Analyst: Dace Bregantini

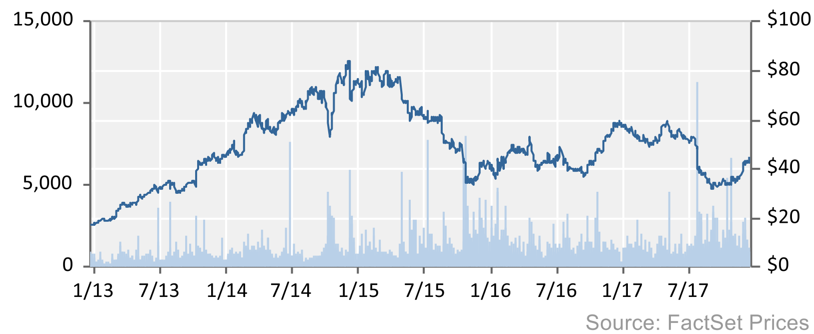
INVESTMENT MANAGEMENT CERTIFICATE PROGRAM

December 31, 2017

Industrials, Airlines

Spirit Airlines, Inc.

Recommendation	HOLD
Target (today's value)	$50.14
Current Price	$45.02
52 week range	$30.32- $60.28



Share Data	
Ticker:	SAVE
Market Cap. (Billion):	$3.1
Inside Ownership	0.8%
Inst. Ownership	87%
Beta	1.2
Dividend Yield	N/A
Payout Ratio	N/A
Cons. Long-Term Growth Rate	-2.0%

Summary: I recommend a hold rating with a target price of $50.14. SAVE has the lowest cost structure in the industry giving it high potential to increase margins as the environment improves, but under current conditions, revenue growth is being out paced by rising costs from aggressive expansion. SAVE's low pricing strategy is a market maker as lower fare prices increase demand. Most headwinds to SAVE remain internal as risks to its low-cost structure. Most prevalent are increases in oil prices and labor uncertainties in a unionized industry. Based off multiples and DCF analysis, the stock is currently fairly valued.

	'15	'16	'17E	'18E	'19E
Sales (billions)					
Year	$2.1	$2.3	$2.7	$3.3	$3.8
Gr %	10.9%	8.4%	13.2%	21.5%	13.4%
Cons	-	-	$2.6	$3.2	$3.6
EPS					
Year	$4.39	$3.77	$3.79	$4.40	$4.70
Gr %	41.6%	-14.1%	0.5%	16.1%	6.8%
Cons	-	-	$3.08	$3.38	$4.09

Key Drivers:

- *Oil*: Fuel accounted for 24% of SAVE's 2016 total expenses. Fuel is a high percent of costs for any airline. Management, advert to hedging jet fuel, has been reaping the benefit of recent lows in oil. Oil prices are expected to rise over the next two years.
- *Pricing and Cost Structure*: SAVE is the low fare leader and has the lowest cost structure in the industry. SAVE's PRASM averages 23% below the industry over the last six years. This gives SAVE a competitive advantage over fare pricing.
- *Growth:* SAVE is young, healthy, and growing. In 2016, SAVE increased capacity by 20% and has scheduled deliveries of another 76 planes, an 80% increase of capacity through 2019.

Ratio	'15	'16	'17E	'18E	'19E
ROE (%)	28.5%	20.2%	13.4%	12.9%	12.1%
Industry	84.3%	47.5%	28.1%	26.5%	23.6%
NPM (%)	14.8%	11.4%	8.2%	7.0%	6.7%
Industry	15.5%	11.5%	7.1%	7.1%	6.9%
A. T/O	1.0	0.8	0.7	0.7	0.7
ROA (%)	15.3%	9.3%	5.4%	4.9%	5.1%
Industry	13.5%	9.5%	5.9%	8.0%	8.5%
A/E	2.1	2.3	2.5	2.7	2.8

Valuation	'15	'16	'17	'18E
P/E	9.7	14.1	14.5	15.5
Industry	7.3	8.7	12.3	11.2
P/S	1.4	1.7	1.2	1.0
P/B	2.3	2.9	2.0	1.8
P/CF	6.1	8.7	7.3	6.5
EV/EBITDA	4.7	9.9	7.8	7.5

Valuation: Using a relative valuation approach, SAVE appears to be fairly valued within the airline industry. Due to greater ability to value long-term inputs, I used a DCF model to value the stock. A combination of approaches suggests that SAVE is fairly valued, as the stock's value is about $50 and the shares are trading close to $45.

Performance	SAVE	Industry
1 Month	15.4%	8.0%
3 Month	23.8%	6.7%
YTD	-26.5%	11.2%
52-week	-26.5%	11.3%
3-year	-41.6%	12.2%

Risks: Threats to the business include rises in uncontrollable costs such as aircraft fuel and airport trafficking expenses. Furthermore, changes in consumer preference or demographics toward higher fare standards or amenities that might arise as the economy improves could hinder SAVE's positioning.

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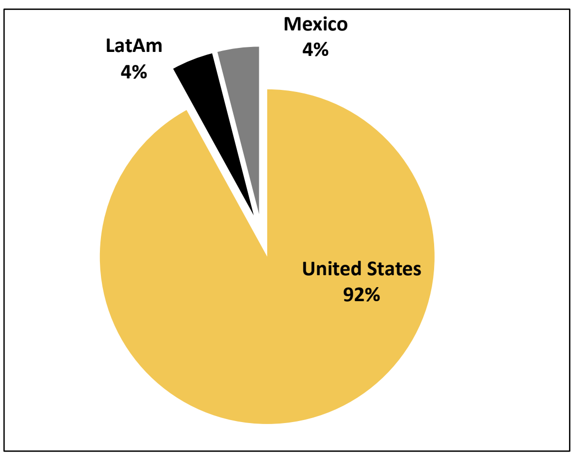
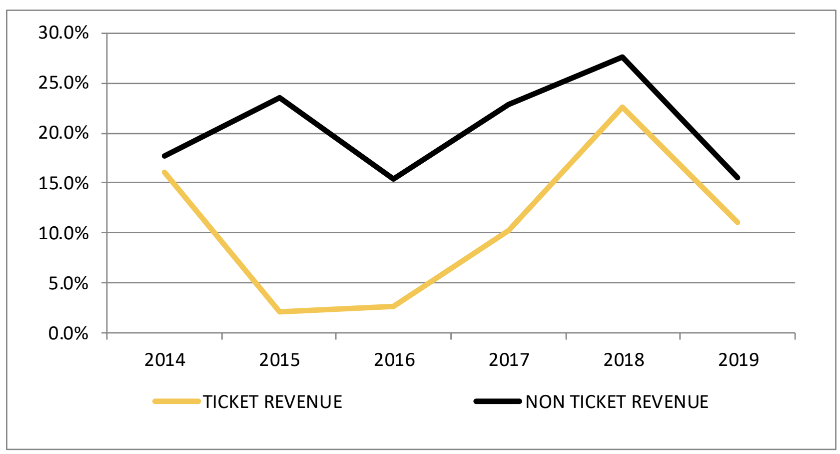
Company Overview

Spirit Airlines (SAVE) is an ultra-low cost, ultra-low fare carrier. The firm targets the "price-conscious customer" by offering low Bare Fares™ and an unbundled approach to flying. They call this approach Frill Control™. Because SAVE separates all amenities out of the fare price, it can offer a far lower fare to travel. SAVE's average ticket price for 2016 totaled $73 compared to the industry's average fare for a domestic flight of $355. SAVE was the first airline to offer this degree of autonomy in a cost selection. Bare Fare™ will get you a seat and one 14"x18"x8" personal item. Other airlines are beginning to offer similar deals to book seats in the final days before departure of scheduled flights. This is standard procedure for SAVE. From there, customers may individually select all additional amenities they may need such as: additional bags, advanced seating, and refreshments. These up charges account for typically 50% of SAVE's revenues.

92% of SAVE's revenue is rooted domestically, 4% comes from flights to Mexico, and the remaining (approximate) 4% comes from Latin America. Over the last five years, SAVE had a revenue CAGR of 15.7%. As a portion of total sales, domestic revenues grew 1.5% from last year while its international markets shrunk. Further detail on international segments at this time is immaterial. Five year CAGR for ticket revenue is 8.9%. Over the same period, non-ticket revenue has a CAGR of 15.9%. SAVE offers a subscription-based service known as the $9 fare club. This membership provides vacation packages and discounted fares in addition to increased baggage allowance. On its website, SAVE offers discounts on car rentals across multiple sources including Alamo, Enterprise, Hertz, and others. Figure two below shows revenue generation for SAVE. Ticket revenues slowed sharply in 2015 and 2016 due to heavy competition leading to ticket price discounting.

Figures 1 and 2: Revenue Sources for SAVE (left), Historic Sales growth (right)





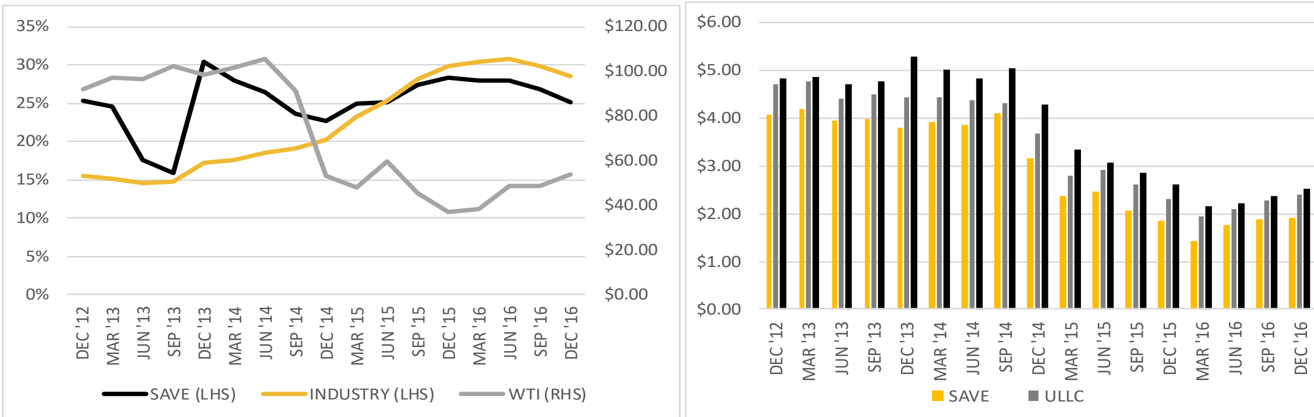
Source: Spirit Airlines, 2017 10-k

Business/Industry Drivers

Though several factors may contribute to Spirit Airlines' future success, the following are the most important business drivers:

1) Oil
2) Pricing and Cost Structure
3) Expansion

Figures 3 and 4: Quarterly Oil Price vs Gross Margin % (left) Fuel Expense in Dollar per ASM (right)



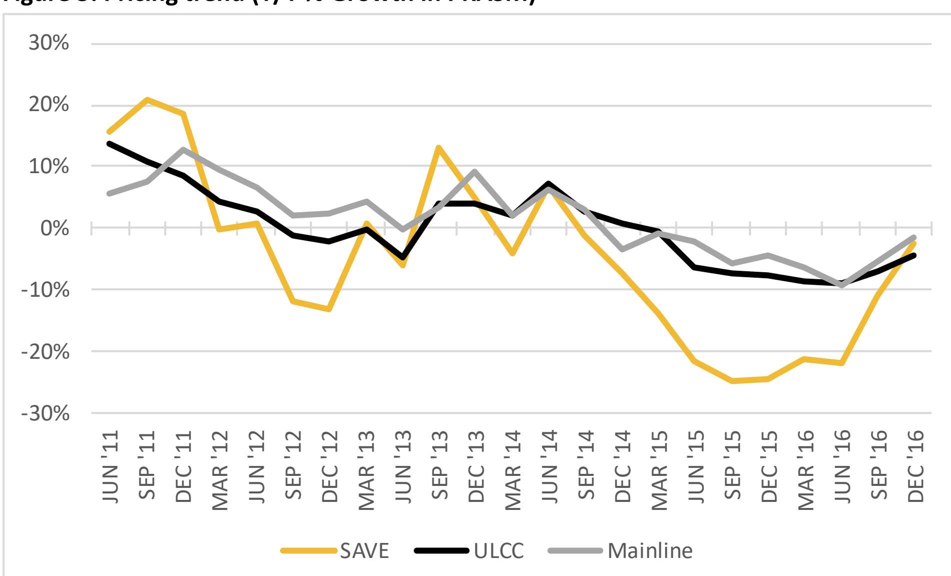
Source: Factset

Oil

COMPS:	**PEERS**:
ALGT	ALGT
JBLU	JBLU
LUV	LUV
AAL	
DAL	

Fuel costs in 2016 were $1.48 per gallon, down 19% from 2015 figures. Figure 3 shows that as fuel prices fell, gross margin rose more for the industry than for SAVE. In 2014 and 2015, SAVE employed United States Gulf Coast jet fuel swaps and options. After suffering a 1.5% increase in fuel cost due to ineffective hedging in 2015, paired with stringent liquidity requirements, management has become avert to hedging. SAVE has no outstanding fuel derivatives at this time. Gross margin for SAVE was down 3.2% in 2016 costing it $0.67 in EPS. As oil prices rose in 2017, both SAVE and the industry were hurt. Expectations for oil are set at $60 per barrel up from 2016 average price of $45.

Figure 5: Pricing trend (Y/Y % Growth in PRASM)



Source: Factset

Pricing and Cost Structure

Discounting is common in the airline industry. Once a flight is scheduled, the airline incurs nominal incremental costs to service additional passengers who fill otherwise empty seats. This makes pricing highly competitive. Figure 5 shows the growth rate in passenger revenue per available seat mile (PRASM) over the last six years. Versus total revenue per available seat mile (TRASM), PRASM specifically depicts scheduled ticket revenue which is the best display of the pricing (or fare) environment for airlines. Prices seem to have hit a bottom in 2016. The downtrend was driven by airlines adding flights because of low oil prices. This market saturation exceeded demand. Moving forward, demand is beginning to catch up, supported by a strengthening economy, fares are beginning an uptrend going into 2017.

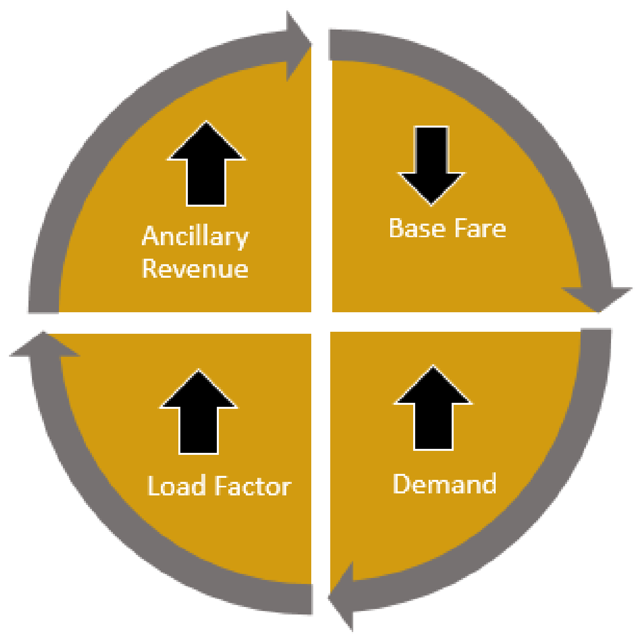
Price is also substantially driven by costs. SAVE, as its ticker might imply, has the best cost position in the industry. SAVE's CASM (cost per available seat per mile) is 26% below the average of its three biggest competitors in the ULCC (ultra-low-cost carriers) sub sector, $7.51 versus $10.18. SAVE offers ultra-low prices through its ultra-low-cost structure, Fit Fleet®, unbundled business model, and other strategic decisions.

Figure 6: SAVE's Fleet

Aircraft Type	Seats	Avg. Age (years)	# of Aircraft	# Owned	Number Leased
A319	145	10.5	29	7	22
A320ceo	178-182	3.4	45	15	30
A320neo	182	0.1	5	-	5
A321	218-228	2.2	16	14	2

Source: Spirit Airlines

Figure 7: SAVE's Business Model



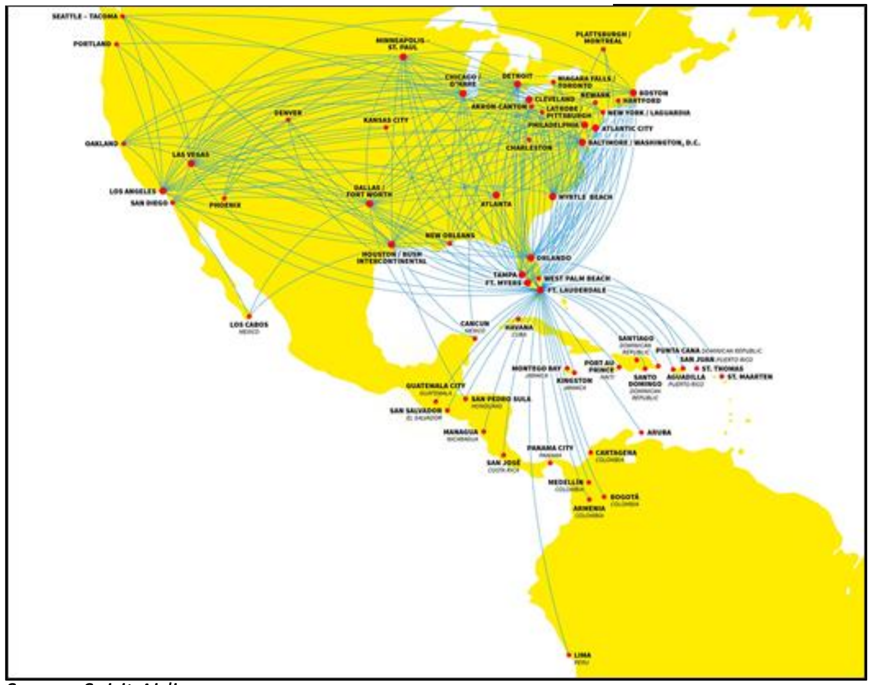
Avg. Fleet Age. (years)
ALGT : 19.8
DAL : 17
UAL : 14.3
LUV : 11.8
AAL : 10.8
JBLU : 9.2

SAVE uses only Airbus A320 family aircrafts in what it calls its Fit Fleet®. SAVE has the youngest fleet in the industry with an average age of 5.2 years. Newer planes are 16% and 28% more fuel-efficient than those used by SAVE's peers and mainline carriers, respectively. Figure 4 shows the cost benefit regarding fuel. Furthermore, these aircraft are configured for high-density seating and can accommodate more passengers than competitors using the same type. The benefit is a lower unit cost. Isolation to a single aircraft type also cuts costs across multiple facets. Incremental costs to train crewmembers across different airline types are eliminated. Maintenance costs are cut through simplified operational support and compatibility of the business's spare parts inventory. SAVE's maintenance costs per ASM (available seat mile) over the past 20 quarters average 44% below its top five industry, mainline and ULCC competitors; it is $0.42 versus $0.84. This benefit was partially offset by SAVE's higher rent expense on the new planes. SAVE owns 36 of its 95 aircraft. By comparison, SAVE's rental expenses per ASM (average over five years) is $1.10, 84% over the $0.25 average of the mentioned COMP group.

Maintaining this lower cost structure is the core of SAVE's strategic position. SAVE is the leading provider in low fares and a market maker. On average, SAVE reports growing the traffic base of markets it enters by 35-40%. Figure 6 shows the cycle of SAVE's business model. Lower fares drive up demand, which increases the load factor, which then increases ancillary revenue, which results in the ability to lower fares further.

Expansion

Figure 8: Map of SAVE's routes as of 2016



Source: Spirit Airlines

SAVE is expanding. In fact, SAVE is expanding more than twice as fast as any of its peers. As of December 31, 2016, SAVE has outstanding orders for 76 new planes and 3 engines to be delivered through 2019 and 2023. These orders represent an 80% increase in capacity for SAVE. However, competition over pricing loosens the correlation between capacity growth and revenue generation. Over the last five years, SAVE's capacity grew at a compounded rate of 5.1% while PRASM CAGR for SAVE was down -2.01%. Comparably, in the same period, ULCC PRASM CAGR was down -0.54% and mainline PRASM CAGR was down -0.12%. This shows the anchoring effect SAVE produces. Fares in SAVE's markets fell more than markets SAVE is not active in. This is because it is SAVE's advantage to be the cheapest, so when it enters a market and demand rises for SAVE's offering, other airlines must react by discounting leading the average fare of the market curbed. Figure 5 shows this. SAVE currently serves 200 markets through 59 airports. In 2018, SAVE will launch 29 new markets, served from four new destinations: Seattle Washington, Akron-Canton Ohio, Newark New Jersey, and Havana Cuba. Management plans to add 125 routes, a 63% expansion, over the next five years.

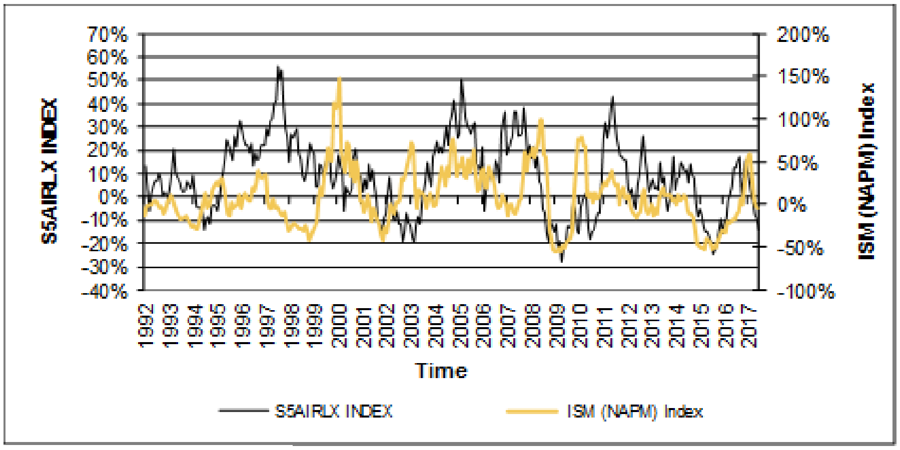
Figure 9: Fleet additions

Management Plan			
Plane	2017	2018	2019
A319	0	0	-1
A320ceo	4	5	1
A320neo	0	4	12
A321ceo	9	5	0
Total	13	14	13
Seats added	2,727	2,743	2,364
Seats lost	-	-	-145

Source: Spirit Airlines

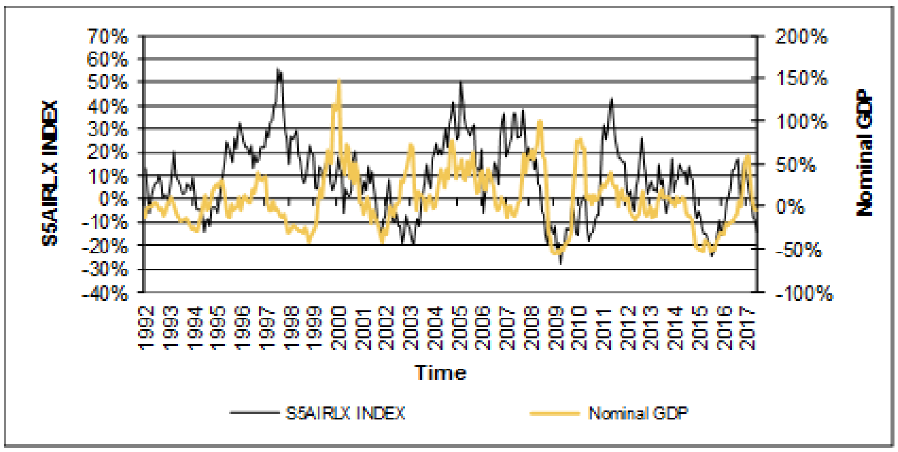
Figures 10 and 11 show that the industry is highly cyclical. It normally outperforms when the economy is strengthening.

Figure 10: Airline annual relative return vs S&P 500 vs ISM



Source: Bloomberg

Figure 11: Airline annual relative returns vs S&P 500 vs Nominal GDP

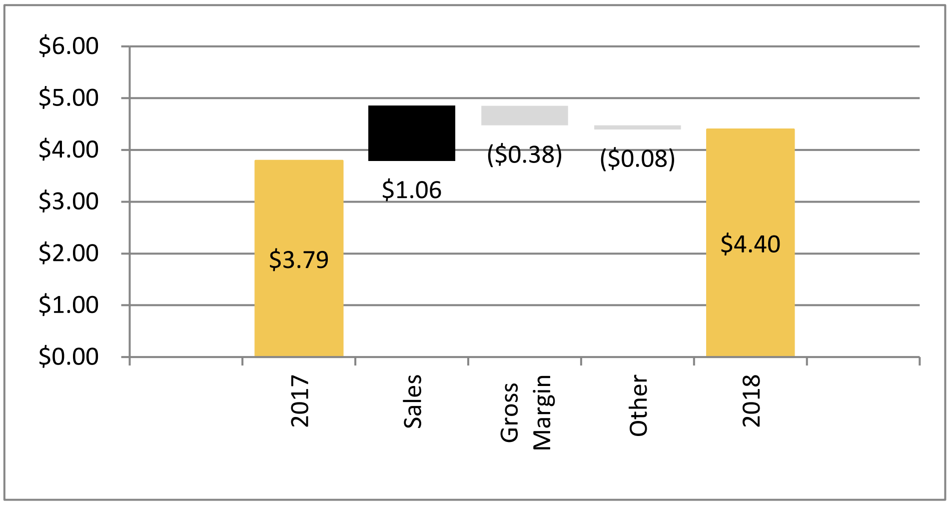


Source: Bloomberg

Financial Analysis

I anticipate EPS to grow to $4.40 in FY 2018. All else equal, the hike in revenues from increased capacity paired with rising fares will drive a $1.06 increase in EPS. However, decreasing margin due to expenses such as labor and fuel outpacing revenues will reduce EPS by $0.38. Furthermore, this will result in more debt issuance and greater interest expense, accounting for a $0.08 decrease in EPS.

Figure 12: Quantification of 2018 EPS drivers



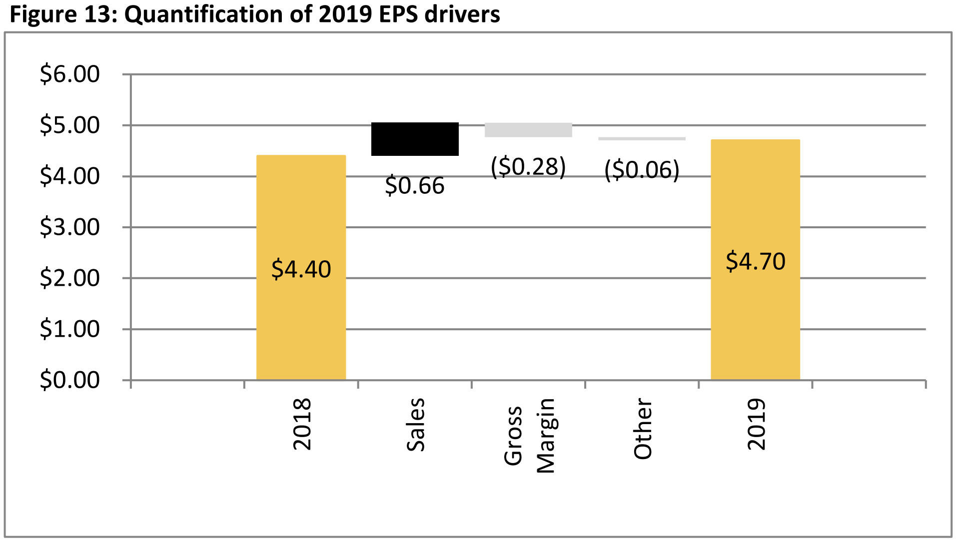
Source: Company Reports, IMCP

<u>Sales- Estimates vs. Consensus</u>
2018: $3,380 vs. $3,193

<u>EPS- Estimates vs. Consensus</u>
2018: $4.40 vs. $3.38

I expect EPS to increase $0.30 over my FY 2018 estimates to $4.70 in FY 2019. Since growth will be slowing, increases in sales will account for $0.66 increase in EPS. Expenses in 2019 are expected to still outpace revenues and further shrink margin accounting for a $0.28 decrease in EPS. Further issuance of debt, increasing interest, will reduce EPS by $0.06.

Figure 13: Quantification of 2019 EPS drivers



Source: Company Reports, IMCP

<u>Sales- Estimates vs. Consensus</u>
2019: $3,832 vs. $3,566

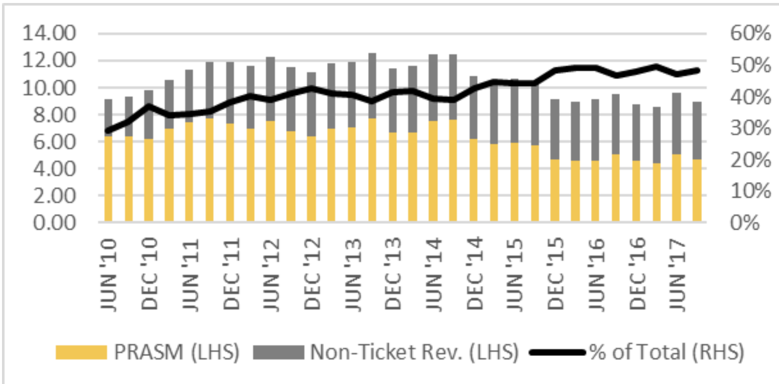
<u>EPS- Estimates vs. Consensus</u>
2019: $4.70 vs. $4.09

My estimates are bullish versus consensus over both forward-looking years. This is because I believe in the effectiveness of SAVE's model and expect higher growth of SAVE's ancillary revenues. As fares rise, SAVE's advantage is to remain the anchor of the industry. While it is advantageous for competitors to drive ticket prices higher, SAVE can benefit at levels 53% relative to even the current industry. Instead of a price focused model, SAVE revolves around pushing for load factor, and servicing markets that people are likely to bring a lot of luggage to. I believe both with be on the rise considering the strengthening economy and increasing demand for flights. Paired with the improving environment, SAVE is expanding both its depth and breadth.

Revenues

Demand for flights is increasing and airlines are beginning to charge more for fares. (See figure 5) Primary increases in revenue will come from capacity additions and an increase in ancillary revenues as traffic grows.

Figure 14: Growth in Non-Ticket Revenue per ASM

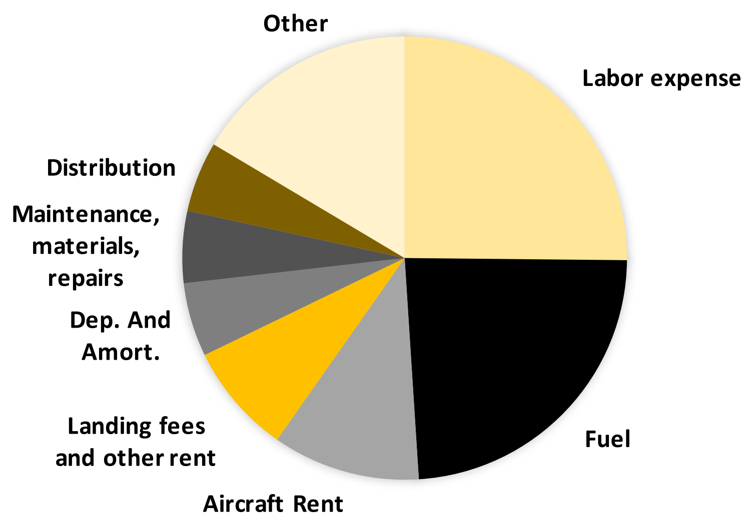


Source: Factset

Operating Income and Margins

Almost 50% of operating expenses are payment for fuel and labor. Airlines also incur expenses to traffic to airports, for maintenance fees, for distribution costs, and for rent expenses. Fuel prices are expected to rise significantly and cut into margins. SAVE's work force is represented by four labor unions: ALPA, AFA, TWV, and IAMAW. Outside of ALPA, all contracts with unions are bound through 2020 at the earliest. As SAVE's fleet ages, maintenance costs are expected to rise. As SAVE continues to expand rent expense will increase.

Figure 15: SAVE Operating Expenses 2016

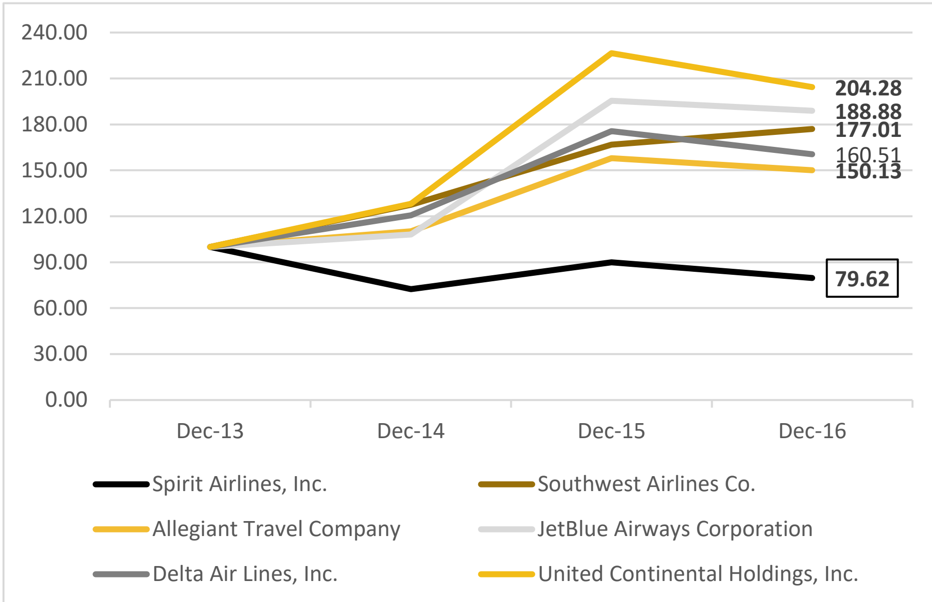


Source: Spirit Airlines

Return on Equity

SAVE's declining ROE comes from its aggressive growth. However, its returns compared to its peers are much more stable. This is because SAVE does not rely on premium fare traffic and instead targets the more resilient, price sensitive traveler. As shown below, operating margin has fallen, primarily because of dropping fare prices. At the same time, asset turns declined as assets grew faster than sales. ROE would have declined more if leverage had not risen. Going forward I expect margins to fall but be somewhat offset by higher asset turns. ROE will decline as leverage moderates a little.

Figure 16: Gross Margin of Airlines Relative to S&P



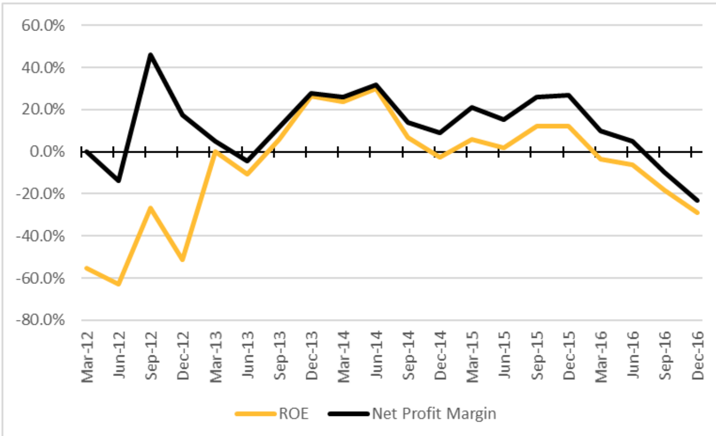
Source: Factset

Figure 17: ROE breakdown, 2014-2019E

Items	2014	2015	2016	2017E	2018E	2019E
ROE						
5-stage						
EBIT / sales	18.4%	23.8%	19.1%	16.8%	15.6%	14.8%
Sales / avg assets	1.39	1.04	0.82	0.81	0.89	0.89
EBT / EBIT	100.1%	98.7%	94.7%	90.0%	89.8%	89.4%
Net income /EBT	63.4%	63.1%	63.1%	63.1%	63.1%	63.1%
ROA	16.2%	15.3%	9.3%	7.7%	7.9%	7.4%
Avg assets / avg equity	1.57	1.85	2.17	2.26	2.23	2.15
ROE	25.4%	28.5%	20.2%	17.5%	17.6%	15.9%

Source: Spirit Airlines

Figure 18: SAVE ROE vs NPM



Source: Factset

SAVE's current load factor is approximately 80%, which is typical of the industry. Over its life, SAVE's PRASM averages 53% relative to the industry. As fares rise for the industry, SAVE would rather maintain low fares in efforts to attract more passengers. Done successfully, this will increase SAVE's NPM.

Free Cash Flow

SAVE's free cash flow is negative because it is growing. In 2015, SAVE elected to fund a 72% increase in NFA through debt. SAVE only recently began using debt to grow. Currently the lowest levered airline, SAVE is expected to take further advantage of leverage.

Figure 19: Free Cash Flows 2014 – 2019E

Free Cash Flow	**Dec-13**	**Dec-14**	**Dec-15**	**Dec-16**	**Dec-17**	**Dec-18**	**Dec-19**
NOPAT	$176,950	$227,854	$321,468	$280,367	$286,780	$333,251	$358,480
Growth		*28.8%*	*41.1%*	*-12.8%*	*2.3%*	*16.2%*	*7.6%*
NWC*	(72,287)	(103,915)	(11,166)	(46,795)	(10,804)	(3,380)	11,498
Net fixed asse	531,690	871,840	1,504,205	2,176,082	2,524,289	2,939,215	3,332,640
Total net ope	$459,403	$767,925	$1,493,039	$2,129,287	$2,513,485	$2,935,835	$3,344,138
Growth		*67.2%*	*94.4%*	*42.6%*	*18.0%*	*16.8%*	*13.9%*
- Change in NWC*		(31,628)	92,749	(35,629)	35,991	7,424	14,878
- Change in NFA		340,150	632,365	671,877	348,207	414,925	393,425
FCFF*		($80,668)	($403,646)	($355,881)	(97,418)	($89,099)	($49,823)
Growth			*400.4%*	*-11.8%*	*-72.6%*	*-8.5%*	*-44.1%*
- After-tax int	(251)	(215)	4,233	14,960	28,540	33,863	38,123
FCFE**		($80,453)	($407,879)	($370,841)	($125,959)	($122,961)	($87,946)
Growth			*407.0%*	*-9.1%*	*-66.0%*	*-2.4%*	*-28.5%*

Source: Company Reports, IMCP

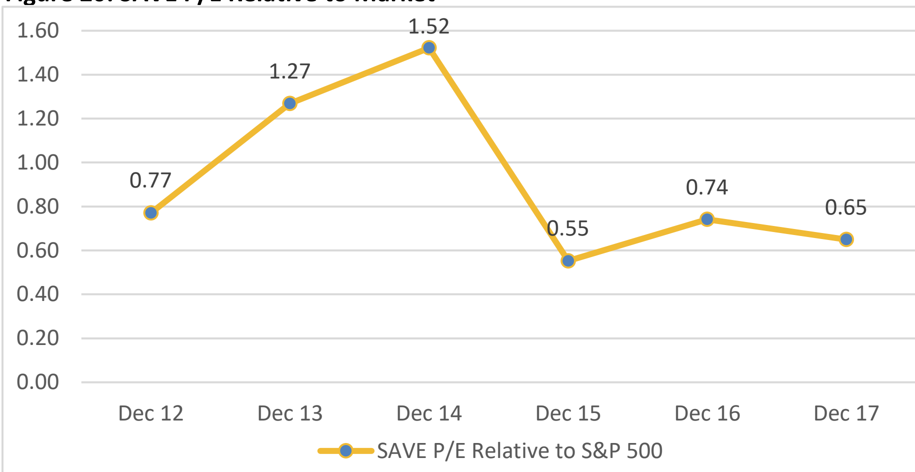
Valuation

SAVE was valued using multiples and a 3-stage discounting cash flow model. Based on earnings multiples, the stock is undervalued relative to other firms and is worth about $60. Due to volatility in earnings over the past few years resulting from fluctuating cost and pricing environments as well as inconsistent expansion, this metric may be unreliable. A detailed DCF analysis shows SAVE is fairly valued, at about $50. I give this valuation weight because it incorporates assumptions that reflect SAVE's ongoing changes. My conclusion of these analyses values SAVE at $50.

Trading History

SAVE ended 2017 trading at P/E of 0.65 relative to the market, respectively low compared to its six year history. This is due to difficult industry dynamics such as rising oil prices and falling ticket prices. However, I expect these conditions to turn around and P/E to rise to 15.5 from 14.3 today.

Figure 20: SAVE P/E Relative to Market



Source: Factset

Assuming SAVE has a 15.5 TTM P/E at the end of 2018, it should trade at $68.20 by the end of the year.

- Price = P/E x EPS = 15.5 x $4.40 = $68.20

Discounting $68.20 to today's price at an 11.5% cost of equity (explained in Discounted Cash Flow section) yields a price of $61.16. I find this valuation rather optimistic.

<u>Relative Valuation</u>

SAVE is currently trading at a P/E in line with its peers, with a P/E TTM of 14.35 compared to an average of 14.5. Despite SAVE's unique model and active growth plans, investors seem apprehensive of its direction, and in a reactive state.

Figure 21: SAVE Comparable Companies

		Current	Market	Price Change						Earnings Growth								LT Debt/	S&P	LTM Dividend	
Ticker	Name	Price	Value	1 day	1 Mo	3 Mo	6 Mo	52 Wk	YTD	LTG	NTM	2016	2017	2018	2019	Pst 5yr	Beta	Equity	Rating	Yield	Payout
SAVE	SPIRIT AIRLINES INC	$44.89	$3,114	(2.9)	3.9	28.7	(15.9)	(18.7)	0.1	4.3	7.2%	-14.1%	9.5%	-25.4%	4.2%	21.3%	-0.21	77.3%		0.00%	
ALGT	ALLEGIANT TRAVEL CO	$166.60	$2,679	(1.4)	11.2	17.7	16.3	(5.3)	7.7	4.7	2.1%	2.0%	-0.2%	-35.2%	14.1%	38.8%	-0.08	178.5%	B+	1.81%	30.1%
LUV	SOUTHWEST AIRLINES	$66.07	$39,205	0.9	2.1	12.5	6.3	31.5	0.9	11.9	30.3%	8.5%	4.7%	-5.1%	26.1%	72.1%	1.14	32.5%	B+	0.73%	12.9%
JBLU	JETBLUE AIRWAYS CORP	$22.45	$7,199	0.7	5.4	11.2	(4.6)	5.2	0.5	3.5	-7.0%	7.9%	-4.3%	-21.2%	5.7%	51.0%	0.11	35.7%	B	0.00%	
DAL	DELTA AIR LINES INC	$59.72	$42,579	0.6	6.5	13.2	9.3	18.7	6.6	12.2	24.1%	-32.5%	525.9%*	-7.0%	11.9%	32.9%	0.87	47.5%	B	1.81%	20.6%
UAL	UNITED CONTINENTAL HLDGS INC	$76.58	$22,687	(1.2)	20.1	13.4	(4.0)	3.9	13.6	2.6	3.6%	-64.9%	26.1%	-26.8%	0.8%	28.1%	1.01	137.1%	B-	0.00%	0.0%
AAL	AMERICAN AIRLINES GROUP INC	$58.16	$27,830	0.3	13.9	11.7	8.0	24.4	11.8	3.9	29.3%	-57.4%	17.7%	-18.9%	8.0%		1.20	562.7%*		0.77%	10.2%
Average			$20,756	(0.4)	9.0	15.5	2.2	8.5	5.9	6.2	12.8%	-21.5%	8.9%	-19.9%	10.1%	40.7%	0.58	84.8%		0.73%	14.8%
Median			$22,687	0.3	6.5	13.2	6.3	5.2	6.6	4.3	7.2%	-14.1%	7.1%	-21.2%	8.0%	35.9%	0.87	62.4%		0.73%	12.9%
SPX	S&P 500 INDEX	$2,803		0.9	4.7	9.5	14.0	23.6	4.8			-0.1%	0.5%	10.3%	11.7%						

		2017		P/E							2017	2017			EV/	P/CF	P/CF	Sales Growth			Book
Ticker	Website	ROE	P/B	2015	2016	2017	TTM	NTM	2018	2019	NPM	P/S	OM	ROIC	EBIT	Current	5-yr	NTM	STM	Pst 5yr	Equity
SAVE	http://www.spirit.com	18.2%	1.98	17.2	10.6	14.0	14.3	13.3	14.6	14.0	12.3%	1.34	15.9%	12.9%	8.8			20.6%	16.6%	16.7%	$22.64
ALGT	http://www.allegiantair.com	44.8%	5.65	11.6	12.7	12.6	17.9	17.5	19.5	17.1	15.6%	1.97	18.4%	20.6%	8.7	6.8	9.1	12.8%	12.1%	11.8%	$29.47
LUV	http://www.southwest.com	25.3%	4.46	12.8	12.0	13.3	19.0	14.6	18.6	14.7	10.9%	1.92	18.5%	21.2%	6.7	11.1	8.7	5.1%	5.1%	5.5%	$14.83
JBLU	http://www.jetblue.com	17.2%	1.74	7.4	9.8	10.1	11.6	12.4	12.8	12.1	10.7%	1.09	15.9%	14.1%	6.6	5.5	5.6	8.4%	7.2%	8.0%	$12.91
DAL	http://www.delta.com	27.1%	3.04	39.0	59.6	9.2	12.1	9.8	12.1	10.8	9.6%	1.07	14.8%	18.4%	7.6	6.8	6.0	5.6%	3.8%	2.4%	$19.64
UAL	http://www.unitedcontinentalholdings.com	28.6%	2.53	3.4	8.4	8.4	12.1	11.6	12.1	12.0	7.0%	0.62	10.2%	11.7%	6.1	4.2	4.9	5.2%	4.4%	-0.2%	$30.28
AAL	http://www.aa.com	69.4%	7.07	4.7	8.7	8.2	14.8	11.4	12.6	11.6	6.8%	0.69	11.7%	10.6%	7.2	5.6		6.4%	4.0%	10.9%	$8.23
Average		32.9%	3.78	13.7	17.4	10.8	14.5	13.0	14.6	13.2	10.4%	1.24	15.0%	15.6%	7.4	6.7	6.9	9.2%	7.6%	7.9%	
Median		27.1%	3.04	11.6	10.6	10.1	14.3	12.4	12.8	12.1	10.7%	1.09	15.9%	14.1%	7.2	6.2	6.0	6.4%	5.1%	8.0%	
spx	S&P 500 INDEX			17.3	17.2	18.8			21.3	19.1											

Source: Factset

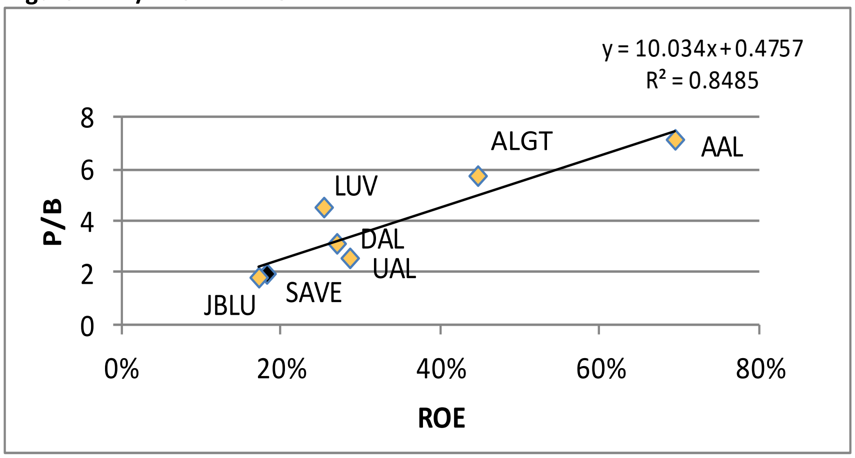
* Outlier removed

Figure 22 shows a more thorough analysis of P/B and ROE. The calculated R-squared of the regression indicates that over 94% of a sampled firm's P/B is explained by its 2017 ROE. SAVE has among the lowest P/B and ROE of this grouping, and accordingly is undervalued.

- Estimated P/B = Estimated 2018 ROE (16.2%) x 10.034 + 0.4757 = 2.101
- Target Price = Estimated P/B (2.101) x 2018E BVPS (27.22) = $57.18

Discounting back to the present at a 11.5% cost of equity leads to a target price of $51.28 using this metric.

Figure 22: P/B vs NTM ROE



Source: Factset

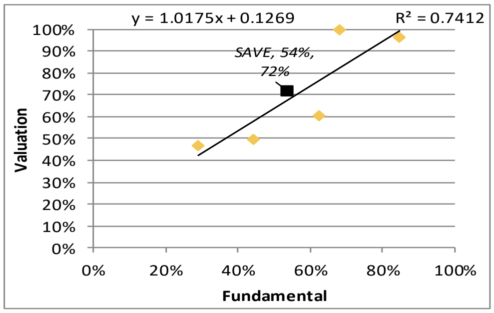
For a final comparison, I created a composite ranking of several valuation and fundamental metrics. Since the variables have different scales, each was converted to a percentile of the maximum before calculating the composite score. Based off the R-squared, the market values P/E metrics. Focus was given to earnings growth and NPM compared to P/E and P/S. The final regression shows an R-squared value of 0.74. One can note SAVE's placement on the line in figure 24, suggesting it is fairly priced based on its fundamentals relative to the industry.

Figure 23: Composite valuation, % of range

				Fundemental % of max			Valuation % of Max	
		Weighted		25%	25%	50%	50%	50%
Ticker	Name	Fund	Value	2019 Earnings Growth	1/(LTD/ Equity)	NPM	P/E	P/S
SAVE	SPIRIT AIRLINES INC	54%	72%	0.16	42%	79%	75%	68%
ALGT	ALLEGIANT TRAVEL CO	68%	100%	0.54	18%	100%	100%	100%
LUV	SOUTHWEST AIRLINES	85%	97%	1.00	100%	70%	95%	98%
JBLU	JETBLUE AIRWAYS CORP	63%	61%	0.22	91%	69%	66%	55%
UAL	UNITED CONTINENTAL HLDGS INC	29%	47%	0.03	24%	45%	62%	32%
AAL	AMERICAN AIRLINES GROUP INC	44%	50%	0.31	59%	44%	65%	35%

Source: IMCP

Figure 24: Composite relative valuation



Discounted Cash Flow Analysis

A three stage discounted cash flow model was also used to value SAVE.

For the purpose of this analysis, the company's cost of equity was calculated to be 11.5% using the Capital Asset Pricing Model. The underlying assumptions used in calculating this rate are as follows:

- The risk-free rate, as represented by the ten-year Treasury bond yield, is 2.33%.
- An average beta of the comp group was taken and then adjusted slightly upward. SAVE, is young and small, making it considerably riskier than the common airline. Under this consideration a beta of 1.2 is assumed.
- A long-term market rate of return of 10% was assumed, since historically, the market has generated an annual return of about 10%.

Given the above assumptions, the cost of equity is 11.5% (2.33 + 1.2 (10.0 – 2.33)).

Stage One - The model's first stage simply discounts fiscal years 2018 and 2019 free cash flow to equity (FCFE). These per share cash flows are forecasted to be ($1.62) and ($1.04), respectively. Discounting these cash flows, using the cost of equity calculated above, retracts ($2.39) per share in value.

Stage Two - Stage two of the model focuses on fiscal years 2020 to 2024. During this period, FCFE is calculated based on revenue growth, NOPAT margin and capital growth assumptions. The resulting cash flows are then discounted using the company's 11.5% cost of equity. I am doubtful the current levels of sales growth will be maintained as SAVE ages so, I have them trickling to a more reasonable rate of 2% (conservatively paced with GDP). I assume NOPAT as a percent of Sales will remain relatively constant, and thus, is subject to trickle parallel to sales. By 2024,I am expecting SAVE to continue utilizing debt to fund a portion of its growth. Decreasing capital expenditures and slowing of NWC growth along with additional leverage will turn FCFE positive.

Figure 25: FCFE and discounted FCFE, 2018 – 2024

	2018	2019	2020	2021	2022	2023	2024
FCFE	($1.81)	($1.29)	$0.30	$1.34	$2.52	$4.35	$5.05
Discounted FCFE	($1.62)	($1.04)	$0.22	$0.87	$1.46	$2.26	$2.35

Added together, these discounted cash flows total $4.50.

Stage Three – Net income for the years 2020 – 2024 is calculated based upon the same margin and growth assumptions used to determine FCFE in stage two. EPS is expected to grow from $4.40 in 2018 to $6.32 in 2024.

Figure 26: NI and EPS estimates for 2018 – 2024

	2018	2019	2020	2021	2022	2023	2024
Net Income	$299,388	$320,357	$355,062	$385,430	$409,769	$422,062	$430,074
EPS	$4.40	$4.71	$5.22	$5.67	$6.02	$6.20	$6.32

Stage three of the model requires an assumption regarding the company's terminal price-to-earnings ratio. The stock currently trades at about a 35% discount to the S&P 500; however, this is during a troubling industry environment. In 2024, growth will mature which should drive down the P/E; furthermore, by that time, the industry should stabilize. These two may offset so I believe a 15.5 P/E is reasonable.

Given the assumed terminal earnings per share of $6.32 and a price to earnings ratio of 15.5, a terminal value of $97.96 per share is calculated. Using the 11.5% cost of equity, this number is discounted back to a present value of $45.72.

Total Present Value – given the above assumptions and utilizing a three stage discounted cash flow model, an intrinsic value of $47.83 is calculated ((2.39) + 4.50 + 45.72). Given SAVE's current price of $45.02, this model indicates that the stock is fairly valued.

<u>Scenario Analysis</u>

Under its current expansion plans, Spirit Airlines is difficult to value with certainty. It is nearly impossible to accurately predict how consumer will react to the disruptive offering SAVE provides across markets it enters. Success of SAVE is rooted in efficiency over pricing. Under this premise, I value SAVE under a bull and bear case, based off scenarios that are affected by the successfulness of its business model.

Sales Growth – Strong growth assumes that SAVE gains market share. I assume prices have risen for the industry, (and 2% for SAVE) driving consumers to the cheaper offerings. Not only does this increase ticket revenue for SAVE but, assuming these converters are not cutting the amount of luggage they would normally bring, it should increase non-ticket revenue as a portion of total revenue. On the flip side, the economy has been improving. People tend to become more lax in spending habits when conditions are good (which is why fare prices are being driven up in the first place). A shift to more comfortable names with better service reputations could steal sales from SAVE.

The sales adjustments alone accounted for a $0.20 and ($0.10) in EPS respectively. Under the same DCF analysis outlined, such adjustments lead to valuation variations of $51.07 bull case, $50.14 expected, and $49.73 bear case.

Figure 27: 2018 Bull Case Sales Effect

	2017 [e] sales	2,700,989,683					
	Ticket rev		Non ticket rev				
2017%	0.53		0.53				
REVENUE	1,423,619,021		1,431,524,532				
Growth (%)	0.02						
adj. revenue	1,452,091,401						
[e] % of total	0.47						
	3,089,556,173		[E] Rasm	0.1042		2018 ASM	2018 Revenue
	29637164032					33803988273	3,523,930,985

Figure 28: 2018 Bear Case Sales Effect

	2017 [e] sales	2,700,989,683					
	Ticket rev		Non ticket rev				
2017%	0.53		0.5				
REVENUE	1,423,619,021		1,350,494,842				
Growth (%)	0.02						
adj. revenue	1,452,091,401						
[e] % of total	0.5						
	2,904,182,802		[E] Rasm	0.0980		2018 ASM	2018 Revenue
	29637164032					33803988273	3,312,495,125

Gross Margin – Margin is a measure of efficiency. My bull premise suggests success of SAVE's model across its markets. Thus, as consumers flock to the cheap flights three things will occur. One, (because SAVE is successful at ticket prices 53% of the current industry) as long as consumers are saving money on tickets they are intent on purchasing anyway, they may be apt to spend it on luxuries like prime seating or that extra luggage bag. Two, will enter new markets. Last, the increase in demand for SAVE flights will lead to higher utilization as current flights have 15% room to grow.

While additional passengers have the power to increase margin, losing passengers is not as harmful. Non-ticket revenues have been growing but are relatively consistent around 50% of total revenue for SAVE. (See figure 13) As conditions improve, it can grow to, say, 1:2 (ticket revenue): (non ticket revenue), but as conditions decline, it is SAVE's objective to maintain close to the 1:1. However, a less than 1:1 ratio is still to SAVE's advantage. This would occur if SAVE falls back onto normal airline tactics, or reliance on ticket prices, a move that while not favorable, could precede margin decreases.

I recommend attention to SAVE's actions namely toward its fare pricing. This metric is a key driver to the rest of SAVE's potential performance.

Business Risks

Although I have many reasons to be neutral about SAVE, there are areas where I could have missed something.

Fuel Prices:

Jet fuel is a primary cost associated with SAVE's daily operations. The price of fuel has been volatile over past years and may continue to be in the near future. Multiple factors influence the price at which SAVE is able to purchase fuel including: the strength of the dollar and foreign currencies, political disruptions and conflicts in oil producing countries, oil supply infrastructure, and environmental concerns. Furthermore, SAVE does not enter into hedging contracts and is fully exposed to the fluctuation of jet fuel prices.

Labor Issues:

Labor expenses are another primary cost of airlines' daily operations. High labor costs from labor agreements have in the past, and may in the future, affect profitability. All of SAVE's labor union represented workers are under agreement through 2020. Unionized employees reserve the right to strike, halting operations.

Negative Reputation:

In recent years, headlines have come to light about poor service provided by Spirit. With so many alternatives, negative experiences hold greater weight, and even more so during periods when the economy is strong.

Appendix 1: Porter's 5 Forces

Threat of New Entrants – Low

The airline industry is capital intense. A single 150 passenger plane costs between $70 and $130 million. Competition is high, leaving little room for increased traffic in the sky and at airports.

Threat of Substitutes - Moderate

The main advantage of airlines is the time benefit of air travel. This is being challenged by advancements in tunnel and subway development. A further decrease in users may come from electric/autonomous cars becoming mainstream, producing a cost and comfort benefit potential that could outweigh the time benefit of air travel.

Supplier Power – High

Airline suppliers are few in numbers. Primary competition resides between two sources: Boeing and Airbus. SAVE is especially weak in this facet as it confines itself to a single supplier.

Buyer Power – High

Because of the cost structure of airlines, consumers have a great degree of power. Flights are scheduled without even a guarantee of meeting the hurdle rate of paying for fuel. Consumer demand for air travel is primarily driven by price. Competition is stringent.

Intensity of Competition – Very High

The airline industry is fragmented. There are nine major (domestic) carriers competing against numerous regional, charter, and commuter airlines over the much of the same space. Primary traffic is leisurely, and price is the main driver of the industry. SAVE is the floor of the industry. Currently, fare prices revolve around SAVE's offerings. This is undermined by SAVE's size. SAVE only serves select markets.

Appendix 2: SWOT Analysis

Strengths	**Weakness**
Lowest cost structure	Time sensitive advantage
Market maker	Overly ambitious management
Low leverage	Lacking customer service
Opportunites	**Threats**
500+ unserved target markets	Rising costs
Increased 3rd party distribution	Substitutes
	Change in consumer preferance

Appendix 3: Income Statement

Income Statement							
Items	**2013**	**2014**	**2015**	**2016**	**2017E**	**2018E**	**2019E**
Sales	1,654,385	1,931,580	2,141,463	2,321,956	2,700,990	3,380,097	3,832,536
Direct costs	1,372,093	1,576,317	1,632,341	1,878,295	2,247,223	2,852,802	3,265,321
Gross Margin	282,292	355,263	509,122	443,661	453,766	527,295	567,215
SG&A, R&D, and other	-	-	-	-	-	-	-
EBIT	282,292	355,263	509,122	443,661	453,766	527,295	567,215
Interest	(401)	(336)	6,704	23,673	45,159	53,580	60,321
EBT	282,693	355,599	502,418	419,988	408,607	473,715	506,894
Taxes	105,492	127,530	185,183	154,581	150,367	174,327	186,537
Income	177,201	228,069	317,235	265,407	258,240	299,388	320,357
Other	283	2,605	15	528	345	357	363
Net income	176,918	225,464	317,220	264,879	257,895	299,031	319,994
Basic Shares	72,592	72,738	72,207	70,343	68,027	68,027	68,027
EPS	2.44	3.10	4.39	3.77	3.79	4.40	4.70

Appendix 4: Balance Sheets

Balance Sheet							
Items	**2013**	**2014**	**2015**	**2016**	**2017E**	**2018E**	**2019E**
Cash	530,631	632,784	803,632	700,900	761,751	852,433	871,124
Operating assets ex cash	118,444	98,357	222,708	174,790	224,182	290,688	344,928
Operating assets	649,075	731,141	1,026,340	875,690	985,934	1,143,121	1,216,052
Operating liabilities	190,731	202,272	233,874	221,585	234,986	294,068	333,431
NOWC	458,344	528,869	792,466	654,105	750,947	849,053	882,622
NOWC ex cash (NWC)	(72,287)	(103,915)	(11,166)	(46,795)	(10,804)	(3,380)	11,498
NFA	531,690	871,840	1,504,205	2,176,082	2,524,289	2,939,215	3,332,640
Invested capital	990,034	1,400,709	2,296,671	2,830,187	3,275,237	3,788,268	4,215,262
Marketable securities	-	-	-	100,155	-	-	-
Total assets	1,180,765	1,602,981	2,530,545	3,151,927	3,510,223	4,082,336	4,548,693
Short-term and long-term debt	-	146,248	646,330	981,713	1,168,713	1,382,713	1,489,713
Other liabilities	220,917	251,386	425,031	554,022	554,022	554,022	554,022
Equity	769,117	1,003,075	1,225,310	1,394,607	1,552,502	1,851,533	2,171,527
Total supplied capital	990,034	1,400,709	2,296,671	2,930,342	3,275,237	3,788,268	4,215,262
Total liabilities and equity	1,180,765	1,602,981	2,530,545	3,151,927	3,510,223	4,082,336	4,548,693

Appendix 5: Sales Forecast

Sales Forecast	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18	Dec-19
Sales (in thousands)	$ 1,654,385	$ 1,931,580	$ 2,141,463	$ 2,321,956	$ 2,700,990	$ 3,380,097	$ 3,832,536
Growth		16.8%	10.9%	8.4%	16.3%	25.1%	13.4%
TICKET REVENUE	$ 986,018	$ 1,144,972	$ 1,169,338	$ 1,200,621	$ 1,323,485	$ 1,622,447	$ 1,801,292
Growth		16.1%	2.1%	2.7%	10.2%	22.6%	11.0%
% of sales	59.6%	59.3%	54.6%	51.7%	49.0%	48.0%	47.0%
NON TICKET REVENUE	$ 668,367	$ 786,608	$ 972,125	$ 1,121,335	$ 1,377,505	$ 1,757,650	$ 2,031,244
Growth		17.7%	23.6%	15.3%	22.8%	27.6%	15.6%
% of sales	40.4%	40.7%	45.4%	48.3%	51.0%	52.0%	53.0%

Appendix 6: Ratios

Ratios							
Items	**2013**	**2014**	**2015**	**2016**	**2017E**	**2018E**	**2019E**
Profitability							
Gross margin	17.1%	18.4%	23.8%	19.1%	16.8%	15.6%	14.8%
Operating (EBIT) margin	17.1%	18.4%	23.8%	19.1%	16.8%	15.6%	14.8%
Net profit margin	10.7%	11.7%	14.8%	11.4%	9.5%	8.8%	8.3%
Activity							
NFA (gross) turnover		2.75	1.80	1.26	1.15	1.24	1.22
Total asset turnover		1.39	1.04	0.82	0.81	0.89	0.89
Liquidity							
Op asset / op liab	3.40	3.61	4.39	3.95	4.20	3.89	3.65
NOWC Percent of sales		25.6%	30.9%	31.1%	26.0%	23.7%	22.6%
Solvency							
Debt to assets	0.0%	9.1%	25.5%	31.1%	33.3%	33.9%	32.8%
Debt to equity	0.0%	14.6%	52.7%	70.4%	75.3%	74.7%	68.6%
Other liab to assets	18.7%	15.7%	16.8%	17.6%	15.8%	13.6%	12.2%
Total debt to assets	18.7%	24.8%	42.3%	48.7%	49.1%	47.4%	44.9%
Total liabilities to assets	34.9%	37.4%	51.6%	55.8%	55.8%	54.6%	52.3%
Debt to EBIT	-	0.41	1.27	2.21	2.58	2.62	2.63
EBIT/interest	(703.97)	(1,057.33)	75.94	18.74	10.05	9.84	9.40
Debt to total net op capital	0.0%	10.4%	28.1%	34.7%	35.7%	36.5%	35.3%
ROIC							
NOPAT to sales	10.7%	11.8%	15.0%	12.1%	10.6%	9.9%	9.4%
Sales to NWC		(21.92)	(37.22)	(80.12)	(93.79)	(476.61)	944.26
Sales to NFA		2.75	1.80	1.26	1.15	1.24	1.22
Sales to IC ex cash		3.15	1.89	1.28	1.16	1.24	1.22
Total ROIC ex cash		37.1%	28.4%	15.5%	12.4%	12.2%	11.4%
NOPAT to sales	10.7%	11.8%	15.0%	12.1%	10.6%	9.9%	9.4%
Sales to NOWC		3.91	3.24	3.21	3.84	4.23	4.43
Sales to NFA		2.75	1.80	1.26	1.15	1.24	1.22
Sales to IC		1.62	1.16	0.91	0.88	0.96	0.96
Total ROIC		19.1%	17.4%	10.9%	9.4%	9.4%	9.0%
NOPAT to sales	10.7%	11.8%	15.0%	12.1%	10.6%	9.9%	9.4%
Sales to EOY NWC	(22.89)	(18.59)	(191.78)	(49.62)	(250.00)	(1,000.00)	333.33
Sales to EOY NFA	3.11	2.22	1.42	1.07	1.07	1.15	1.15
Sales to EOY IC ex cash	3.60	2.52	1.43	1.09	1.07	1.15	1.15
Total ROIC using EOY IC ex cash	38.5%	29.7%	21.5%	13.2%	11.4%	11.4%	10.7%
NOPAT to sales	10.7%	11.8%	15.0%	12.1%	10.6%	9.9%	9.4%
Sales to EOY NOWC	3.61	3.65	2.70	3.55	3.60	3.98	4.34
Sales to EOY NFA	3.11	2.22	1.42	1.07	1.07	1.15	1.15
Sales to EOY IC	1.67	1.38	0.93	0.82	0.82	0.89	0.91
Total ROIC using EOY IC	17.9%	16.3%	14.0%	9.9%	8.8%	8.8%	8.5%
ROE							
5-stage							
EBIT / sales		18.4%	23.8%	19.1%	16.8%	15.6%	14.8%
Sales / avg assets		1.39	1.04	0.82	0.81	0.89	0.89
EBT / EBIT		100.1%	98.7%	94.7%	90.0%	89.8%	89.4%
Net income /EBT		63.4%	63.1%	63.1%	63.1%	63.1%	63.1%
ROA		16.2%	15.3%	9.3%	7.7%	7.9%	7.4%
Avg assets / avg equity		1.57	1.85	2.17	2.26	2.23	2.15
ROE		25.4%	28.5%	20.2%	17.5%	17.6%	15.9%
3-stage							
Net income / sales		11.7%	14.8%	11.4%	9.5%	8.8%	8.3%
Sales / avg assets		1.39	1.04	0.82	0.81	0.89	0.89
ROA		16.2%	15.3%	9.3%	7.7%	7.9%	7.4%
Avg assets / avg equity		1.57	1.85	2.17	2.26	2.23	2.15
ROE		25.4%	28.5%	20.2%	17.5%	17.6%	15.9%
Payout Ratio		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Retention Ratio		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Sustainable Growth Rate		25.4%	28.5%	20.2%	17.5%	17.6%	15.9%

Appendix 7: Comps Sheet

Ticker	Name	Current Price	Market Value	Price Change 1 day	1 Mo	3 Mo	6 Mo	52 Wk	YTD	Earnings Growth LTG	NTM	2016	2017	2018	2019	Pst 5yr	Beta	LT Debt/ Equity	S&P Rating	LTM Dividend Yield	Payout
SAVE	SPIRIT AIRLINES INC	$44.89	$3,114	(2.9)	3.9	28.7	(15.9)	(18.7)	0.1	4.3	7.2%	-14.1%	9.5%	-25.4%	4.2%	21.3%	-0.21	77.3%		0.00%	
ALGT	ALLEGIANT TRAVEL CO	$166.60	$2,679	(1.4)	11.2	17.7	16.3	(5.3)	7.7	4.7	2.1%	2.0%	-0.2%	-35.2%	14.1%	38.8%	-0.08	178.5%	B+	1.81%	30.1%
LUV	SOUTHWEST AIRLINES	$66.07	$39,205	0.9	2.1	12.5	6.3	31.5	0.9	11.9	30.3%	8.5%	4.7%	-5.1%	26.1%	72.1%	1.14	32.5%	B+	0.73%	12.9%
JBLU	JETBLUE AIRWAYS CORP	$22.45	$7,199	0.7	5.4	11.2	(4.6)	5.2	0.5	3.5	-7.0%	7.9%	-4.3%	-21.2%	5.7%	51.0%	0.11	35.7%	B	0.00%	
DAL	DELTA AIR LINES INC	$59.72	$42,579	0.6	6.5	13.2	9.3	18.7	6.6	12.2	24.1%	-32.5%	525.9%*	-7.0%	11.9%	32.9%	0.87	47.5%	B	1.81%	20.6%
UAL	UNITED CONTINENTAL HLDGS INC	$76.58	$22,687	(1.2)	20.1	13.4	(4.0)	3.9	13.6	2.6	3.6%	-64.9%	26.1%	-26.8%	0.8%	28.1%	1.01	137.1%	B-	0.00%	0.0%
AAL	AMERICAN AIRLINES GROUP INC	$58.16	$27,830	0.3	13.9	11.7	8.0	24.4	11.8	3.9	29.3%	-57.4%	17.7%	-18.9%	8.0%		1.20	562.7%*		0.77%	10.2%
Average			$20,756	(0.4)	9.0	15.5	2.2	8.5	5.9	6.2	12.8%	-21.5%	8.9%	-19.9%	10.1%	40.7%	0.58	84.8%		0.73%	14.8%
Median			$22,687	0.3	6.5	13.2	6.3	5.2	6.6	4.3	7.2%	-14.1%	7.1%	-21.2%	8.0%	35.9%	0.87	62.4%		0.73%	12.9%
SPX	S&P 500 INDEX	$2,803		0.9	4.7	9.5	14.0	23.6	4.8			-0.1%	0.5%	10.3%	11.7%						

Ticker	Website	2017 ROE	P/B	P/E 2015	2016	2017	TTM	NTM	2018	2019	2017 NPM	2017 P/S	OM	ROIC	EV/ EBIT	P/CF Current	P/CF 5-yr	Sales Growth NTM	STM	Pst 5yr	Book Equity
SAVE	http://www.spirit.com	18.2%	1.98	17.2	10.6	14.0	14.3	13.3	14.6	14.0	12.3%	1.34	15.9%	12.9%	8.8			20.6%	16.6%	16.7%	$22.64
ALGT	http://www.allegiantair.com	44.8%	5.65	11.6	12.7	12.6	17.9	17.5	19.5	17.1	15.6%	1.97	18.4%	20.6%	8.7	6.8	9.1	12.8%	12.1%	11.8%	$29.47
LUV	http://www.southwest.com	25.3%	4.46	12.8	12.0	13.3	19.0	14.6	18.6	14.7	10.9%	1.92	18.5%	21.2%	6.7	11.1	8.7	5.1%	5.1%	5.5%	$14.83
JBLU	http://www.jetblue.com	17.2%	1.74	7.4	9.8	10.1	11.6	12.4	12.8	12.1	10.7%	1.09	15.9%	14.1%	6.6	5.5	5.6	8.4%	7.2%	8.0%	$12.91
DAL	http://www.delta.com	27.1%	3.04	39.0	59.6	9.2	12.1	9.8	12.1	10.8	9.6%	1.07	14.8%	18.4%	7.6	6.8	6.0	5.6%	3.8%	2.4%	$19.64
UAL	http://www.unitedcontinentalholdings.com	28.6%	2.53	3.4	8.4	8.4	12.1	11.6	12.1	12.0	7.0%	0.62	10.2%	11.7%	6.1	4.2	4.9	5.2%	4.4%	-0.2%	$30.28
AAL	http://www.aa.com	69.4%	7.07	4.7	8.7	8.2	14.8	11.4	12.6	11.6	6.8%	0.69	11.7%	10.6%	7.2	5.6		6.4%	4.0%	10.9%	$8.23
Average		32.9%	3.78	13.7	17.4	10.8	14.5	13.0	14.6	13.2	10.4%	1.24	15.0%	15.6%	7.4	6.7	6.9	9.2%	7.6%	7.9%	
Median		27.1%	3.04	11.6	10.6	10.1	14.3	12.4	12.8	12.1	10.7%	1.09	15.9%	14.1%	7.2	6.2	6.0	6.4%	5.1%	8.0%	
spx	S&P 500 INDEX			17.3	17.2	18.8			21.3	19.1											

Appendix 8: DCF Model

	First Stage		Second Stage				
Cash flows	2018	2019	2020	2021	2022	2023	2024
Sales Growth	*25.1%*	*13.4%*	*10.0%*	*8.0%*	*6.0%*	*3.0%*	*2.0%*
NOPAT / S	*9.9%*	*9.4%*	*9.4%*	*9.4%*	*9.4%*	*9.4%*	*9.4%*
S / NWC	*(1,000.00)*	*333.33*	*333.33*	*333.33*	*333.33*	*333.33*	*333.33*
S / NFA (EOY)	*1.15*	*1.15*	*1.15*	*1.15*	*1.15*	*1.15*	*1.15*
S / IC (EOY)	*1.15*	*1.15*	*1.15*	*1.15*	*1.15*	*1.15*	*1.15*
ROIC (EOY)	*11.4%*	*10.7%*	*10.7%*	*10.7%*	*10.7%*	*10.7%*	*10.7%*
ROIC (BOY)		*12.2%*	*11.8%*	*11.6%*	*11.4%*	*11.0%*	*10.9%*
Share Growth		*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*	*0.0%*
Sales	$3,380,097	$3,832,536	$4,215,790	$4,553,053	$4,826,236	$4,971,023	$5,070,444
NOPAT	$333,251	$358,480	$394,328	$425,874	$451,427	$464,970	$474,269
Growth		*7.6%*	*10.0%*	*8.0%*	*6.0%*	*3.0%*	*2.0%*
- Change in NWC	7424	14878	1150	1012	820	434	298
NWC EOY	*-3380*	*11498*	*12647*	*13659*	*14479*	*14913*	*15211*
Growth NWC		*-440.2%*	*10.0%*	*8.0%*	*6.0%*	*3.0%*	*2.0%*
- Chg NFA	414925	393425	333264	293272	237551	125902	86453
NFA EOY	*2,939,215*	*3,332,640*	*3,665,904*	*3,959,177*	*4,196,727*	*4,322,629*	*4,409,082*
Growth NFA		*13.4%*	*10.0%*	*8.0%*	*6.0%*	*3.0%*	*2.0%*
Total inv in op cap	422349	408303	334414	294284	238370	126336	86751
Total net op cap	2935835	3344138	3678552	3972836	4211206	4337542	4424293
FCFF	($89,099)	($49,823)	$59,914	$131,590	$213,057	$338,633	$387,518
% of sales	*-2.6%*	*-1.3%*	*1.4%*	*2.9%*	*4.4%*	*6.8%*	*7.6%*
Growth		*-44.1%*	*-220.3%*	*119.6%*	*61.9%*	*58.9%*	*14.4%*
- Interest (1-tax rate)	33863	38123	39267	40445	41658	42908	44195
Growth		*12.6%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*	*3.0%*
+ Net new debt	214000	107000	44691	46032	47413	48835	50301
Debt	1382713	1489713	1534404	1580437	1627850	1676685	1726986
Debt / tot net op capital	*47.1%*	*44.5%*	*41.7%*	*39.8%*	*38.7%*	*38.7%*	*39.0%*
FCFE w/o debt	($122,961)	($87,946)	$20,648	$91,146	$171,399	$295,726	$343,323
% of sales	*-3.6%*	*-2.3%*	*0.5%*	*2.0%*	*3.6%*	*5.9%*	*6.8%*
Growth		*-28.5%*	*-123.5%*	*341.4%*	*88.0%*	*72.5%*	*16.1%*
/ No Shares	68027.0	68027.0	68,027.0	68,027.0	68,027.0	68,027.0	68,027.0
FCFE	($1.81)	($1.29)	$0.30	$1.34	$2.52	$4.35	$5.05
Growth		*-28.5%*	*123.5%*	*341.4%*	*88.0%*	*72.5%*	*16.1%*
* Discount factor	0.90	0.80	0.72	0.65	0.58	0.52	0.47
Discounted FCFE	($1.62)	($1.04)	$0.22	$0.87	$1.46	$2.26	$2.35

Third Stage								
Terminal value P/E								
	Net income	$299,031	$319,994	$355,062	$385,430	$409,769	$422,062	$430,074
	% of sales	*8.8%*	*8.3%*	*8.4%*	*8.5%*	*8.5%*	*8.5%*	*8.5%*
	EPS	$4.40	$4.70	$5.22	$5.67	$6.02	$6.20	$6.32
	Growth		*7.0%*	*11.0%*	*8.6%*	*6.3%*	*3.0%*	*1.9%*
	Terminal P/E							15.50
	* Terminal EPS							$6.32
	Terminal value							$97.99
	* Discount factor							0.47
	Discounted terminal value							$45.64

Summary			
First stage	($2.66)	Present value of first 2 year cash flow	
Second stage	$7.15	Present value of year 3-7 cash flow	
Third stage	$45.64	Present value of terminal value P/E	
Value (P/E)	**$50.14**	= value at beg of fiscal yr	2018