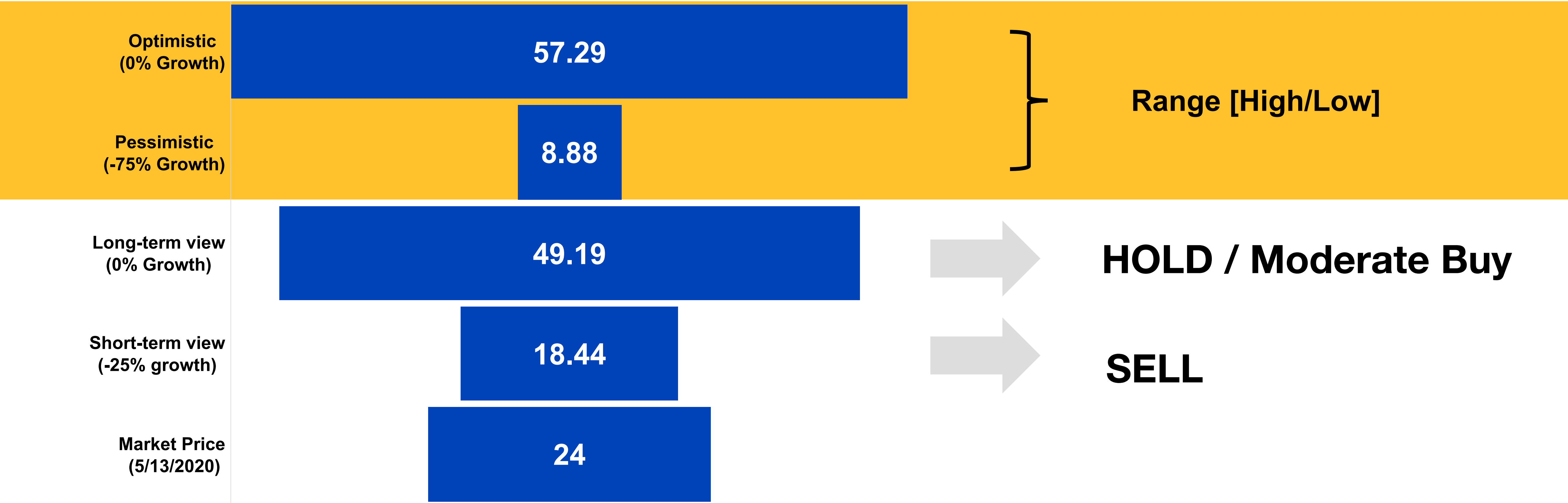
HOLD / Moderate Buy for long-term investors

SELL for short-term investors



Recommendation

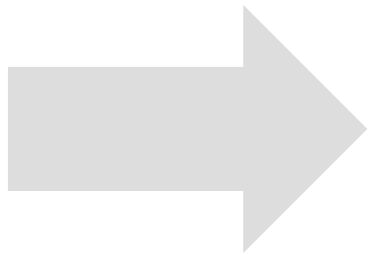
Target Price



Range [High/Low]

Long-term view
(0% Growth)

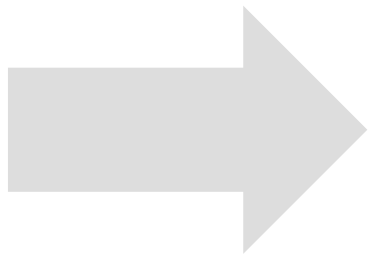
49.19



HOLD / Moderate Buy

Short-term view
(-25% growth)

18.44



SELL

Market Price
(5/13/2020)

24

Company Overview + Business Strategy

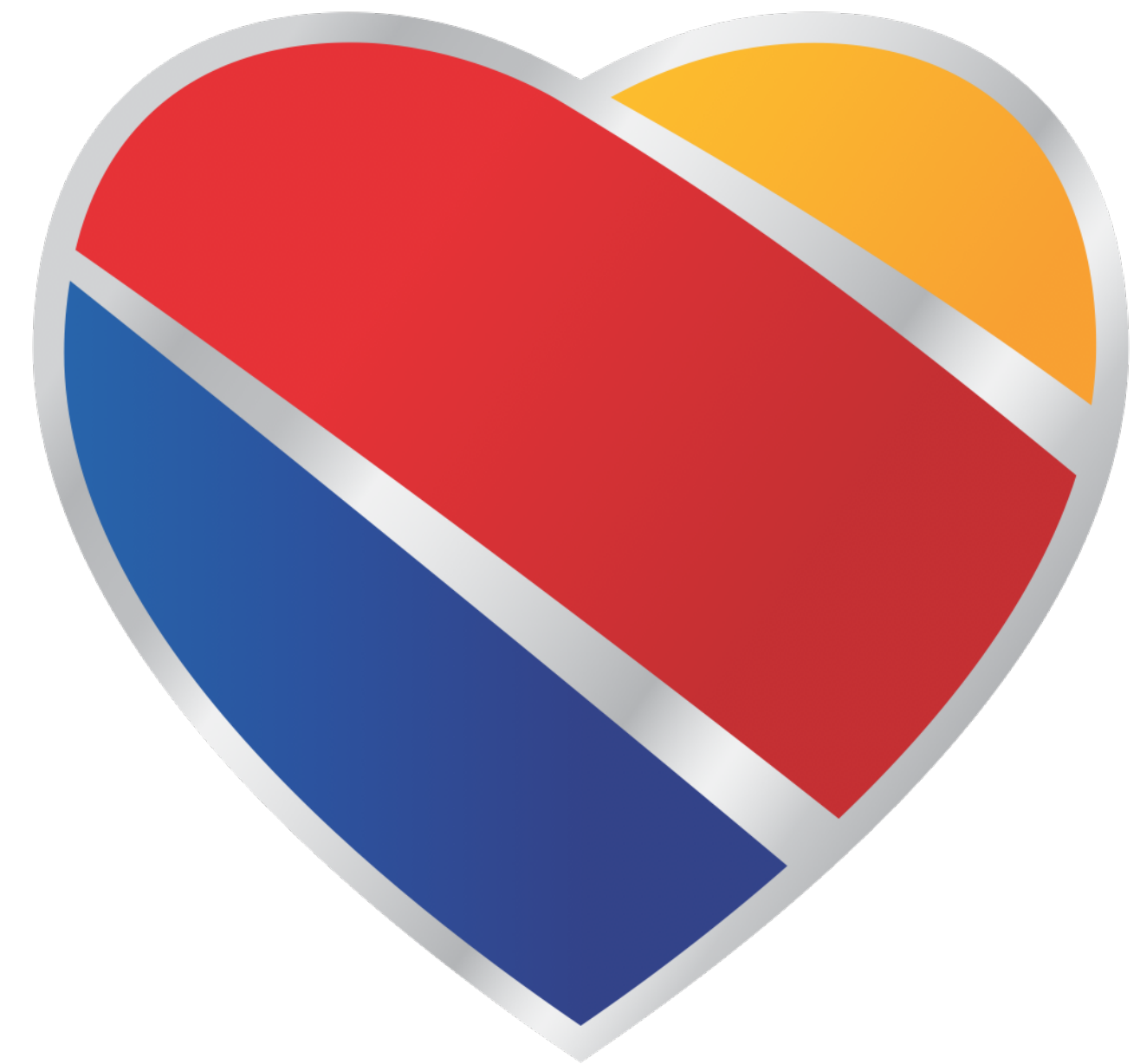


Company Overview

- Nationally base airliner and low-cost provider
- Hit hard by COVID-19 global pandemic
- Their unique strategy continues to serve them during this crisis

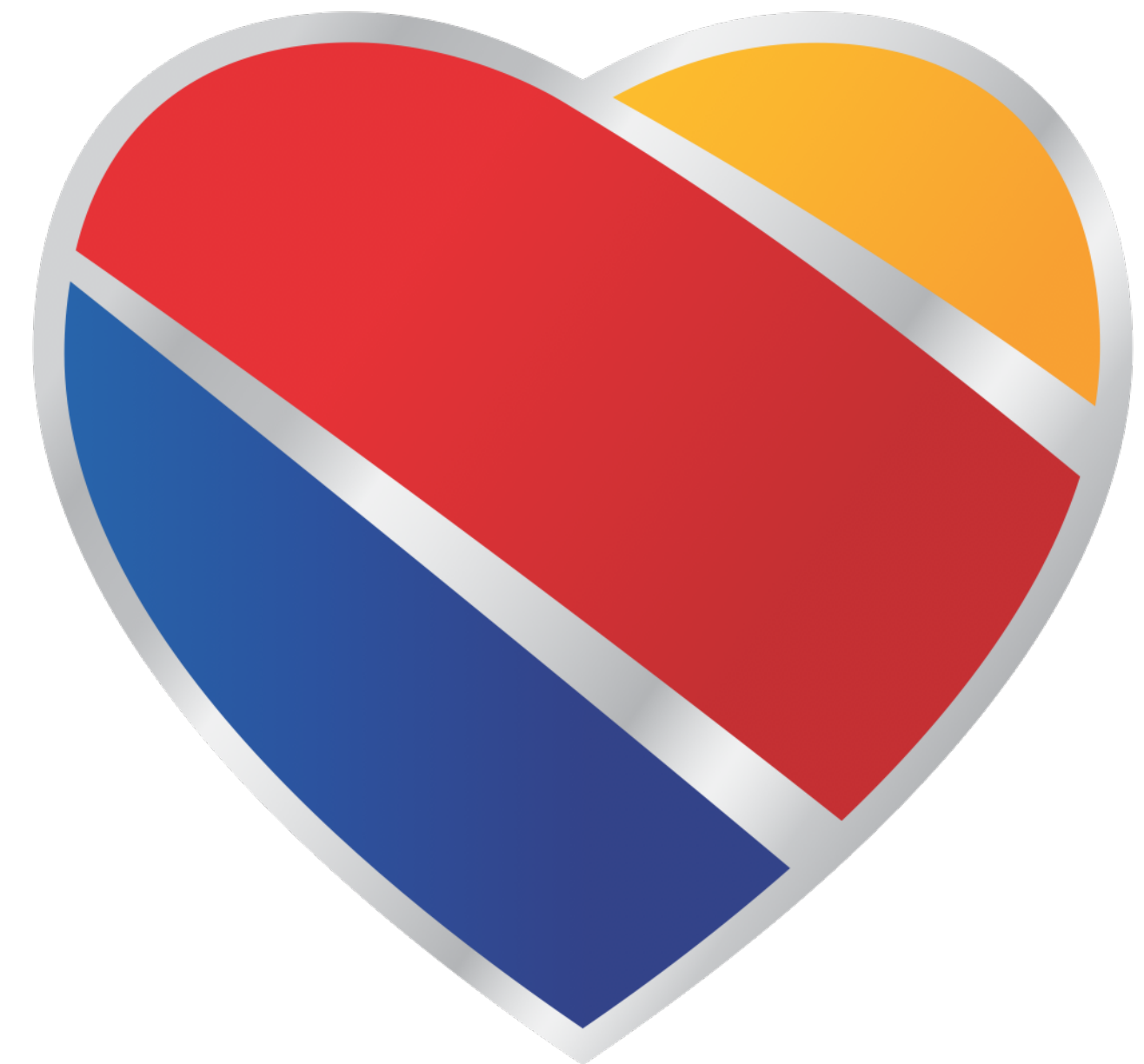
Competitors

- JetBlue, Spirit, Delta, Alaska, United etc.



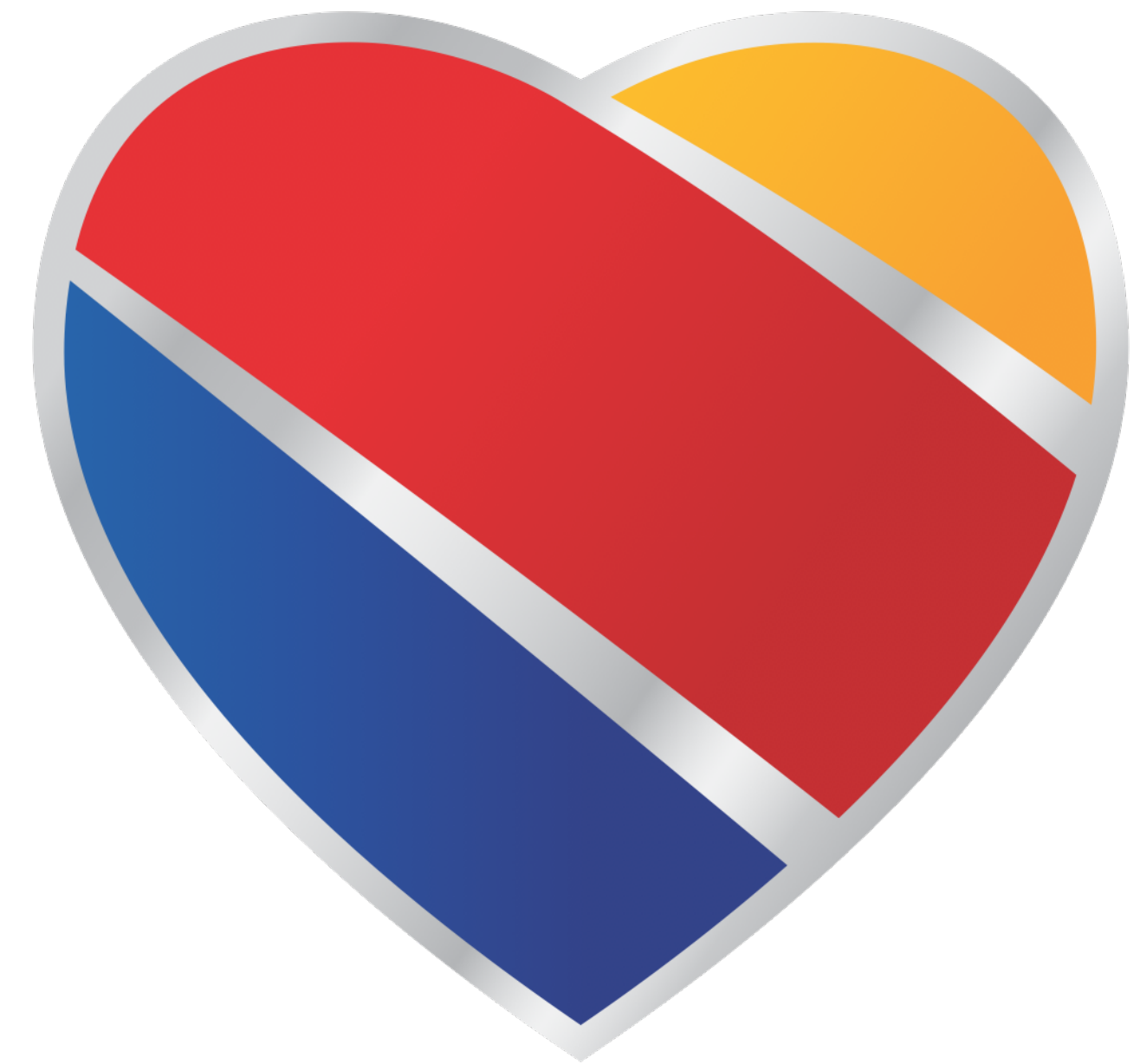
Southwest Strategy

- Cost leadership strategy ("Southwest model")
- Focuses on driving down costs for customers
- Unbundled services to maintain low costs
- Unique product offerings with the business customer (the highest value marketing target)
- Reduce costs:
 - replacing aging plans with a fuel-efficient fleet
 - increasing passenger capacity
 - using hub-and-spoke routing



Southwest Strategy

- SW has since become a more hybrid operation:
 - customer satisfaction
 - price
 - geography
 - network availability
- Southwest is large enough:
 - traditional hub and spoke model
 - but has own distinct strategy of network saturation and continuous geographic expansion.

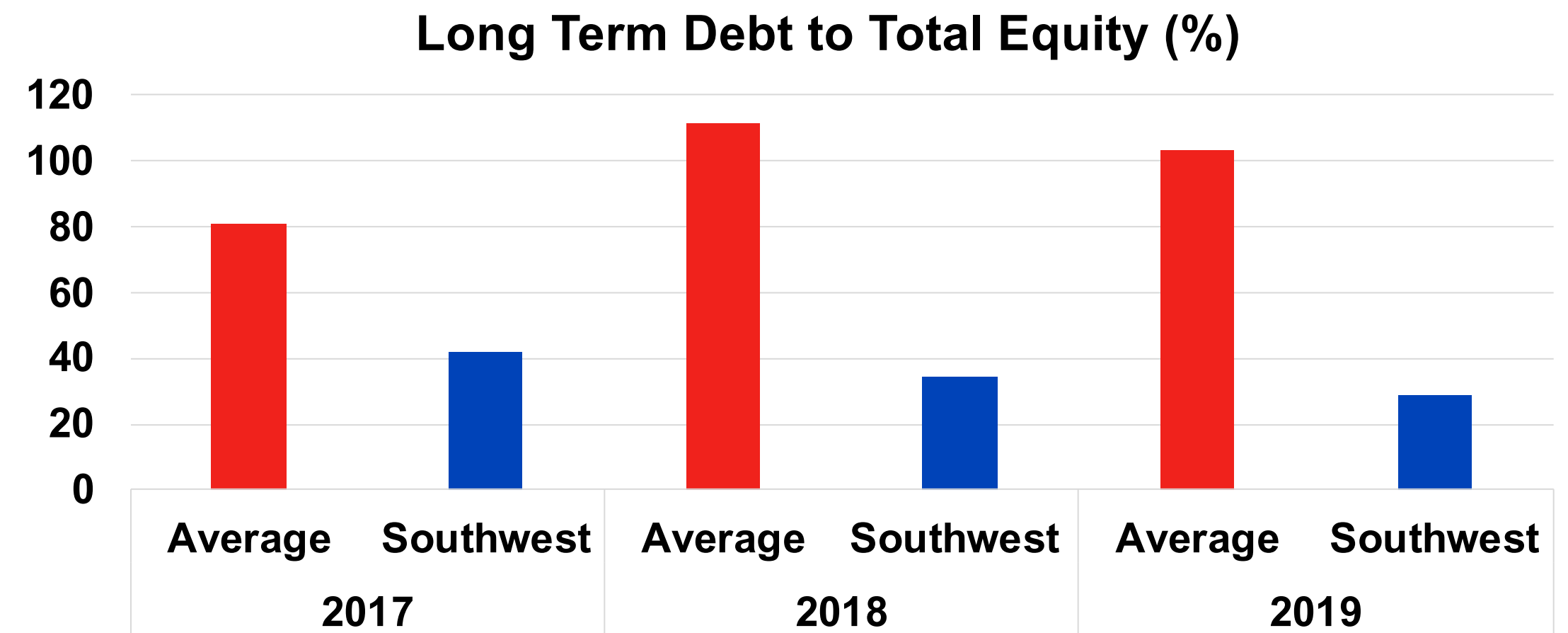
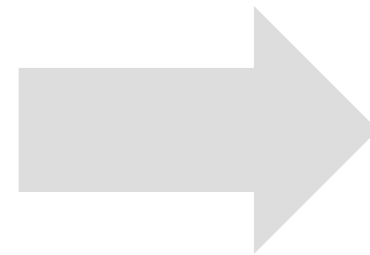


Southwest Historically (Before COVID-19)

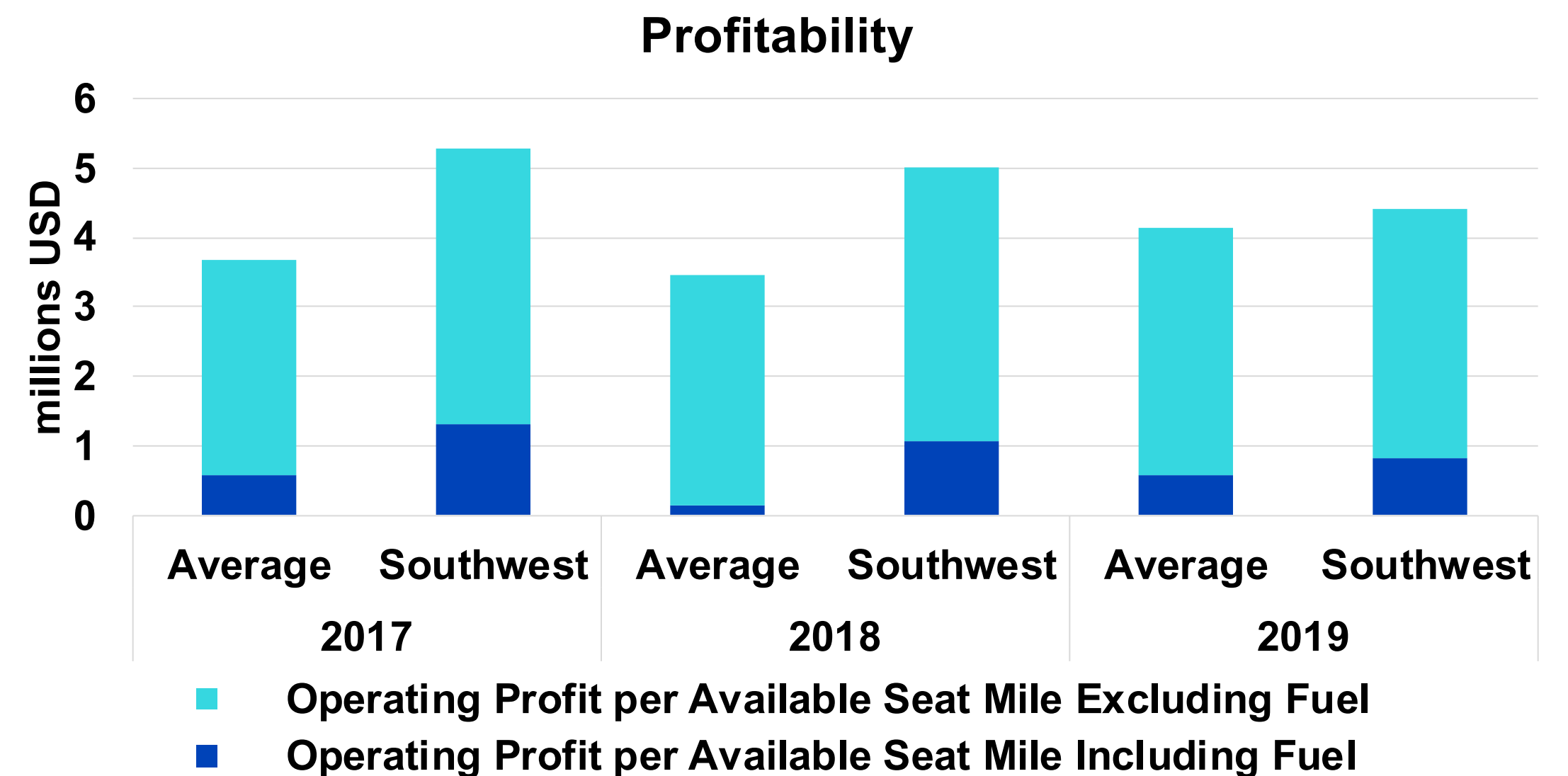
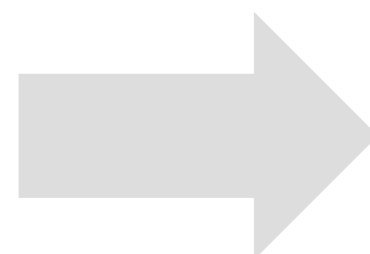


Potential Strength (2017-2019)

lower debt to equity than competitors

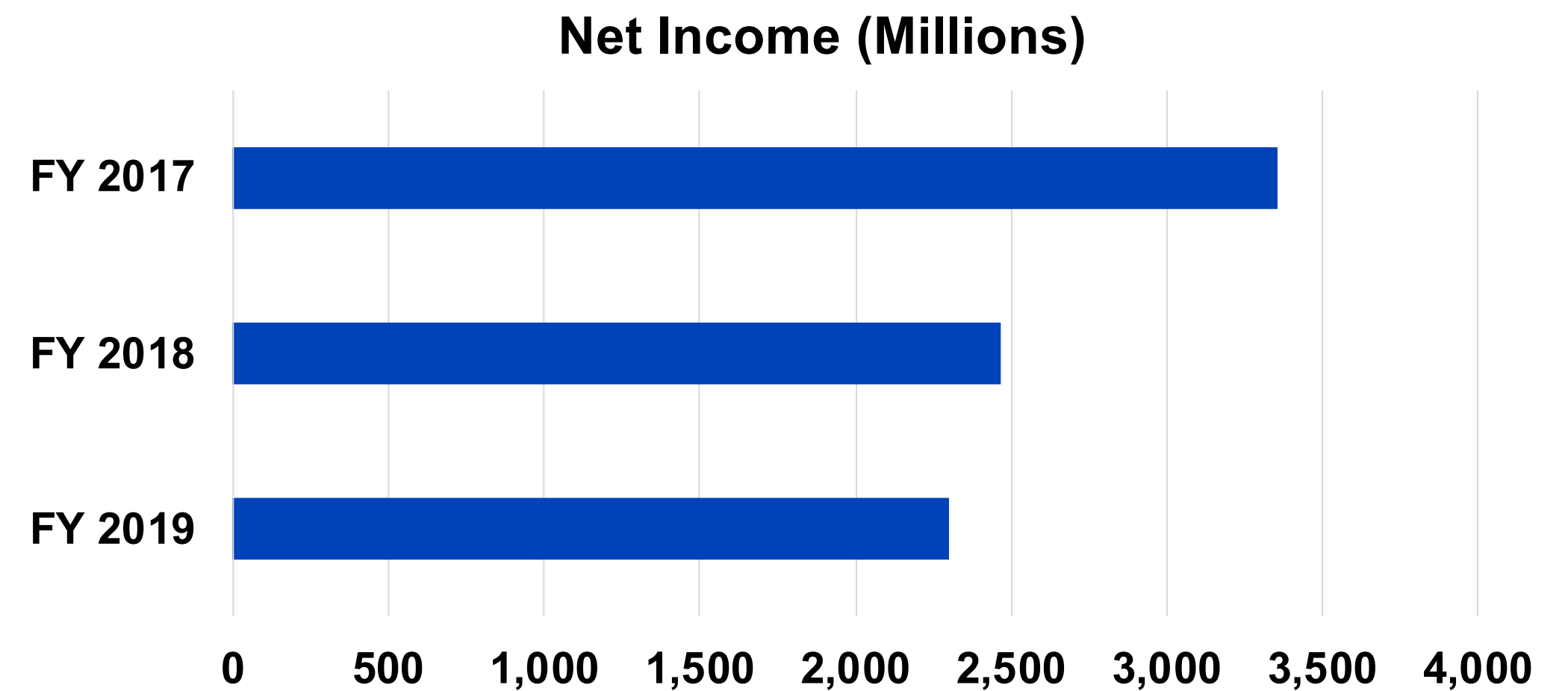
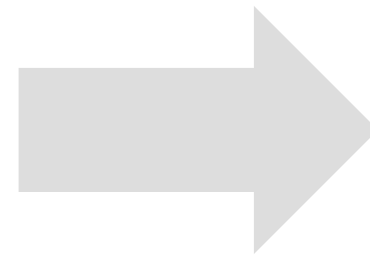


higher operating profit per seat mile than competitors

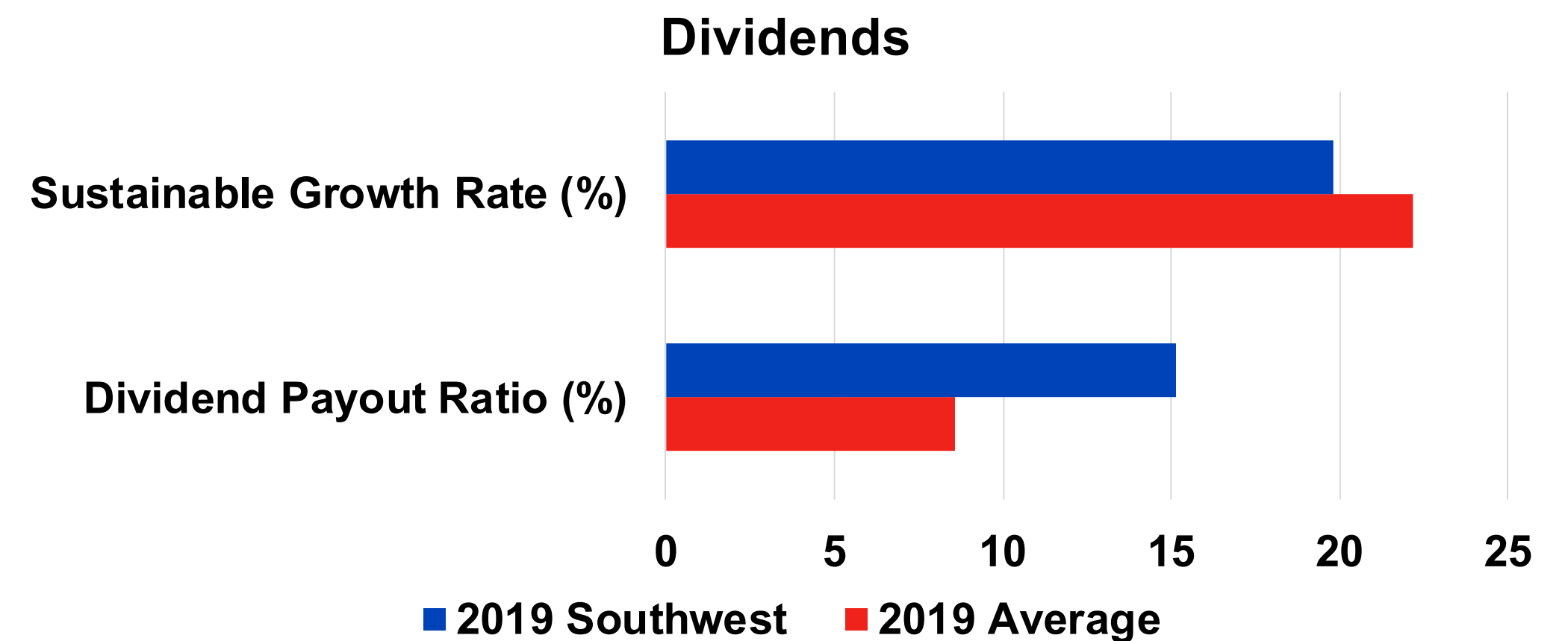
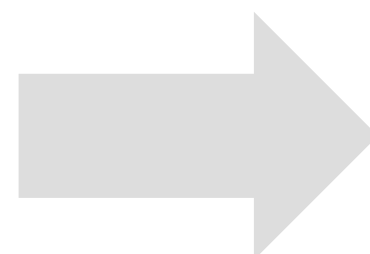


Potential Weakness (2017-2019)

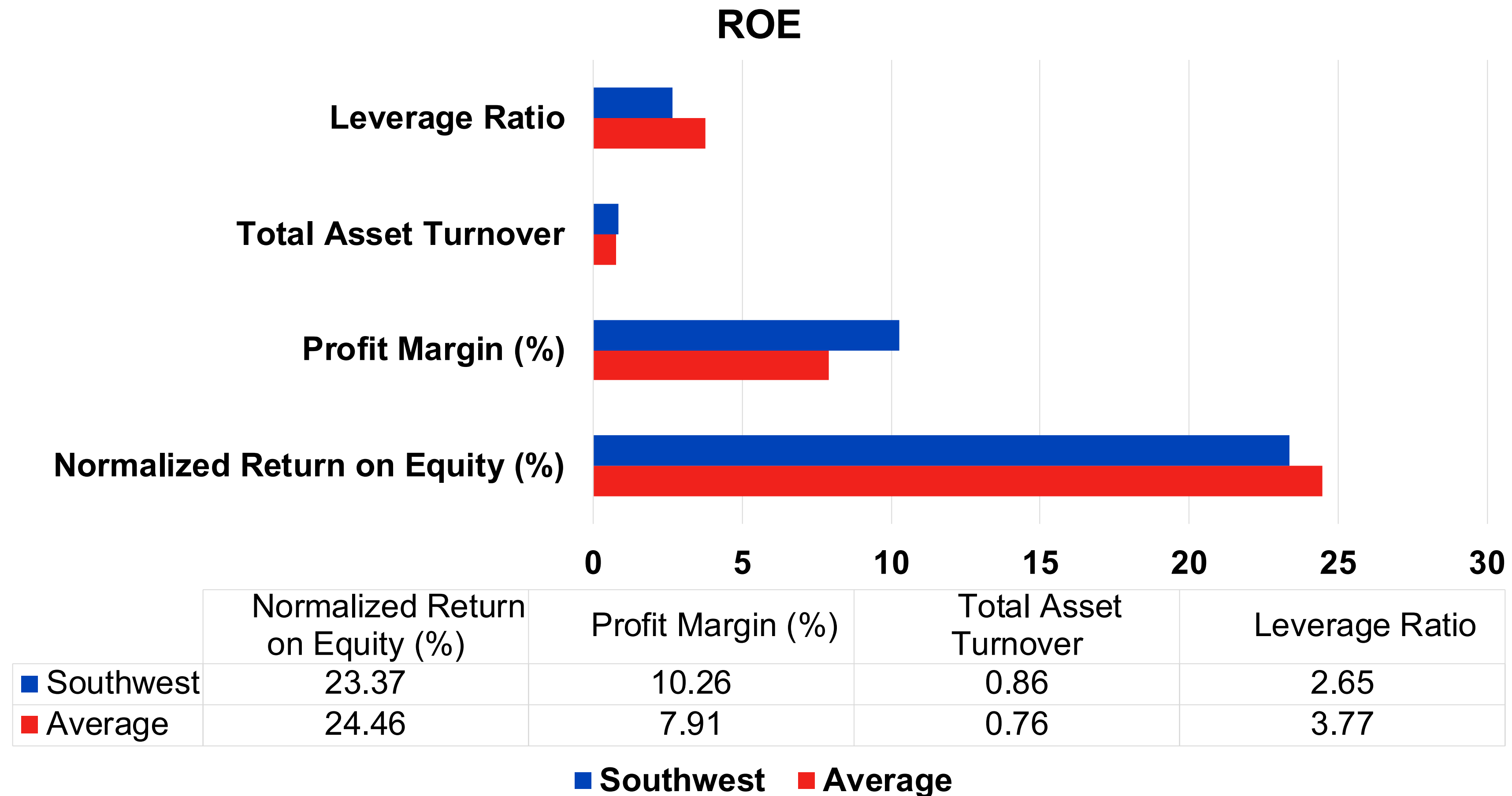
However, increased expenses and taxes have reduced overall profit



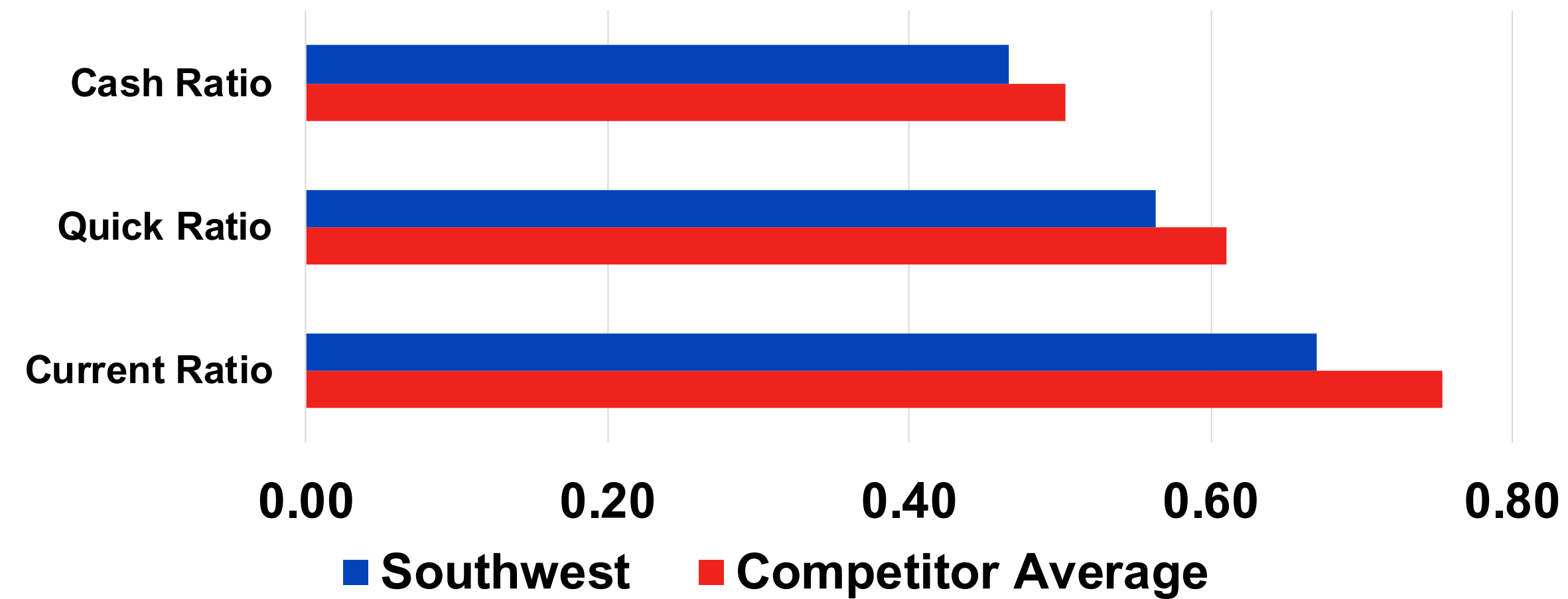
As of 2019, Southwest favored dividends over capital reinvestment



Dupont Analysis (2019)



Liquidity (2017 - 2019 [Average])



Liquidity ratios						
	2017		2018		2019	
	Competitors	Southwest	Competitors	Southwest	Competitors	Southwest
Current Ratio	0.83	0.7	0.73	0.64	0.7	0.67
Quick Ratio	0.65	0.57	0.6	0.54	0.58	0.58
Cash Ratio	0.53	0.48	0.5	0.47	0.48	0.45

Valuation



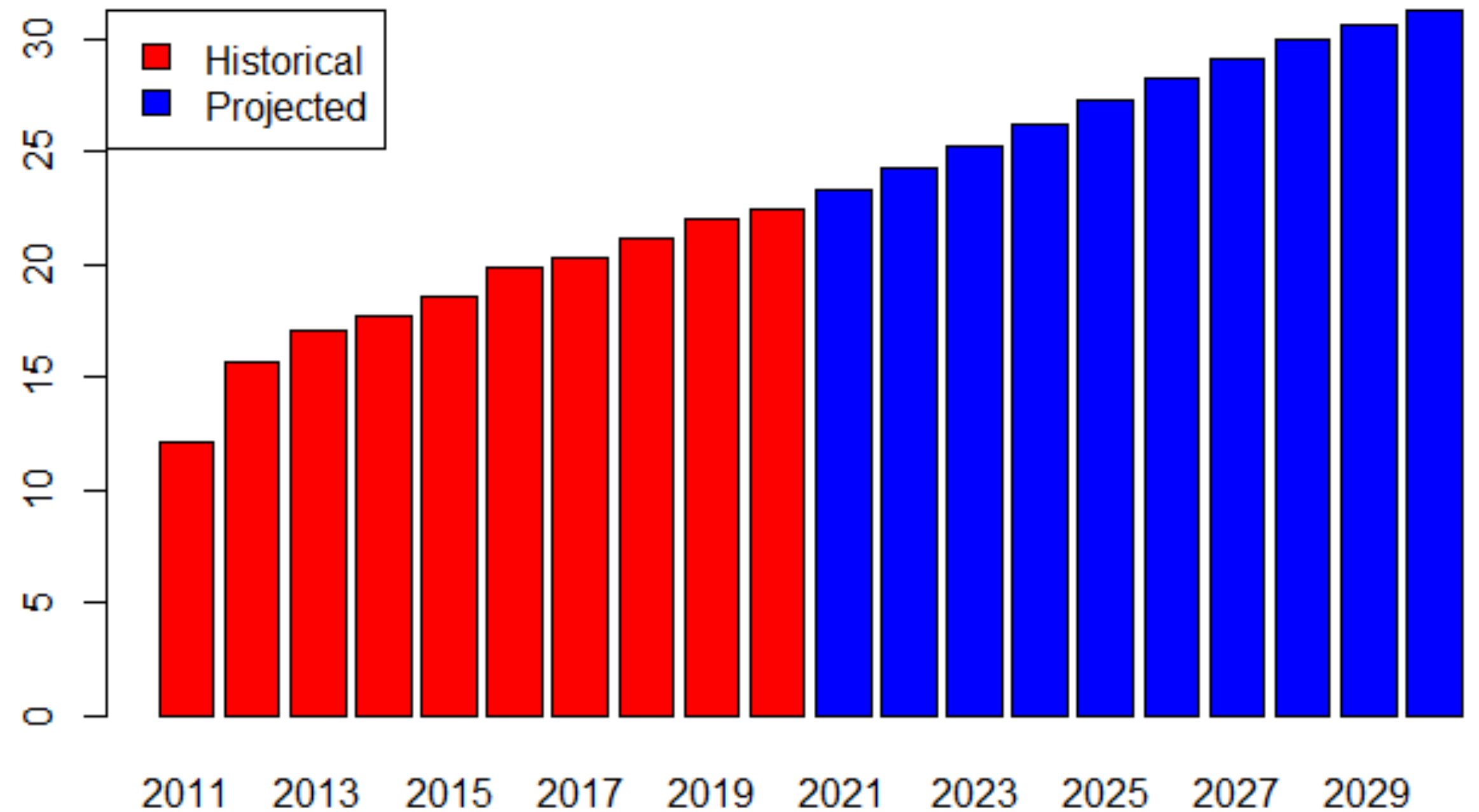
Valuation Assumptions

Past Growth - Expected Growth



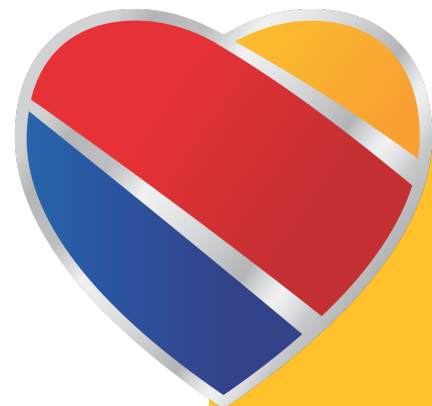
Revenues trend is steadily increasing at an average rate of 3.97%

Historical vs. Projected Revenue (in billions)



Valuation

Discounted Cash Flow Model



Value/share \$72.00
Southwest is **undervalued**

Valuation

WACC	9.38%
Weight Debt	39.54%
Weight Equity	60.46%
Cost of Equity, CAPM	13.68%
Beta	1.23
Cost of Debt (bbb)	3.59%
Price/share (April 20)	\$31.06, 508m shares
Terminal Growth Rate	2.0%

Southwest Transitioning (with COVID-19 ongoing)



Valuation

P/E Ratio

- LUV stock price (March 31, 2020): \$35.61
- Based on the competitors' P/E ratio * LUV EPS, we get the range of high, average, and low price
- The range of expected share price is from \$11.35 to \$30.68 which are much lower than \$35.61.
- **LUV overvalued**

Stock price, EPS and P/E ratio

	Southwest	Jet Blue	Spirit	Delta	Alaska
Stock Price (March 31)	\$35.61	\$8.95	\$12.89	\$28.53	\$28.47
EPS (TTM/4)	\$0.90	\$0.45	\$1.02	\$1.56	\$1.54
P/E ratio	9.95	5.03	3.17	4.58	4.61

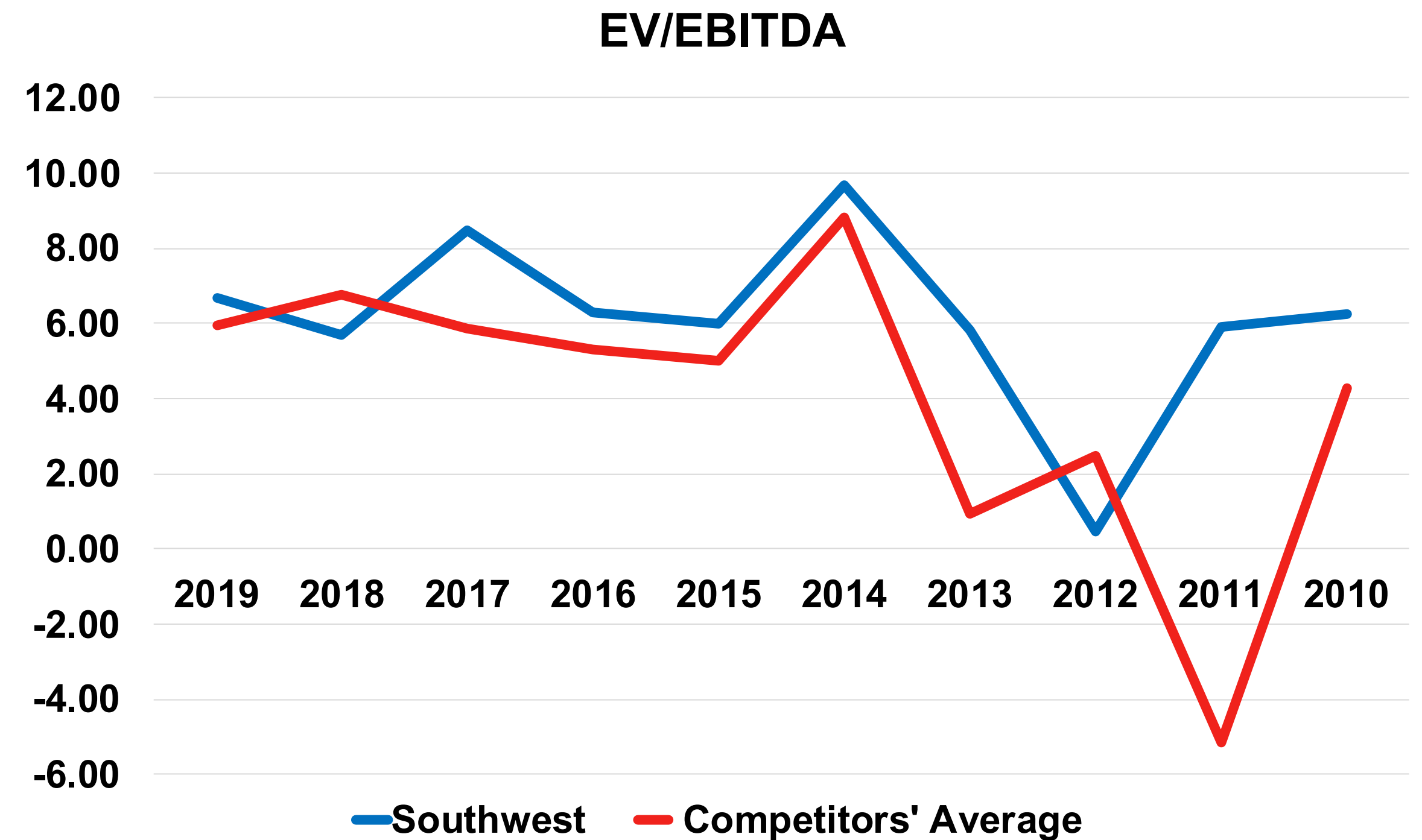
Expected Price

	Southwest
Expected Market Price	\$18.59
High Price	\$30.68
Low Price	\$11.35

Valuation

EV/EBITDA

- LUV (2019): 6.67
Competitors' average (2019): 5.96
- LUV tends to have higher EV/EBITDA in past 10 years.
- LUV (2020.1Q): 94.95
Competitors' average (2020.1Q): 33.65
- LUV **overvalued**



Current EV/EBITDA		
	Southwest	Competitors' Average
EV/EBITDA (2020.1Q)	94.95	33.65

Southwest Hit by COVID-19

Scenario Analysis

WACC re-assessment
Pessimistic/Optimistic Growth Assumptions
Value re-assessment



Scenario Analysis

WACC Adjustments

- Adjusted current, pessimistic and optimistic WACC based on COVID19 assumptions
- The stock period: day of state of emergency from the state government on March 13th to May 11th.
- Current WACC is **9.22%**
 Optimistic WACC is **8.93%**
 Pessimistic WACC is **8.02%**

Assumptions				WACC
	Total Debt (million)	Number of shares	Stock Price	New WACC
Current (May 11)	\$10,318	589M	\$25.24	9.22%
Optimistic	\$16,466	519M	\$41.28	8.93%
Pessimistic	\$20,260	750M	\$24.92	8.02%

Potential Impact of COVID-19

Cashflow scenarios for the next two years

	Two-year DCF Sensitivity Table based on 2019 FCF of 3.36B (present value in millions USD)									
		Weighted Average Cost of Capital (WACC)								
		6.5%	7.0%	7.5%	8.0%	8.5%	9.0%	9.5%		
Growth Rate	-75%	4,334	4,328	4,323	4,318	4,313	4,307	4,302	4,297	
	-50%	5,678	5,664	5,650	5,636	5,622	5,608	5,595	5,581	
	-25%	7,393	7,366	7,340	7,314	7,288	7,263	7,238	7,213	
	0%	9,477	9,435	9,393	9,352	9,311	9,271	9,231	9,191	
	1%	9,568	9,525	9,483	9,441	9,399	9,358	9,318	9,278	
	2%	9,660	9,616	9,573	9,530	9,488	9,447	9,405	9,365	
	3%	9,752	9,708	9,664	9,621	9,578	9,535	9,493	9,452	
	4%	9,845	9,800	9,755	9,711	9,668	9,625	9,582	9,540	

Relative Valuation

Enterprise Value (as of 5/8/2020)							
SW	JetBlue	Spirit	Delta	Alaska	American	United	Air Canada
15,570	3,870	2,130	25,520	3,815	25,160	19,410	5,276

EBITDA (Q1 2020)								
	SW	JetBlue	Spirit	Delta	Alaska	American	United	Air Canada
EBITDA	201	(195)	8	(410)	(213)	(2,466)	(972)	71
change from 2019	-75%	-203%	-1632%	-140%	-162%	-118%	-296%	-721%

EV/EBITDA multiple							
Southwest	JetBlue	Spirit	Delta	Alaska	American	United	Air Canada
77.46	-	266.28	-	-	-	-	74.31
a lower EV/EBITDA multiple may signal that a company is undervalued							
blank scores indicate negative EBITDA							
EV/EBITDA multiples prior to restrictions were in the high 30's to mid 40's.							

Summary Table of Recommendations

Value Recap

Outlooks				
	Pessimistic Outlook	Target Short Term (Q1 guidance w -25%)	Target Long Term	Optimistic
Growth rate	-75%	-25%	0%	0%
WACC	8.02%	9.22%	9.22%	8.93%
Value per share	\$8.88	\$18.44	\$49.19	\$57.29
Conclusion	Overvalued	Overvalued	Undervalued	Undervalued
	\$24	SW Market Price (5/13/2020)		

Final Summary + Ongoing SW Strategy

Strong strategy 2019
 high quick ratio
 low leverage ratio

Strong relative valuation

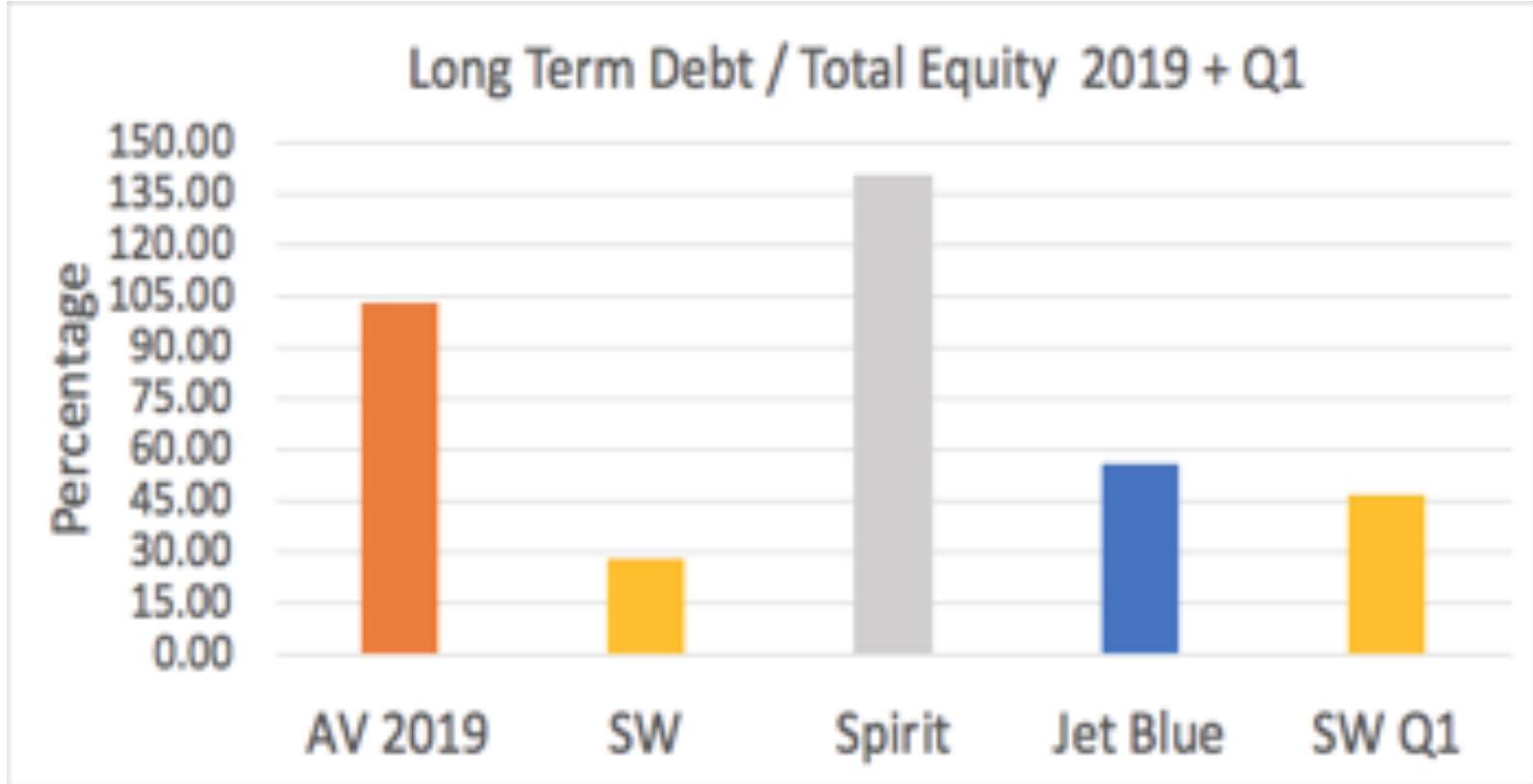
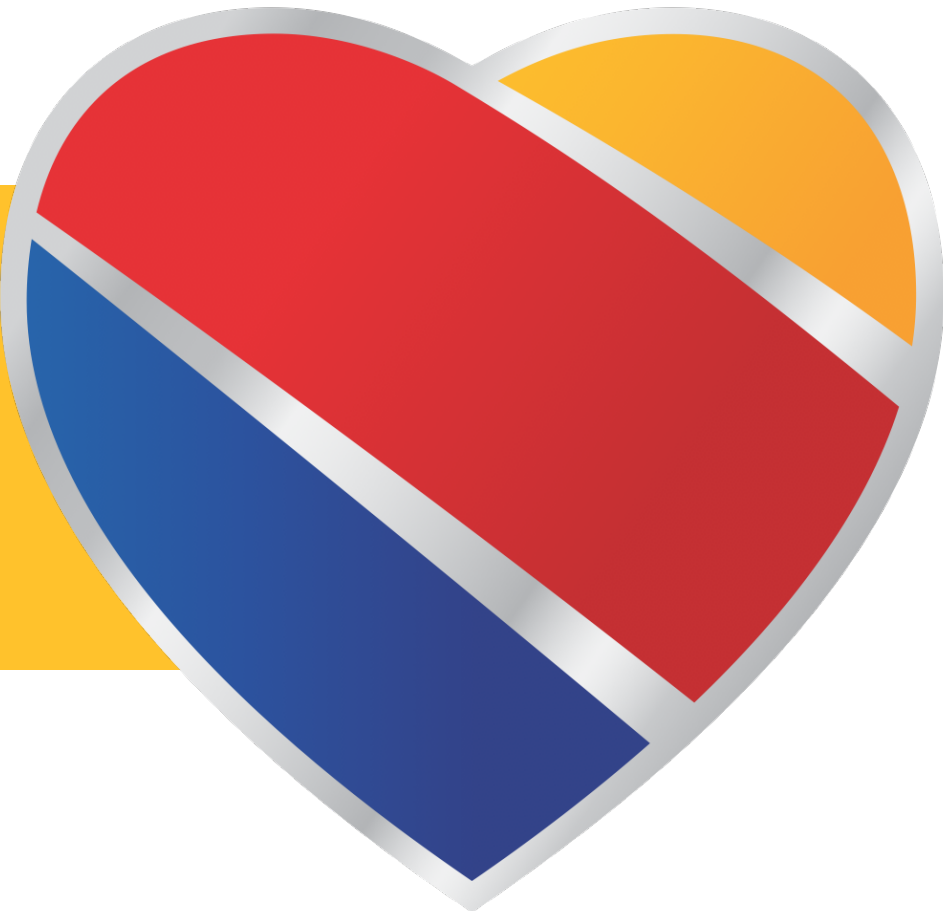
Recently Bolstered Liquidity
 Government Support

COVID Recovery to 0% growth

HOLD / Moderate Buy for long-term investors

SELL for short-term investors

Southwest can recover





Questions?

Just because we like you.

\$50

Southwest
Airlines

Appendix

Southwest
Lightly Salted
Peanuts
Peanuts are our favorite, too.

Southwest
Rapid Rewards

Drink
coupon
Beer, Wine, or Liquor

Departure gate #

Discussion Q&A

Think about it... Why did Buffet sell his stocks? Did he make the right move? What's the reason behind his move?

Valuation Assumptions

Operating Margins

Revenues trend is steadily increasing over period 2012-2019 at an average rate of 3.97%.

Operating margin consistently above and on track with competitors however SW fluctuates heavily due to sharp losses in fuel hedging in recent years

Sharp losses due to aggressive fuel hedging from beginning in 2017

Changed their strategy and reported fuel hedging losses would be negligible going forward.

Average operating margin over last three years is 14.63% with a decreasing trend.

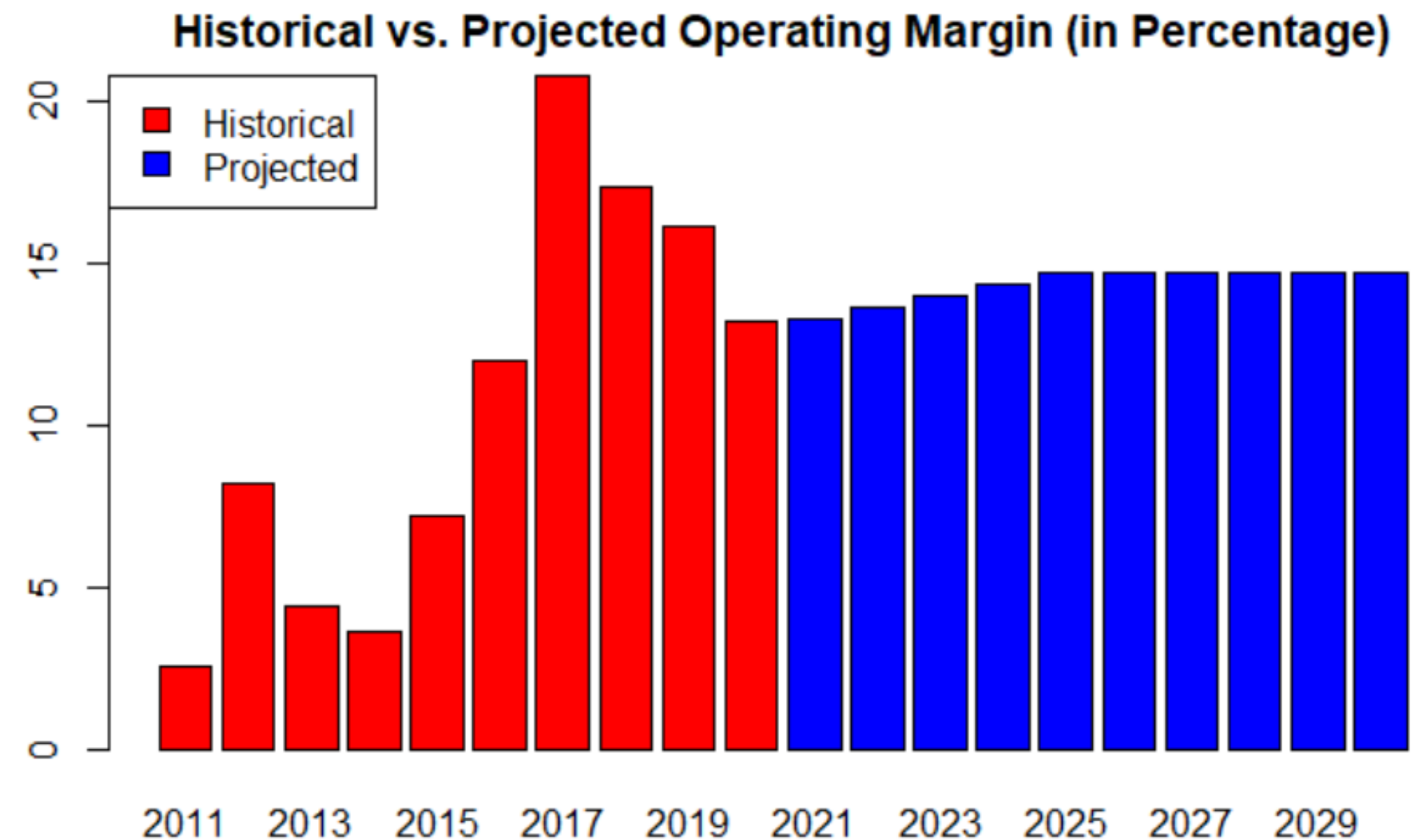


Table 1 - Financial Ratios Across Airlines - FY 2017

In Millions of USD except Per Share	Average* FY 2017	Southwest FY 2017	Jet Blue FY 2017	Spirit FY 2017	Delta FY 2017	Alaska FY 2017	American FY 2017	United FY 2017	Air Canada FY 2017
Market Value (Performance)									
Market Capitalization to Book Value	(1.83)	3.75	1.52	1.74	3.16	2.61	(31.72)	2.21	2.07
Profitability									
Operating Margin (%)	13.11	15.75	13.96	15.40	14.33	15.77	10.44	9.60	9.61
Return on Assets (%)	9.07	13.87	11.93	11.39	6.11	9.27	2.46	5.20	12.34
Operating Profit per Available Seat Mile Including Fuel	0.57	1.32	1.32	1.30	(0.12)	1.95	0.27	0.13	(1.60)
Operating Profit per Available Seat Mile Excluding Fuel	3.11	3.97	3.75	3.38	2.54	4.28	2.99	2.76	1.23
Dupont Analysis (ROE)									
Normalized Return on Equity (%)	29.52	37.45	26.07	14.85	27.72	24.75	—	23.89	51.89
Profit Margin (%)	11.12	15.88	16.26	15.72	7.79	12.16	3.01	5.67	12.48
Total Asset Turnover	0.83	0.87	0.73	0.72	0.78	0.76	0.82	0.92	0.99
Leverage Ratio	7.64	2.68	2.18	2.31	4.23	3.24	34.63	4.74	7.09
Asset Management (Efficiency)									
Accounts Receivable Turnover	30.88	35.01	33.63	58.45	18.53	24.55	25.48	30.04	21.37
Days Sales Outstanding - DSO	13.21	10.43	10.85	6.24	19.70	14.87	14.33	12.15	17.08
Fuel Cost per Available Seat Mile	2.54	2.65	2.43	2.08	2.66	2.33	2.72	2.63	2.83
Fuel % of Oper Exp	21.62	23.00	22.60	27.25	19.21	21.64	19.56	20.00	19.67
Debt Management (Leverage)									
Long Term Debt to Total Equity (%)	80.61	41.71	21.20	78.76	52.61	65.38	—	145.40	159.21
Liquidity									
Current Ratio	0.83	0.70	0.56	1.93	0.41	0.80	0.60	0.56	1.06
Quick Ratio	0.65	0.57	0.44	1.43	0.26	0.73	0.44	0.40	0.91
Cash Ratio	0.53	0.48	0.32	1.36	0.14	0.60	0.33	0.30	0.75
Altman's Z-Score* (Bankruptcy Risk)	2.31	3.73	2.29	2.42	2.21	2.81	1.50	1.79	1.74
Free Cash Flow	247.42	1,806.00	177.00	(203.64)	1,132.00	564.00	(1,227.00)	(585.00)	316.00
Dividend Payout Ratio (%)	7.77	8.52	0.00	0.00	22.81	15.40	15.44	0.00	0.00
Sustainable Growth Rate (%)	34.83	33.97	26.07	26.32	19.94	25.42	—	24.65	87.44

*Note: calculated competitor average

Source: Calculations based on company and Bloomberg data.

Table 2 - Financial Ratios Across Airlines - FY 2018

In Millions of USD except Per Share	Average* FY 2018	Southwest FY 2018	Jet Blue FY 2018	Spirit FY 2018	Delta FY 2018	Alaska FY 2018	American FY 2018	United FY 2018	Air Canada FY 2018
Market Value (Performance)									
Market Capitalization to Book Value	(9.12)	2.61	1.05	2.05	2.48	2.00	(87.52)	2.25	2.14
Profitability									
Operating Margin (%)	8.28	14.83	3.64	8.69	12.29	7.96	6.60	8.03	4.22
Return on Assets (%)	4.13	9.60	1.82	3.35	6.91	4.04	2.49	4.66	0.19
Operating Profit per Available Seat Mile Including Fuel	0.14	1.06	(0.01)	0.96	0.22	0.99	(0.43)	(0.11)	(1.60)
Operating Profit per Available Seat Mile Excluding Fuel	3.32	3.95	3.16	3.53	3.64	3.95	3.08	3.27	1.98
Dupont Analysis (ROE)									
Normalized Return on Equity (%)	18.37	24.98	10.72	16.84	29.87	15.37	—	26.91	3.94
Profit Margin (%)	5.13	11.22	2.47	4.69	8.86	5.29	3.17	5.15	0.21
Total Asset Turnover	0.81	0.86	0.74	0.71	0.78	0.76	0.79	0.90	0.91
Leverage Ratio	3.64	2.63	2.20	2.52	4.35	3.00	—	4.87	5.92
Asset Management (Efficiency)									
Accounts Receivable Turnover	32.27	35.72	33.59	68.53	18.95	23.38	25.76	29.86	22.36
Days Sales Outstanding - DSO	13.00	10.22	10.87	5.33	19.27	15.61	14.17	12.22	16.32
Fuel Cost per Available Seat Mile	3.19	2.89	3.17	2.57	3.42	2.96	3.51	3.38	3.58
Fuel % of Oper Exp	25.25	24.60	25.70	31.60	23.03	25.40	23.63	24.00	24.04
Debt Management (Leverage)									
Long Term Debt to Total Equity (%)	111.25	34.68	46.08	105.04	102.68	43.11	—	176.41	270.77
Liquidity									
Current Ratio	0.73	0.64	0.55	1.61	0.34	0.61	0.48	0.51	1.11
Quick Ratio	0.60	0.54	0.43	1.38	0.22	0.54	0.36	0.39	0.97
Cash Ratio	0.50	0.47	0.35	1.33	0.10	0.42	0.26	0.29	0.83
Altman's Z-Score* (Bankruptcy Risk)									
Altman's Z-Score*	1.92	3.03	1.72	2.16	1.78	2.36	0.92	1.64	1.78
Free Cash Flow	982.94	2,971.00	86.00	(100.51)	1,846.00	235.00	(212.00)	2,004.00	1,034.00
Dividend Payout Ratio (%)	10.81	14.12	0.00	0.00	23.10	36.09	13.17	0.00	0.00
Sustainable Growth Rate (%)	12.68	21.72	4.01	8.44	23.08	7.75	—	22.68	1.10

*Note: calculated competitor average

Source: Calculations based on company and Bloomberg data.

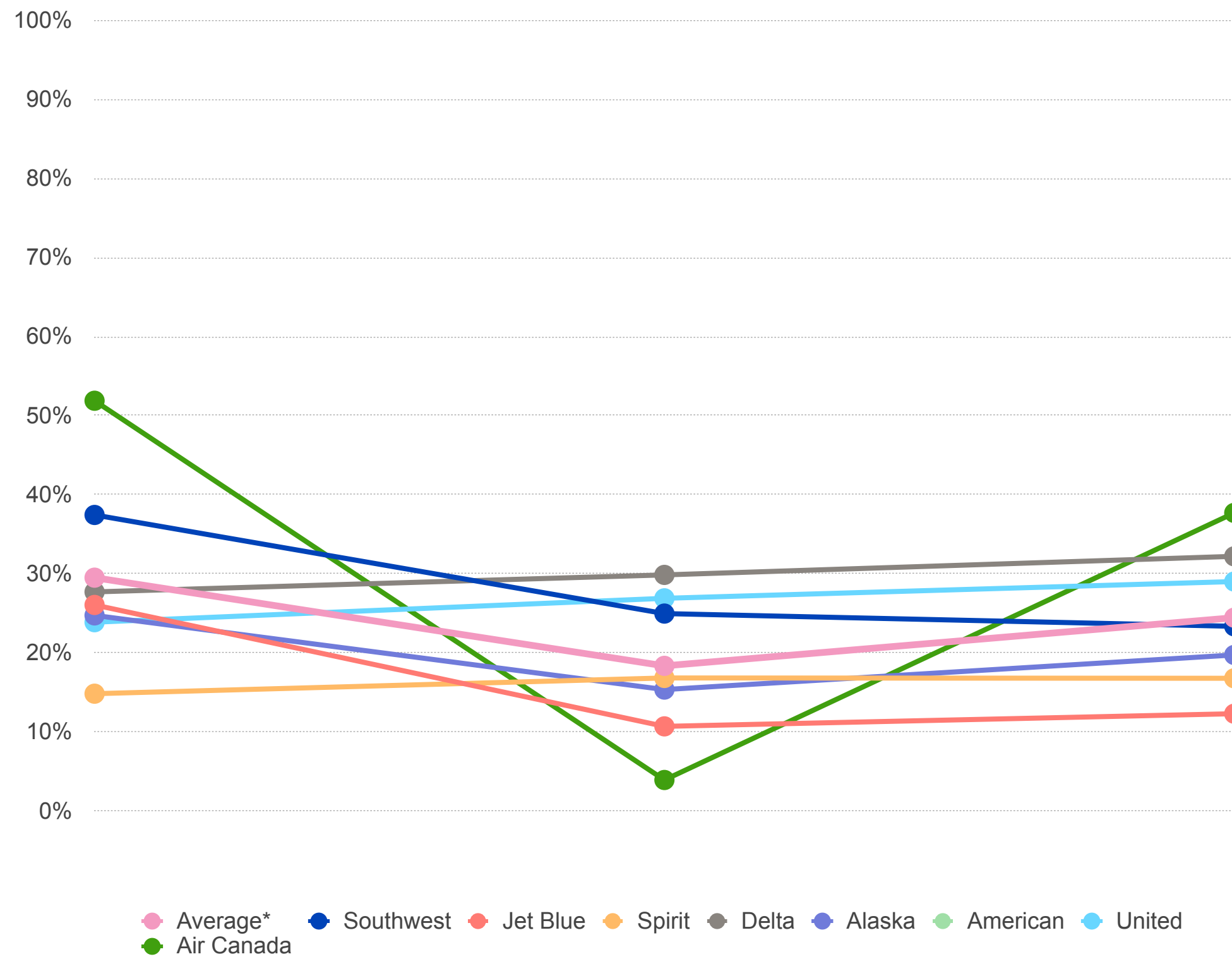
Table 3 - Financial Ratios Across Airlines - FY 2019

In Millions of USD except Per Share	Average* FY 2019	Southwest FY 2019	Jet Blue FY 2019	Spirit FY 2019	Delta FY 2019	Alaska FY 2019	American FY 2019	United FY 2019	Air Canada FY 2019
Market Value (Performance)									
Market Capitalization to Book Value	(11.21)	2.85	1.10	1.22	2.45	1.92	(104.08)	1.93	2.91
Profitability									
Operating Margin (%)	11.71	13.55	10.29	14.04	13.83	12.29	7.32	10.54	11.79
Return on Assets (%)	6.00	8.82	4.97	5.49	7.64	6.43	2.80	5.92	5.95
Operating Profit per Available Seat Mile Including Fuel	0.58	0.83	0.77	1.20	1.98	1.59	(0.24)	0.23	(1.70)
Operating Profit per Available Seat Mile Excluding Fuel	3.56	3.59	3.66	3.58	5.07	4.41	3.06	3.37	1.72
Dupont Analysis (ROE)									
Normalized Return on Equity (%)	24.46	23.37	12.32	16.80	32.22	19.75	—	29.03	37.71
Profit Margin (%)	7.91	10.26	7.03	8.75	10.14	8.76	3.68	6.96	7.72
Total Asset Turnover	0.76	0.86	0.71	0.63	0.75	0.73	0.76	0.85	0.77
Leverage Ratio	3.77	2.65	2.41	2.91	4.30	2.96	—	4.71	6.47
Asset Management (Efficiency)									
Accounts Receivable Turnover	31.28	27.12	36.62	63.07	18.19	25.49	26.49	31.01	22.22
Days Sales Outstanding - DSO	13.20	13.46	9.97	5.79	20.06	14.32	13.78	11.77	16.43
Fuel Cost per Available Seat Mile	2.98	2.76	2.89	2.38	3.09	2.82	3.30	3.14	3.42
Fuel % of Oper Exp	23.74	22.30	25.30	29.84	21.09	24.33	22.00	22.98	22.09
Debt Management (Leverage)									
Long Term Debt to Total Equity (%)	102.99	28.72	55.85	140.56	92.25	62.41	—	158.80	182.36
Liquidity									
Current Ratio	0.70	0.67	0.67	1.25	0.41	0.64	0.45	0.55	0.97
Quick Ratio	0.58	0.58	0.59	1.04	0.28	0.58	0.30	0.42	0.88
Cash Ratio	0.48	0.45	0.50	0.98	0.14	0.48	0.21	0.33	0.76
Altman's Z-Score* (Bankruptcy Risk)	1.89	3.24	1.77	1.56	2.00	2.23	1.00	1.78	1.52
Free Cash Flow	1,635.35	2,960.00	293.00	216.78	3,489.00	1,026.00	(453.00)	2,381.00	3,170.00
Dividend Payout Ratio (%)	8.59	15.13	0.00	0.00	20.56	22.44	10.56	0.00	0.00
Sustainable Growth Rate (%)	22.15	19.83	12.00	16.00	26.08	14.76	—	27.90	38.45

*Note: calculated competitor average

Source: Calculations based on company and Bloomberg data.

ROE



DuPont Analysis Split

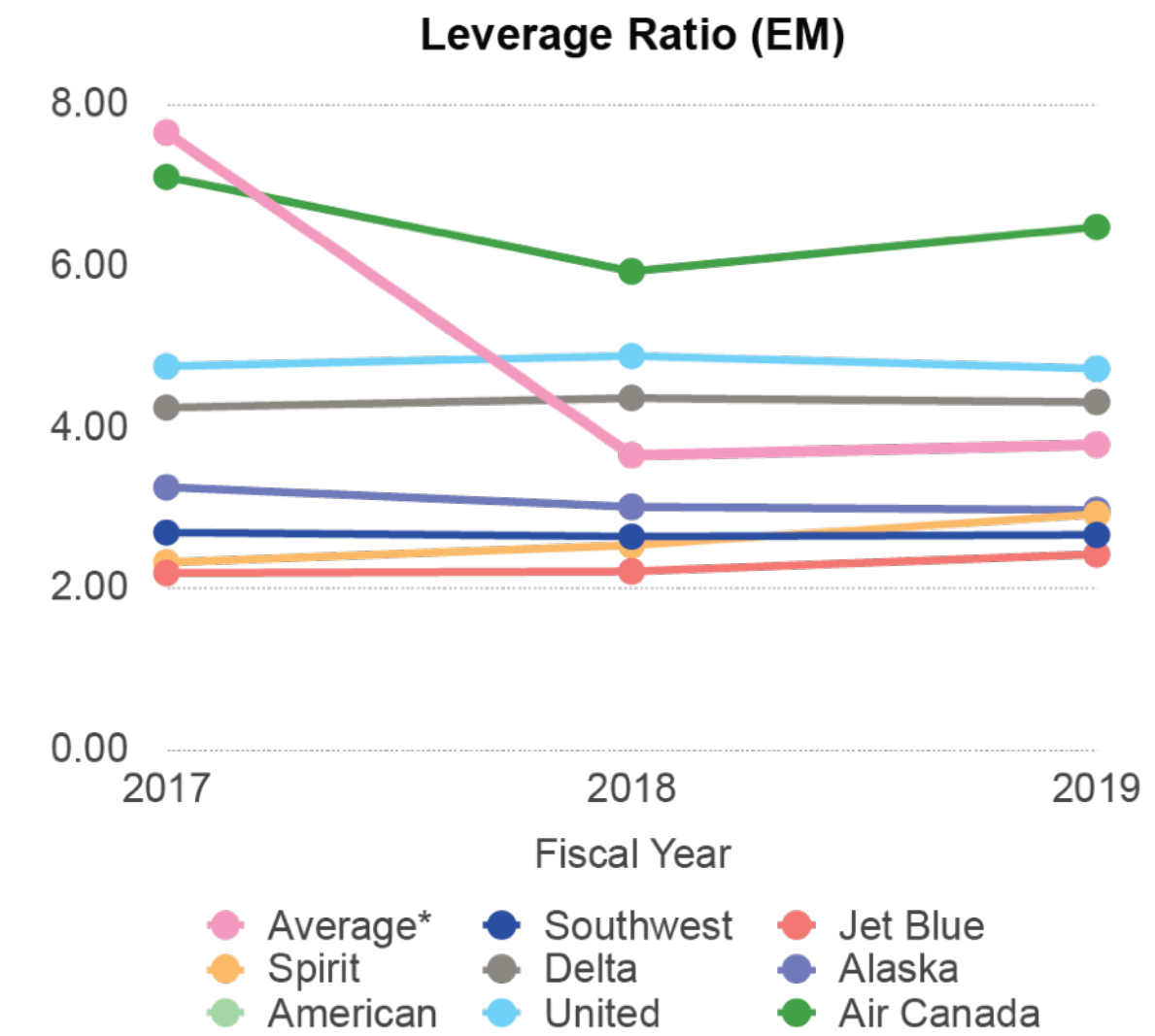
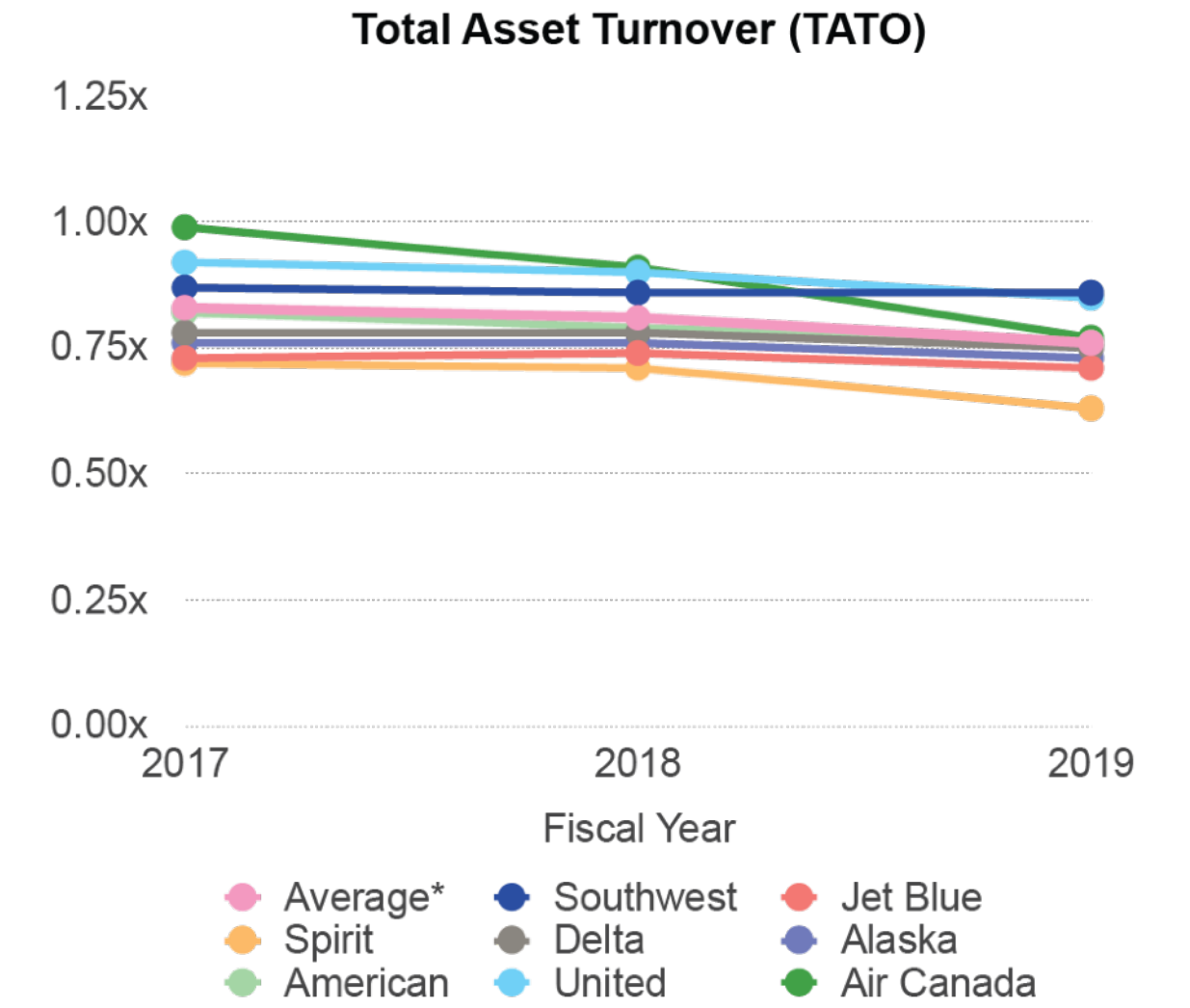
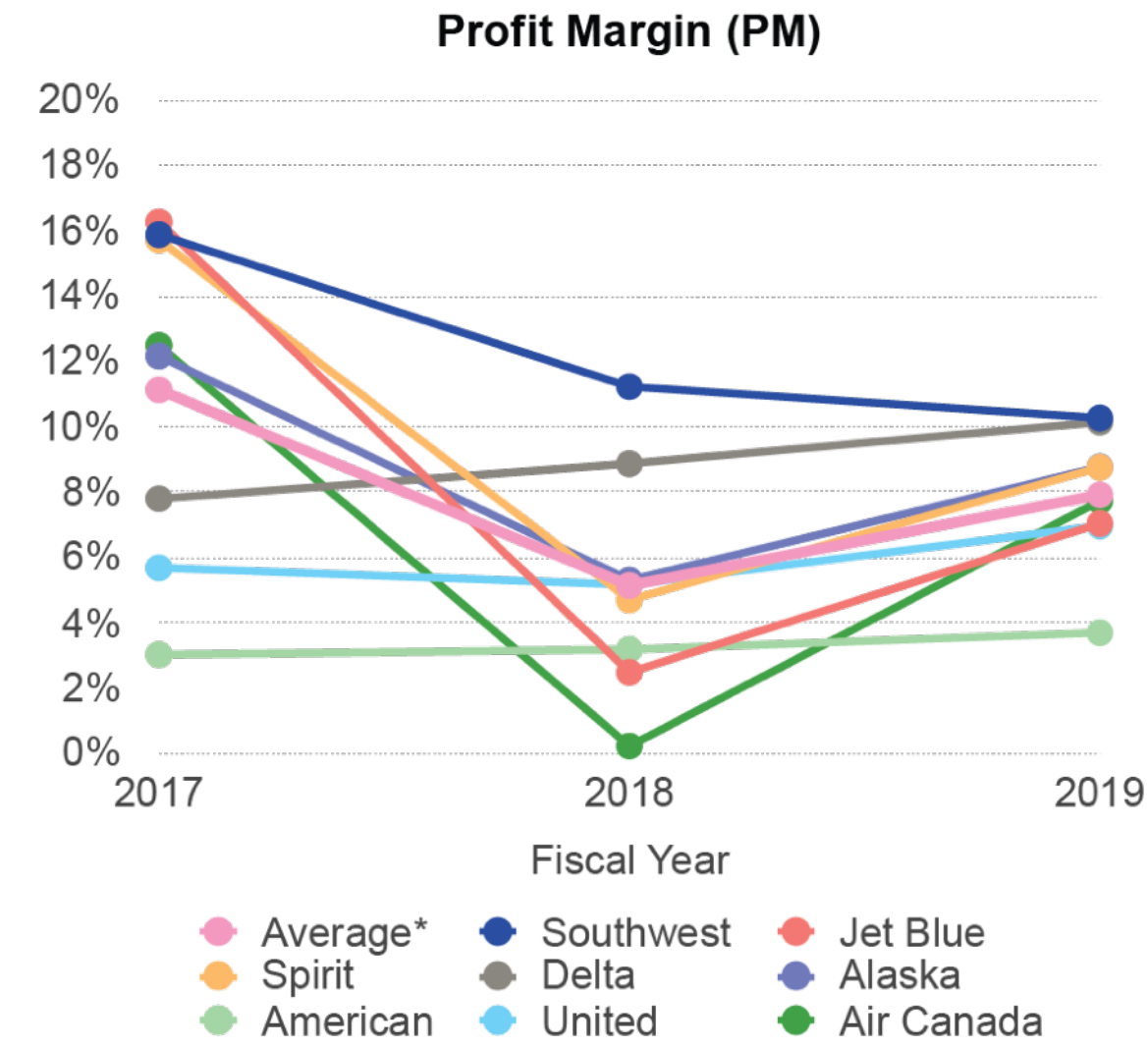


Table 4 - Profitability - ROE

Return on Equity	Average* FY 2017	Average* FY 2018	Average* FY 2019	Southwest FY 2017	Southwest FY 2018	Southwest FY 2019
Profitability						
Normalized Return on Equity (%)	29.52	18.37	24.46	37.45	24.98	23.37

*Note: calculated competitor average
Source: Calculations based on company and Bloomberg data.

Table 5 - Profitability - Net Income

Net Income (Millions)	Southwest FY 2017	Southwest FY 2018	Southwest FY 2019
Profitability			
Net Income (Millions)	3,357	2,465	2,300

*Note: calculated competitor average
Source: Calculations based on company and Bloomberg data.

Table 6 - Efficiency

	Southwest FY 2017	Southwest FY 2018	Southwest FY 2019
Accounts Receivables Turnover (ARTO)	35.01	35.72	27.12
Days Sales Outstanding (DSO)	10.43	10.22	13.46

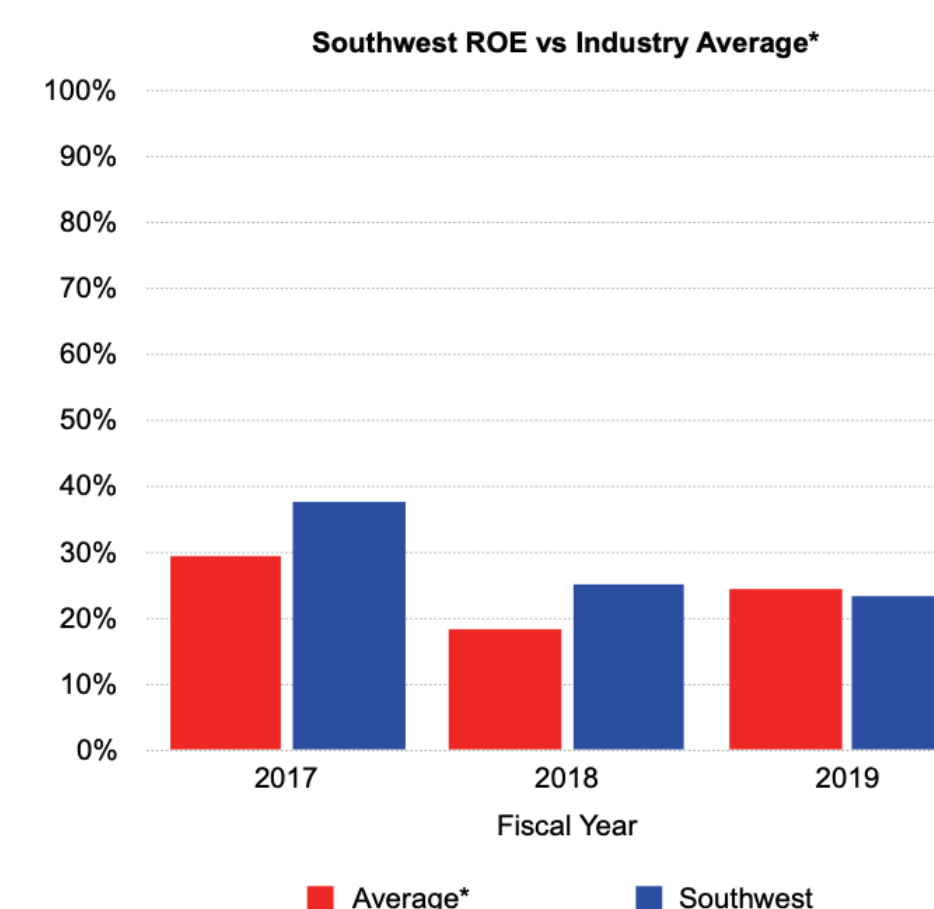
*Note: calculated competitor average
Source: Calculations based on company and Bloomberg data.

Table 7 - Debt (Leverage)

Debt	Average* FY 2017	Average* FY 2018	Average* FY 2019	Southwest FY 2017	Southwest FY 2018	Southwest FY 2019
Debt Management (Leverage)						
Long Term Debt to Total Equity (%)	80.61	111.25	102.99	41.71	34.68	28.72

*Note: calculated competitor average
Source: Calculations based on company and Bloomberg data.

Figure 3 – Southwest ROE 2017 - 2019



Note: Calculations based on company and Bloomberg Data.

Figure 4 – Southwest Net Income 2017 - 2019

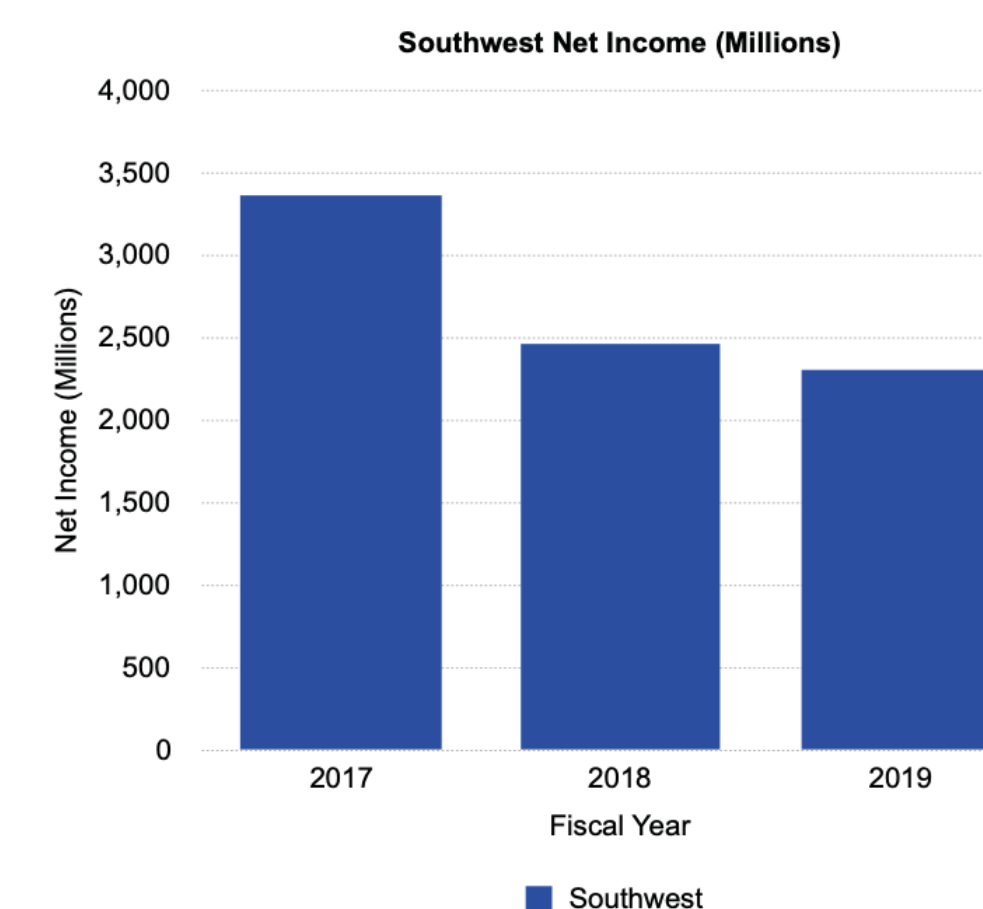


Table 8 - Operating Profit

	Average* FY 2017	Average* FY 2018	Average* FY 2019	Southwest FY 2017	Southwest FY 2018	Southwest FY 2019
Operating Profit per Available Seat Mile Including Fuel	0.57	0.14	0.58	1.32	1.06	0.83

*Note: calculated competitor average
Source: Calculations based on company and Bloomberg data.

Balance Sheet

LUV US (Southwest) - Balance Sheet	(in millions)		
	31-Dec-17	31-Dec-18	31-Dec-19
ASSETS			
Current assets:			
Cash and cash equivalents	1,495	1,854	2,548
Short-term investments	1,778	1,835	1,524
Accounts and other receivables	662	568	1,086
Inventories of parts and supplies, at cost	420	461	529
Prepaid expenses and other current assets	460	310	287
Total current assets	4,815	5,028	5,974
Fixed assets:			
Property and equipment, at cost:			
Flight equipment	21,368	21,753	21,629
Ground property and equipment	4,399	4,960	5,672
Deposits on flight equipment purchase contracts	919	775	248
Assets constructed for others	1,543	1,768	164
Gross fixed assets	28,229	29,256	27,713
Less allowance for depreciation and amortization	9,690	9,731	10,688
Net fixed assets	18,539	19,525	17,025
Goodwill	970	970	970
Operating lease right-of-use assets	0	0	1,349
Other assets	786	720	577
Total long-term assets	20,295	21,215	19,921
Total assets	25,110	26,243	25,895
LIABILITIES AND STOCKHOLDERS' EQUITY			
Current liabilities:			
Accounts payable	1,320	1,416	1,574
Accrued liabilities	1,700	1,749	1,749
Current operating lease liabilities	0	0	353
Air traffic liability	3,495	4,134	4,457
Current maturities of long-term debt	348	606	819
Total current liabilities	6,863	7,905	8,952
Long-term liabilities:			
Long-term debt <u>less</u> current maturities	3,320	2,771	1,846
Air traffic liability - noncurrent	1,070	936	1,053
Deferred income taxes	2,119	2,427	2,364
Construction obligation	1,390	1,701	164
Noncurrent operating lease liabilities	0	0	978
Other noncurrent liabilities	707	650	706
Total long-term liabilities	8,606	8,485	7,111
Total liabilities	15,469	16,390	16,063
Stockholders' equity:			
Common stock, \$1.00 par value: 2,000,000,000 authorized; 807,611,634 issued	808	808	808
Capital in excess of par value	1,451	1,510	1,581
Retained earnings	13,832	15,967	17,945
Accumulated other comprehensive income (loss)	12	20	(61)
Treasury stock, at cost: 219,060,856 in 2017 255,008,275 in 2018 288,547,318 in 2019	(6,462)	(8,452)	(10,441)
Total stockholders' equity	9,641	9,853	9,832
Total liabilities + equity	25,110	26,243	25,895

Source: Company Report

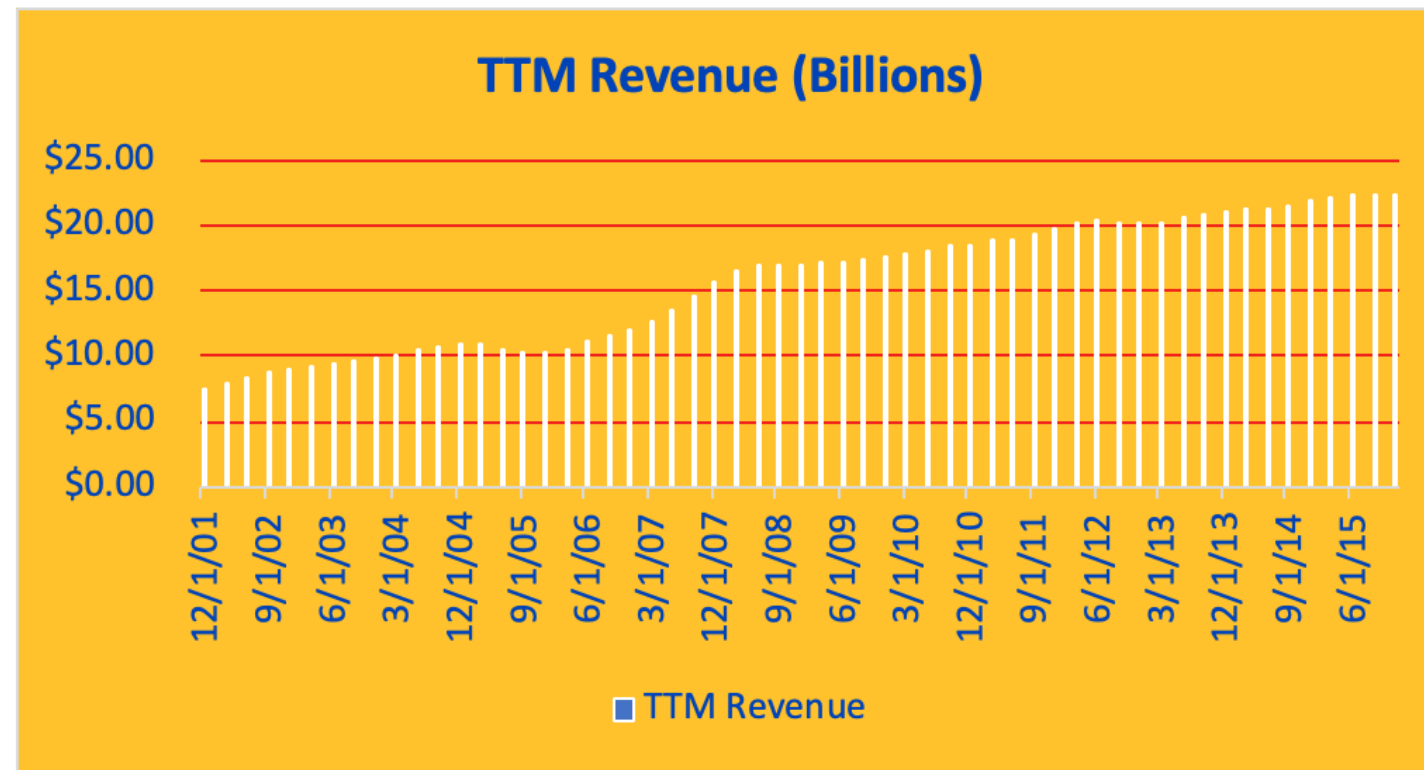
recast from
2018 from 2019 from 2019

Income Statement

LUV US (Southwest) - Income Statement	(in millions)		
	Year ended 31-Dec-17	Year ended 31-Dec-18	Year ended 31-Dec-19
OPERATING REVENUES:			
Passenger	19,763	20,455	20,776
Freight	173	175	172
Other	1,210	1,335	1,480
Total operating revenues	21,146	21,965	22,428
OPERATING EXPENSES:			
Salaries, wages, and benefits	7,305	7,649	8,293
Fuel and oil	4,076	4,616	4,347
Maintenance materials and repairs	1,001	1,107	1,223
Landing fees and airport rentals	1,292	1,334	1,363
Depreciation and amortization	1,218	1,201	1,219
Other operating expenses	2,847	2,852	3,026
Total operating expenses	17,739	18,759	19,471
OPERATING INCOME (EBIT)	3,407	3,206	2,957
OTHER EXPENSES (INCOME):			
Interest expense	114	131	118
Capitalized interest	(49)	(38)	(36)
Interest income	(35)	(69)	(90)
Other (gains) losses, net	112	18	8
Total other expenses (income)	142	42	0
INCOME BEFORE INCOME TAXES	3,265	3,164	2,957
PROVISION (BENEFIT) FOR INCOME TAXES	(92)	699	657
NET INCOME	3,357	2,465	2,300
NET INCOME PER SHARE, BASIC	5.58	4.3	4.28
NET INCOME PER SHARE, DILUTED	5.57	4.29	4.27

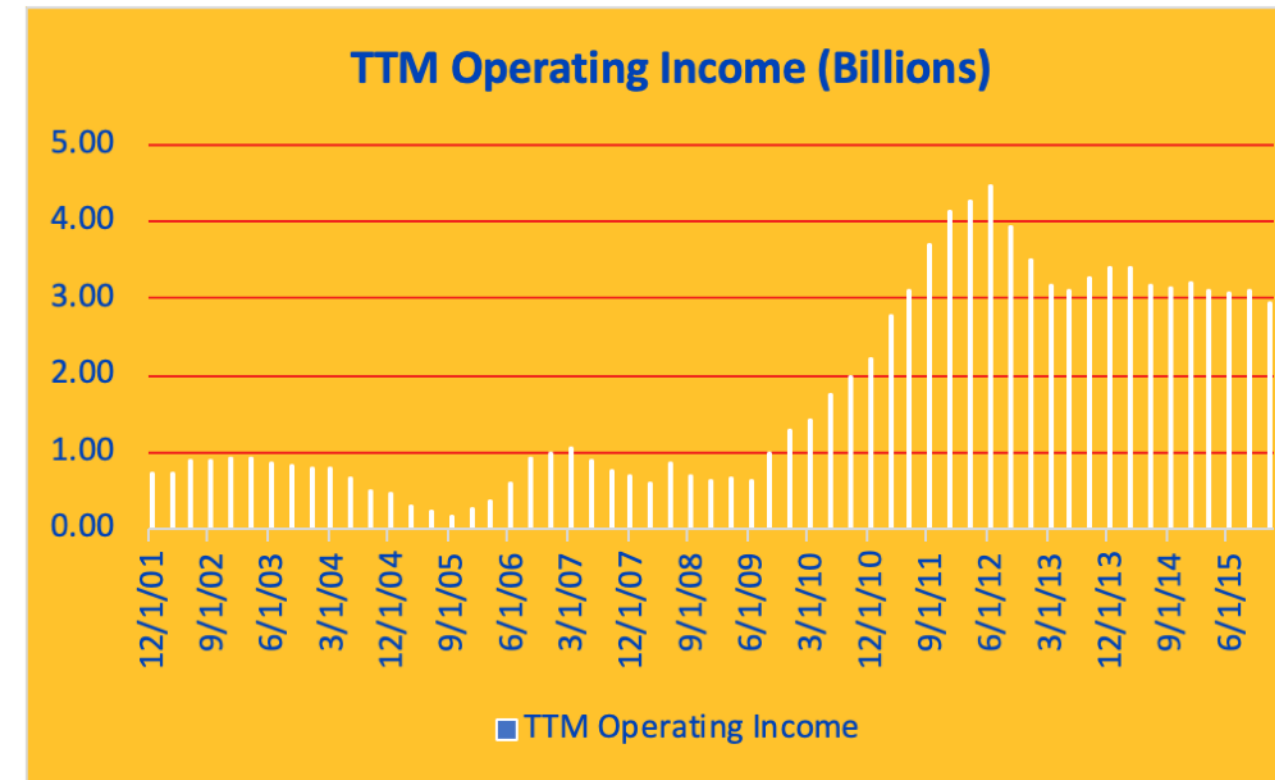
Source: Company Report

Figure 1 – Southwest TTM Revenue (Billions)



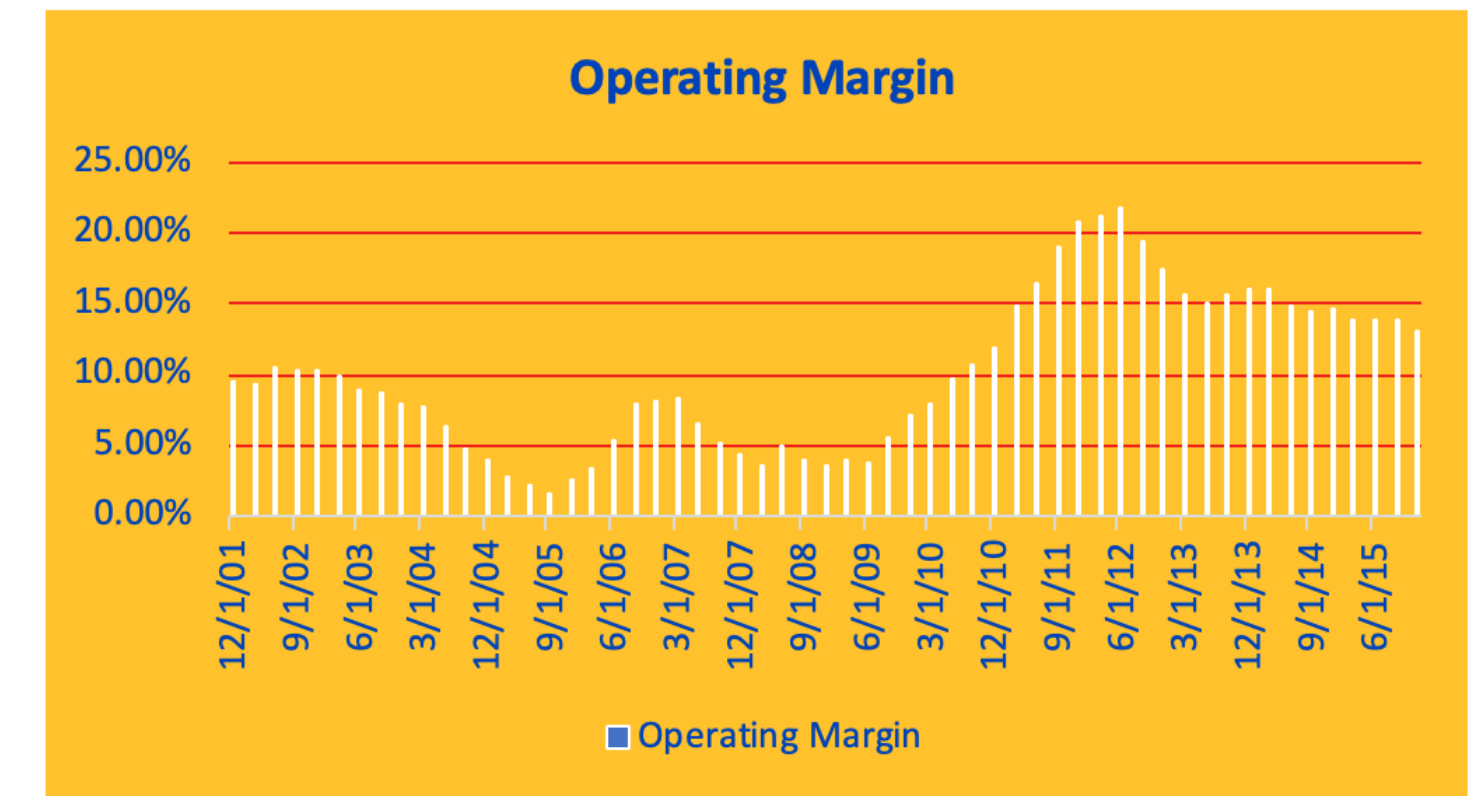
Source: Data based on Macrotrends.net

Figure 2 – Southwest TTM Operating Income (Billions)



Source: Data based on Macrotrends.net

Figure 3 – Southwest Operating Margin



Source: Data based on Macrotrends.net

Figure 5 – Southwest Historical vs Projected Operating Income

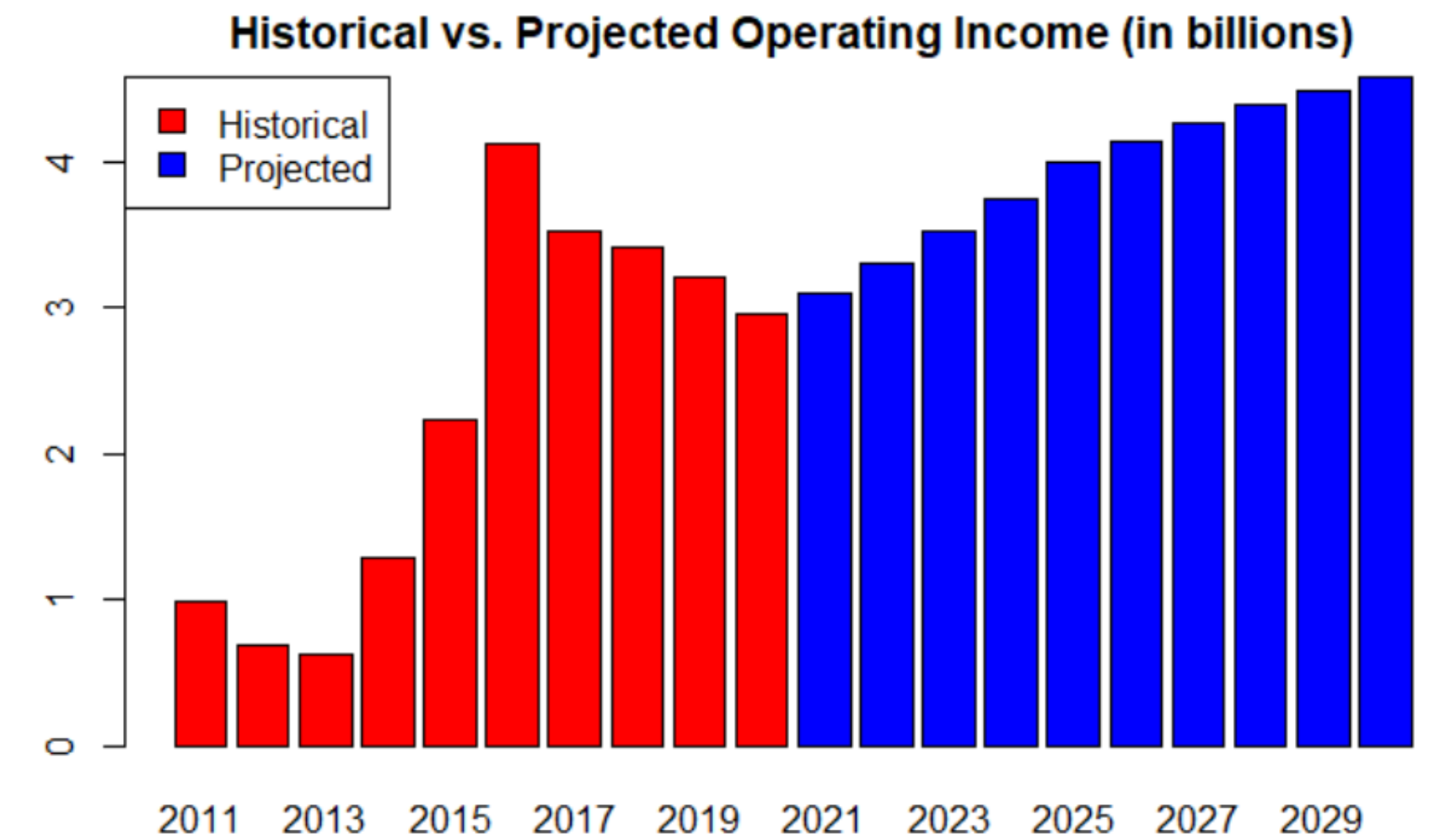


Table 1 - Operating Margin

	Ind.Average* FY 2017	Ind.Average* FY 2018	Ind.Average* FY 2019	Southwest FY 2017	Southwest FY 2018	Southwest FY 2019
Profitability						
Operating Margin (%)	13.11	8.28	11.71	15.75	14.83	13.55

*Note: Calculated competitor average

Source: Calculations based on company and Bloomberg data.

FCFF Input / Assumptions

FCFF Inputs / Assumptions

Revenue Growth Rate Expectation

Date	TTM Revenue	
12/31/19	\$22.43	
12/31/18	\$21.97	2.09%
12/31/17	\$21.15	3.88%
12/31/16	\$20.29	4.24%
12/31/15	\$19.82	2.37%
12/31/14	\$18.61	6.50%
12/31/13	\$17.70	5.14%
12/31/12	\$17.09	3.57%

Avg 2012-2019 Annual Growth Rate **3.97%**

Source: Data based on Macrotrends.net

Operating Margin Expectations

Date	Operating Margin
12/31/19	13.18%
12/31/18	14.60%
12/31/17	16.11%

Avg Op Margin 2017-2019 **14.63%**

Source: Data based on Macrotrends.net

Calculations Based on Balance Sheet

FCFF INPUT

Long-term liabilities plus current portion of long term debt.

7,930	2019
9,091	2018

FCFF INPUT OUTSTANDING SHARES

Issued Shares	807611634	OUTSTANDING SHARES	in millions
TS 2019	-288547318	519064316	519
TS 2018	-255008275	552603359	553

Source: Balance sheet (refer to Part One Appendix 1)

Calculations Based on Income Statement

FCFF INPUTS

Effective Tax Rate

22.22%	2019
22.09%	2018

Source: Income Statement (refer to Part One Appendix 2)

Excel Sheet Input / Drivers

Country of incorporation	United States		
Industry (US)	Air Transport		
Industry (Global)	Air Transport	Last 10K	Years since last 10K
Revenues	\$22,428.00	\$21,965.00	1
Operating income or EBIT	\$2,957.00	\$3,206.00	1
Interest expense	\$118.00	\$131.00	
Book value of equity	\$9,832.00	\$9,853.00	
Book value of debt	\$7,930.00	\$9,091.00	
Do you have R&D expenses to capitalize?	No		
Do you have operating lease commitments?	Yes		
Cash and Marketable Securities	\$2,548.00	\$1,854.00	
Number of shares outstanding =	519		
Current stock price =	\$37.66		
Effective tax rate =	22.21%		
Marginal tax rate =	25.00%		
The value drivers below:			
Compounded annual revenue growth rate over next 5 years =	3.97%	<i>Growth Lever</i>	
Target pre-tax operating margin (EBIT as % of sales in year 10) =	14.67%	<i>Profitability Lever</i>	
Year of convergence	5	<i>Speed of convergence level</i>	
Sales to capital ratio (for computing reinvestment) =	1.5	<i>Efficiency of Growth Lever</i>	
Market numbers			
Risk-free rate	0.92%		
Initial cost of capital =	9.33%		
Other inputs			
Do you have employee options outstanding?	No		
Standard deviation on stock price =	43.00%		

Addition of Operating Leases to Final Outputs

Inputs			
Operating lease expense in current year =			\$256.00
<i>Operating Lease Commitments (From footnote to financials)</i>			
	Year	Commitment	
	1	398	
	2	398	
	3	205	
	4	205	
	5	661	
	6 and beyond	661	
Output			
Pre-tax Cost of Debt =		3.93%	
Number of years embedded in v 6 estimate = 2			
<i>Converting Operating Leases into debt</i>			
	Year	Commitment	Present Value
	1	\$398.00	\$382.95
	2	\$398.00	\$368.47
	3	\$205.00	\$182.61
	4	\$205.00	\$175.71
	5	\$661.00	\$545.13
	6 and beyond	\$330.50	\$514.60
Debt Value of leases =			\$2,169.46
<i>Restated Financials</i>			
Depreciation on Operating Lease Asset =			\$309.92
Adjustment to Operating Earnings =			<i>(\$53.92)</i>
Adjustment to Total Debt outstanding =			\$2,169.46
Adjustment to Depreciation =			\$309.92

FCFF output / results

Table 2 - Comparison Data

	Southwest	Industry (US data)	Industry (Global data)
Revenue growth in the most recent year =	2.11%	4.84%	7.14%
Pre-tax operating margin in the most recent year =	12.94%	11.60%	8.46%
Sales to capital ratio in most recent year =	1.29	1.5	1.01
Return on invested capital in most recent year=	12.99%	13.69%	6.64%
Standard deviation in stock prices =	43.00%	31.74%	30.61%
Cost of capital =	9.33%	5.86%	5.78%
Revenues in year 10 (<i>in Millions</i>)	\$31,887		
Pre-tax Operating Income in year 10 based on operating margin = (<i>in Millions</i>)	\$4,678		
Return on invested capital in year 10 based on sales/capital ratio =	14.78%		

Table 3 - Valuation Output

Southwest	Base 2019	Year 1 2020	Year 2 2021	Year 3 2022	Year 4 2023	Year 5 2024	Year 6 2025	Year 7 2026	Year 8 2027	Year 9 2028	Year 10 2029	Terminal
Revenue Growth Rate (%)		3.97%	3.97%	3.97%	3.97%	3.97%	3.58%	3.18%	2.79%	2.39%	2.00%	2.00%
FCFF (<i>in Millions</i>)		\$1,816.98	\$1,954.22	\$2,099.49	\$2,253.22	\$2,415.84	\$2,547.96	\$2,676.77	\$2,801.03	\$2,919.49	\$3,030.91	\$2,806.68
PV of FCFF (<i>in Millions</i>)		\$1,661.90	\$1,634.86	\$1,606.47	\$1,576.94	\$1,546.44	\$1,499.43	\$1,455.59	\$1,414.73	\$1,376.70	\$1,341.36	

Terminal Growth Rate is 2.0%

RISK and Return Analysis

Analysis

Table 1 - Historical Data

	LUV	NEM	S&P 500
Average Historical Return	1.72%	0.69%	0.98%
Historical Standard Deviation	8.31%	10.17%	3.58%

Source: Based on Yahoo Finance

Table 2 - Matrix

Correlation Matrix (standardized)

	LUV	NEM	S&P 500
LUV	1.0000		
NEM	-0.1196	1.0000	
S&P 500	0.5178	-0.0220	1.0000

Covariance Matrix (unstandardized)

	LUV	NEM	S&P 500
LUV	0.006842		
NEM	-0.001002	0.010260	
S&P 500	0.001525	-0.000079	0.001268

Table 3 - LUV Regression Summary

LUV	Coefficients	Standard Error	t Stat	P-value
Intercept	0.005389829	0.006758119	0.797533817	0.426743033
S&P 500	1.202785095	0.182915939	6.575616657	1.38626E-09

Table 4 - NEM Regression Summary

NEM	Coefficients	Standard Error	t Stat	P-value
Intercept	0.007524887	0.009671824	0.778021498	0.43811355
S&P 500	-0.0625508	0.261778555	-0.23894547	0.81156237

Table 5 - Historical Return vs Calculated Required Return

	LUV	NEM	S&P 500
Average Historical Return	1.72%	0.69%	0.98%
Average Calculated Required Return	1.14%	0.15%	

10-year Quarterly	*data from macrotrends.net																		*data from ycharts.com Toronto Stock Exchange					
	Southwest (LUV)			JetBlue (JBLU)			Spirit (SAVE)			Delta (DAL)			Alaska (ALK)			American (AAL)			United (UAL)			Air Canada (AC.TO)		
Date	Stock Price	EPS	PE Ratio	Stock Price	EPS	PE Ratio	Stock Price	EPS	PE Ratio	Stock Price	EPS	PE Ratio	Stock Price	EPS	PE Ratio	Stock Price	EPS	PE Ratio	Stock Price	EPS	PE Ratio	Stock Price	EPS	PE Ratio
4/17/20	31.19	\$4.28	7.29	8.98	\$1.92	4.68	13.35	\$4.89	2.73	24.27	\$7.31	3.32	29.93	\$6.20	4.83	11.57	\$3.81	3.04	29.08	\$11.63	2.5	18.15	\$5.50	3.3
12/31/19	53.98	\$0.97	12.61	18.72	\$0.55	9.75	40.31	\$1.18	8.24	58.48	\$1.69	7.99	67.75	\$1.45	10.93	28.68	\$0.93	7.53	88.09	\$2.48	7.57	48.51	\$0.58	8.901
9/30/19	54.01	\$1.23	12.08	16.75	\$0.63	8.77	36.3	\$1.22	7.19	57.6	\$2.31	8.11	64.91	\$2.60	13.17	26.97	\$0.96	7.6	88.41	\$3.99	8.19	43.21	\$2.35	12.17
6/30/19	50.78	\$1.37	11.75	18.49	\$0.59	12.84	47.73	\$1.67	9.09	56.75	\$2.21	8.47	63.91	\$2.11	15.66	32.61	\$1.49	9.79	87.55	\$4.02	8.87	39.69	\$1.26	10.58
3/31/19	51.91	\$0.70	12.30	16.36	\$0.14	34.81	52.86	\$0.82	14.13	51.65	\$1.09	8.67	56.12	\$0.03	15.9	31.76	\$0.41	10.38	79.78	\$1.09	9.58	32.21	\$1.26	15.19

Southwest 2020 EPS	\$ 4.28				
Growth Rate (From Part 2)	3.97%	historical growth			
Southwest Expected EPS	\$ 4.45				
2020 Avg PE Ratio	3.49				
Expected MKT PRICE Range	\$ 15.51				
	HIGH PE	\$21.49	LOW PE	\$11.12	
Conclusion	Overvalued				
\$31.19 > \$15.51					

Company	P/E	EV/EBITDA
Jetblue	4.68	3.21
Spirit	2.73	4.64
Delta	3.32	3.25
Alaska	4.83	3.60
American	3.04	6.42
United	2.50	3.35
Air Canada	3.30	2.93
Average	3.49	3.91
High	4.83	6.42
Low	2.50	2.93
Southwest	7.29	3.78
Implied Prices for Southwest		
Average Price	\$ 15.51	
High Price	\$ 21.49	
Low Price	\$ 11.12	

10-year Quarterly	*data from macrotrends.net																		*data from ycharts.com Toronto Stock Exchange					
	Southwest (LUV)			JetBlue (JBLU)			Spirit (SAVE)			Delta (DAL)			Alaska (ALK)			American (AAL)			United (UAL)			Air Canada (AC.TO)		
Date	Stock Price	EPS	PE Ratio	Stock Price	EPS	PE Ratio	Stock Price	EPS	PE Ratio	Stock Price	EPS	PE Ratio	Stock Price	EPS	PE Ratio	Stock Price	EPS	PE Ratio	Stock Price	EPS	PE Ratio	Stock Price	EPS	PE Ratio
3/31/20	35.61	\$3.58	9.95	8.95	\$1.78	5.03	12.89	\$4.07	3.17	28.53	\$6.23	4.58	28.47	\$6.17	4.61	12.19	-1.86	-	31.55	\$3.68	8.57		\$0.19	
TTM/4		\$0.90			\$0.45			\$1.02			\$1.56			\$1.54						\$0.92				

Southwest 2020 Q1 EPS	\$ 0.90				
Growth Rate	0.00%				
Southwest Expected EPS	\$ 0.90				
2020 Avg PE Ratio	5.19				
Expected MKT PRICE Range	\$ 18.59				
	HIGH Price Per Share	\$30.68	LOW Price Per Share	\$11.35	
Conclusion	Overvalued				
\$35.61 > \$18.59					

Company	P/E	EV/EBITDA
Jetblue	5.03	5.00
Spirit	3.17	6.68
Delta	4.58	5.74
Alaska	4.61	6.70
American	-	7.33
United	8.57	5.73
Air Canada	-	3.84
Average	5.19	5.86
High	8.57	7.33
Low	3.17	3.84
Southwest	9.95	6.67
Implied Prices for Southwest		
Average Price	\$ 18.59	
High Price	\$ 30.68	
Low Price	\$ 11.35	

Table 9 - WACC Calculations

	(in millions)
Market Values of SE and Debt	
Market Value of bonds - Calculated	\$1,427.31
Market Value of Equity - Calculated	\$15,778.48
tax rate	22.21%
1-TR	77.79%
LUV Beta	1.2028
Rate of Debt (YTM)	3.59%
Rate of Equity (Req. Return Part 3)	13.68%
Price/Share as of April 20, 2020	\$31.06
Share outstanding as of April 20, 2020	508
Total Debt	
MV of bonds and Debentures	\$1,427.31
Contractual Obligations expected 2020	3,626
Air traffic liability - noncurrent	\$1,053.00
Deferred income taxes	\$2,364.00
Construction obligation	\$164.00
Noncurrent operating lease liabilities	\$978.00
Other noncurrent liabilities	\$706.00
Total Debt	\$10,318.31
WACC Calculations (End of 2019)	
V=D+E	\$26,096.79
E/V (Weight of Equity)	60.46%
D/V (Weight of Debt)	39.54%
New WACC estimate	9.38%

Table 10 - Long Term Debt to Total Equity Ratio - FY 2019 (From Part One)

In Millions of USD except Per Share	Average* FY 2019	Southwest FY 2019	Jet Blue FY 2019	Spirit FY 2019	Delta FY 2019	Alaska FY 2019	American FY 2019	United FY 2019	Air Canada FY 2019
Debt Management (Leverage)									
Long Term Debt to Total Equity (%)	102.99	28.72	55.85	140.56	92.25	62.41	—	158.80	182.36

*Note: calculated competitor average

Source: Calculations based on company and Bloomberg data.

Table 11 - Projected Growth Rates (From Part Two)

Southwest	Base 2019	Year 1 2020	Year 2 2021	Year 3 2022	Year 4 2023	Year 5 2024	Year 6 2025	Year 7 2026	Year 8 2027	Year 9 2028	Year 10 2029	Terminal
Revenue Growth Rate (%)		3.97%	3.97%	3.97%	3.97%	3.97%	3.58%	3.18%	2.79%	2.39%	2.00%	2.00%

Table 12 - Cash Flows

Southwest (in millions)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Terminal
Revenues	\$23,318	\$24,244	\$25,207	\$26,207	\$27,248	\$28,222	\$29,120	\$29,932	\$30,649	\$31,262	\$31,887
Operating Margin %	13.29%	13.63%	13.98%	14.32%	14.67%	14.67%	14.67%	14.67%	14.67%	14.67%	14.67%
EBIT	\$3,099	\$3,306	\$3,524	\$3,754	\$3,997	\$4,140	\$4,272	\$4,391	\$4,496	\$4,586	\$4,678
EBIT (1-t)	\$2,411	\$2,571	\$2,741	\$2,920	\$3,109	\$3,198	\$3,275	\$3,342	\$3,397	\$3,440	\$3,508
Reinvestment	\$594	\$617	\$642	\$667	\$694	\$650	\$599	\$541	\$478	\$409	\$702
FCFF	\$1,817	\$1,954	\$2,099	\$2,253	\$2,416	\$2,548	\$2,677	\$2,801	\$2,919	\$3,031	\$2,807

Table 13 - Present Value of Cash Flows

Southwest (in millions)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
PV (FCFF)	\$1,672.63	\$1,656.05	\$1,637.81	\$1,618.09	\$1,597.05	\$1,556.54	\$1,516.92	\$1,478.20	\$1,440.36	\$1,403.38

Table 14 - The Value

Terminal value	\$61,658
PV(Terminal value)	\$28,549
PV (CF over next 10 years)	\$15,577
Value of operating assets =	\$44,126
Adjustment for distress	\$-
- Debt & <u>Minority</u> Interests	\$10,099
+ Cash & Other Non-operating assets	\$2,548
Value of equity	\$36,575
- Value of equity options	\$-
Number of shares	508
Value per share	\$72.00

		Total Equity			
Based on 589(NOW) shares			\$ 14,683.77	\$ 14,866.36	\$ 24,313.92
	Total Debt	we are using now (2019)	\$ 10,318.31	9.22%	
		PESSIMISTIC DEBT ASSUMPTION	\$ 20,260.54	7.37%	
		OPTIMISTIC DEBT ASSUMPTION	\$ 16,466.31		9.28%
		Total Equity			
Based on 515 Shares			\$ 12,838.95	\$ 12,998.60	\$ 21,259.20
	Total Debt	we are using now (2019)	\$ 10,318.31	8.86%	
		PESSIMISTIC DEBT ASSUMPTION	\$ 20,260.54	7.02%	
		OPTIMISTIC DEBT ASSUMPTION	\$ 16,466.31		8.93%
		Total Equity			
Based on 750 Shares			\$ 18,697.50	\$ 18,930.00	\$ 30,960.00
	Total Debt	we are using now (2019)	\$ 10,318.31	9.84%	
		PESSIMISTIC DEBT ASSUMPTION	\$ 20,260.54	8.02%	
		OPTIMISTIC DEBT ASSUMPTION	\$ 16,466.31		9.90%

	6.98%								
	8.33%		Now	18.44	25.24	-25%	overvalued	short term outlook	
			The number of shares	value per share					
		515M	589M	750M	Ginzu Vps	Market Price	Growth		
Now (May-12-2020 23:33)			9.22%		49.18	25.24	0%	undervalued	long term outlook
Optimistic		8.93%			57.29		0%		
Pessimistic			8.02%		8.88		-75%		
			Optimistic	Pessimistic	Today LT	Today ST			
			Growth	0%	-75%	0%	-25%		
			Wacc	8.93	8.02	9.22	9.22		
			Value/Share	57.29	8.88	49.18	18.44		

Reference / Credit

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