



2017 Graduate Student Managed Fund Report

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Apr, 2017



UConn
SCHOOL OF BUSINESS



Southwest Inc.

Date: Apr. 19, 2017

Ticker: LUV (NYSE)

Recommendation: **BUY**

Price: \$39.60 [52 Week: \$51.4 – 33.96]

Price Target: \$56.55

Sector: **Industrials Cyclical**

Industry: **Airlines**

Exhibit: Historic Stock Price



Source: Morning Star

Exhibit: Target Price

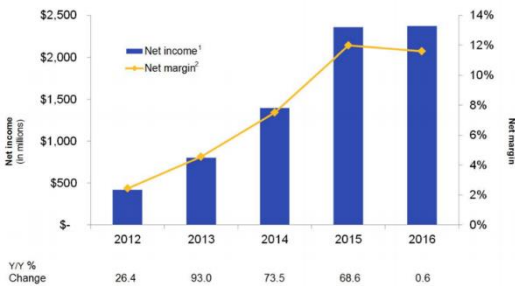
	Model Weight	Fair Value
Price Earnings	10%	\$ 42.60
Price to CF	5%	\$ 32.39
DCF	60%	\$ 57.32
DDM	20%	\$ 69.18
52 Week Rang	5%	\$ 47.55
Target Price		\$ 56.55

Executive Summary

We issue a **buy** recommendation for Southwest airlines (LUV) with a **12-month price target of \$56.55**/class A common share, a forecasted **price appreciation of 29.8%** from OCT 31st close and **dividend yield of 1.1%**. The target price is a weighted average of discounted cashflow, dividend discount and multiples valuation. Weights assigned to the models based on our confidence in the underlying assumptions and is explained in the valuation section. The recommendation is driven by key investment drivers.

- I. **Unit margins are aided by improvements in route mix** (redeployment of flights to more profitable markets) and **continued up-gauging**
- II. **Capacity rationalization across the industry**, coupled with rebound in business travel post-election to stem topline growth, while **sustained low oil prices** is likely to provide cost tailwind
- III. **Launch of new international routes** to Cuba from Florida and to Mexico from LAX and new international routes planned from Ft. Lauderdale in 2017 to fuel growth in international operations
- IV. **New ticketing system** with significantly superior customer experience to **further bolster NPS**. 90% of all Southwest tickets are booked online and 85% of these originate from Southwest website
- V. **Returning value to shareholders** with an active stock buyback program where the company has \$1.25 billion left of the \$2 billion accelerated share repurchase program launched in May 2016

Exhibit: Net Income vs Net Margin

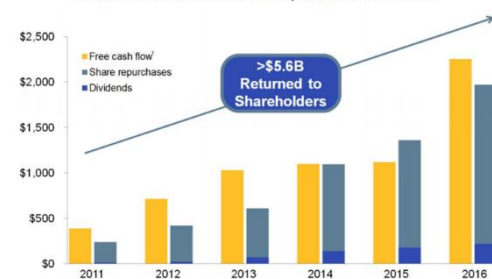


Source: Southwest

Company Overview

Southwest is the largest domestic air carrier in the United States by the number of domestic originating passengers boarded and with over 120 million of revenue passengers and \$2.3 billion in FCF in 2016. It has an unmatched record of 44 consecutive years of operating profits when over 100 US airlines declared bankruptcy during this period. With one of the best debt structures it the only major US airline to be rated investment grade by Moody's, S&P and Fitch.

Exhibit: Free Cash Flow vs Share Repurchases vs Dividends



Source: Southwest

Southwest specializes in low fares & short-haul flights. It operates around 700 aircraft constituting an all-Boeing fleet. The airline specializes in short-haul flights, using a point-to-point network, versus common hub-and-spoke model, and offers flights in the U.S. and several international locations. Southwest completed the merger of AirTran Airways in May 2011. Synergies from the merger of AirTran has accelerated Southwest's expansion in the continental U.S. and positioned it well



Exhibit: Average Seats Per Aircraft

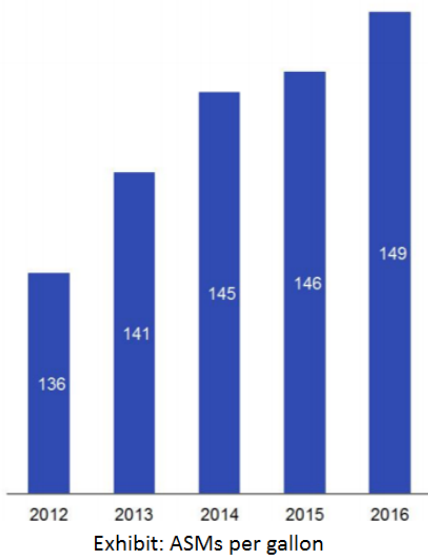
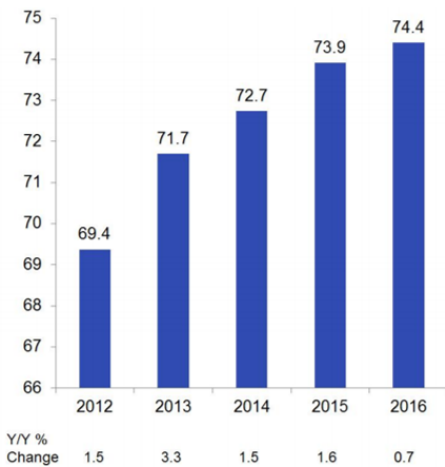


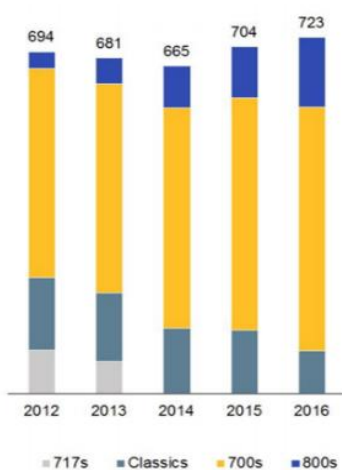
Exhibit: ASMs per gallon



Y/Y % Change

Source: Southwest

Exhibit: Aircraft by fleet type



Source: Southwest

for long term growth in the international market. During 2016, Southwest employed more than 53,000 workers and generated over \$20 billion in revenue.

Industry Overview

The U.S. airline industry has undergone a fundamental transformation through a series of mergers, bankruptcies, and restructuring over the past decade. This transformation has brought healthier financial shape to the carriers in the industry. Besides, fewer competitors and lower capacity growth coupled with the steep decline in jet fuel prices have made carriers profitable in the past few years. With capacity growth declining, management are focusing on preserving and improving profitability (e.g. return on invested capital.)

Airline Terminology

ASM: Available Seat Miles (also referred to as “capacity,” an available seat mile is one seat, empty or full, flown one mile and is a measure of space available to carry passengers

CASM: A measure of cost efficiency of an airline – operating costs divided by the available seat miles(ASM)

RASM: Revenue per available seat mile – operating income divided by the available seat miles

RPM: Revenue Passenger Mile is the number of miles traveled by paying passengers calculated by multiplying the number of paying passengers by the distance traveled

Load Factor: Measures the capacity utilization as a percentage of available seating capacity that is filled with passengers.

Passenger Yield: Measure of average fare paid per mile, per passenger, calculated by dividing passenger revenue by revenue passenger miles(RPM). Typically, the measure is presented in cents per mile and is useful in assessing changes in fares over time

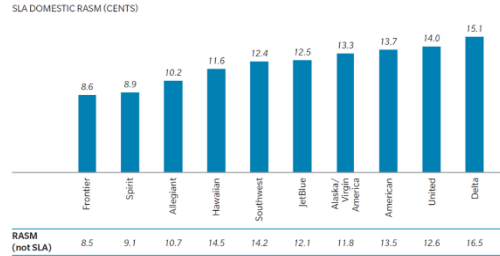
Gauge: Number of seats per trip

Pivotal Industry Drivers

Pricing Power: As of 2016, more than 85% of revenues of the industry come from passenger revenues. After a series of bankruptcies and consolidations additional capacity came out of the system which is leading to the strengthening of pricing power for the airlines. As the pricing power rises, fares will continue rise and keep driving revenue growth.

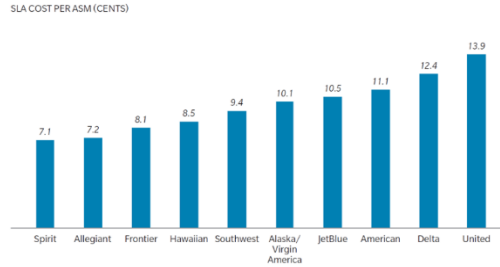


Exhibit: Domestic RASM by Airline - Stage-length Adjusted to 1,000 Miles, Q2 2016



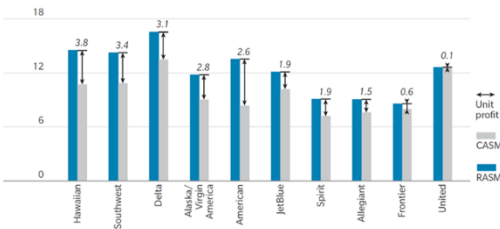
Source: Oliver Wyman

Exhibit: Domestic CASM Details for Individual Carriers, Q2 2015/2016



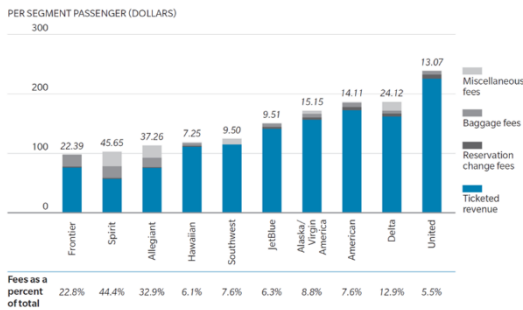
Source: Oliver Wyman

Exhibit: RASM – CASM = Unit Revenue



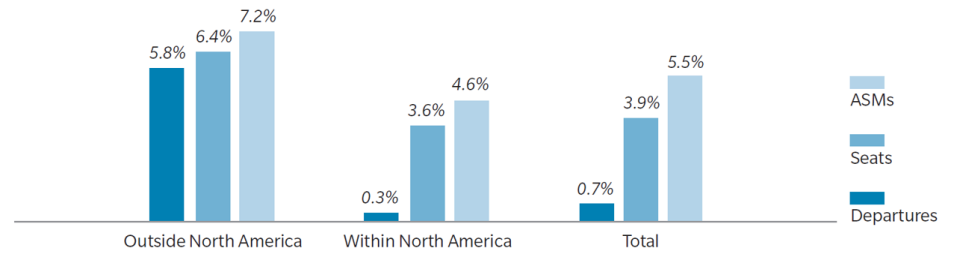
Source: Oliver Wyman

Exhibit: System Service Fees and Ticketed Revenue, Q2 2016



Fees as a percent of total

Exhibit: North America Capacity Changes, Year-end October 2015/2016



Source: Oliver Wyman

Ancillary fees: Ancillary fees are fees charged for checked bags, lounges, food service, and even a space in the overhead storage bin. This category has been another main stream of revenue. As of 2016, the “other revenue” accounted for 12% of the industry’s total revenue an increase in from 9% in 2014.

Jet fuel prices: Airlines are energy-sensitive operations. Oil has dropped sharply since June 2014. However, current low oil price is not a guarantee going ahead. Moreover, because of purchase contracts and hedging strategies, airlines buy little of fuel at the spot market price. The difference between age of fleets and engine design among carries also lead to different level of oil consumption.

Consumer Confidence: 2015 and 2016 saw a modest rebound in passenger demand. And with the new administration in place, business and leisure travel is slated to pick up in 2017. The US economy is the middle of a moderate recovery and this, coupled with historically low headline unemployment could result in better levels of consumer confidence going ahead.

Financial Analysis

In the peer comparison of this section, we chose other three U.S. major airlines (Delta -DAL, United-UAL, American-AAL) as our benchmarks

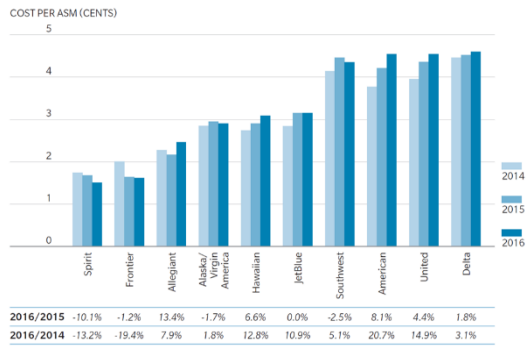
Profitability Analysis

In the past 5 years, Southwest’s compound annual growth rate of revenue is 5%. Passenger revenue accounted for 91% of the airline’s total revenue in 2016. Ancillary fees have grown sharply since 2014. Other revenue accounted for 8.1% of total revenue in 2016 while for 4.1% in 2014. The increase in the portion of ancillary fee is expected to keep boosting Southwest’s revenue.

Southwest’s operating margin has seen a significant growth since 2012. As of 2016, its operating margin of 19.4% was the highest among the major four carriers. This indicates that the carrier’s cost management is on the top in the industry.



Exhibit: US Carrier System Labor Unit Costs, Q2 2014/2015/2016



Source: Oliver Wyman

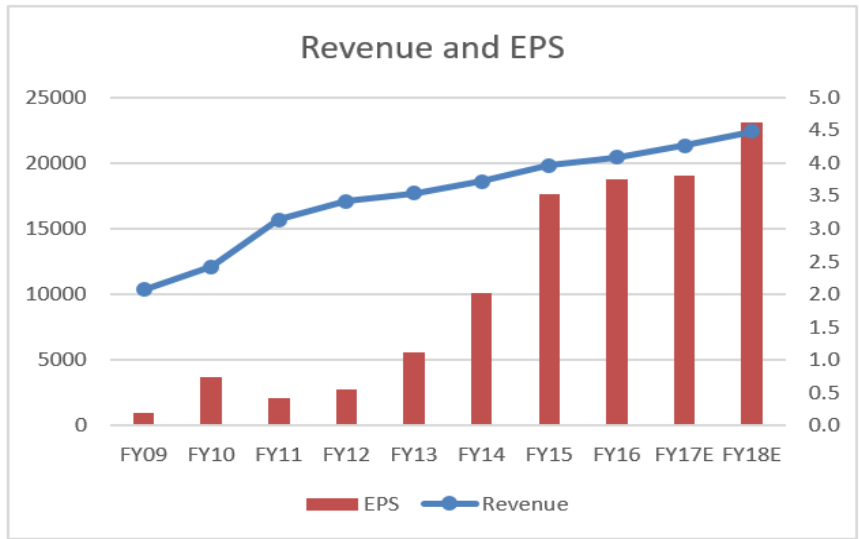
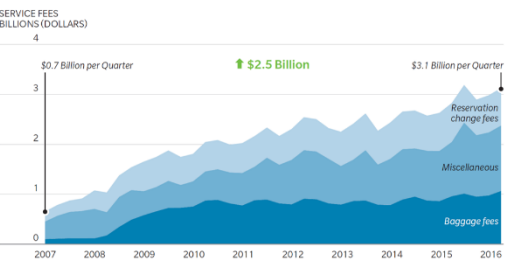


Exhibit: System Baggage, Reservation Change and Miscellaneous Fees, Q1 2007 - Q2 2016

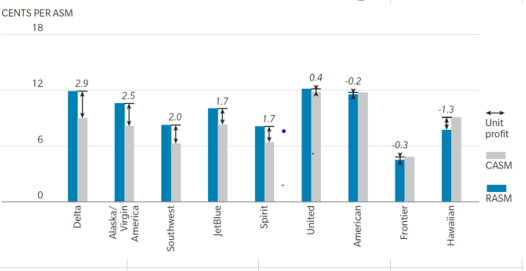


Source: Oliver Wyman

Growing RPM: Since financial crisis, Southwest's RPMs has been growing for eight years in a row with a recent five-year CAGR of 5.4%. In terms of Available Seat Miles, the carrier's five-year CAGR is 4.4%. Even though, in FY16, Southwest's total RPMs was 124,798 billion dollars, and total ASM, 148.52 billion dollars, are lower than other three major competitors, we acknowledge that this is because Southwest has a higher ratio of short-haul flights.

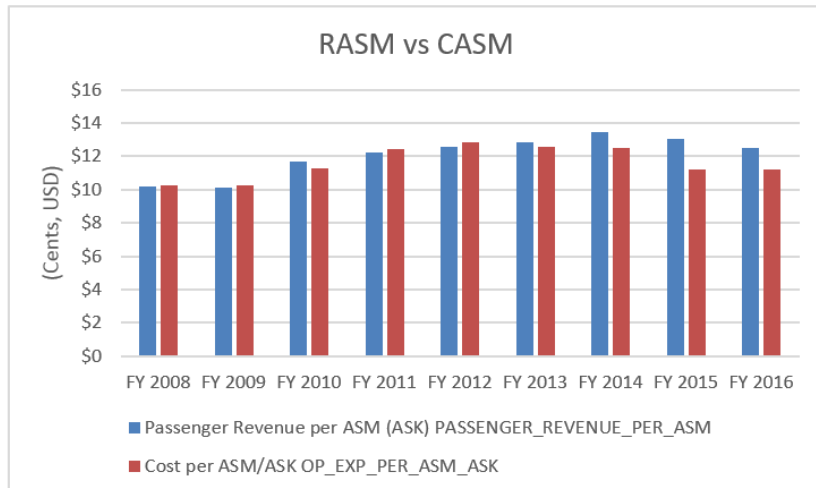
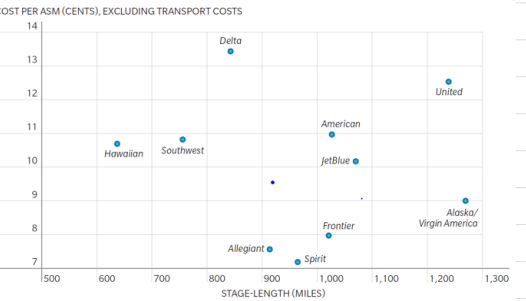
Improved Load Factor: Southwest has the second highest Passenger Load Factor, 84%, among its peer group, slightly lower than Delta's 84.6%. As Passenger Load Factor is a standard measure of how full a flight is, we can see Southwest handling its perishable inventory well.

Exhibit: International Unit Margin



Highest Unit Margin: In airline industry, we are used to evaluating a carrier's unit revenue by subtracting RASM (Passenger Revenue per Available Seat Mile) by CASM (Cost per Available Seat Mile). In FY16, Southwest had the highest unit margin among peer group. This can be attributed to one of the best operations in the industry resulting in the lowest CASM. Its outstanding unit revenue is another specific metric validating Southwest's profitability. With 3.5c LUV has the highest unit margin across any major US airline.

Exhibit: Stage Length vs. CASM



Peer Comparison (FY16)

Name	Revenue Passenger Miles/Kms (Billion USD)	Available Seat Miles/Kms (Billion USD)	Passenger Load Factor	Passenger Revenue per ASM (ASK) (RASM)	Cost per ASM/ASK (CASM)	RASM - CASM
SOUTHWEST AIRLINES CO	124.80	148.52	84.00	12.52	11.22	1.30
DELTA AIR LINES INC	213.10	251.87	84.60	13.41	12.98	0.43
AMERICAN AIRLINES GROUP INC	223.48	273.41	81.70	12.65	12.76	-0.11
UNITED CONTINENTAL HOLDINGS	210.31	253.59	82.90	12.40	12.70	-0.30
Average	192.92	231.85	83.30	12.74	12.41	0.33

Southwest has the highest ROA among its peers; again indicating the efficiency of its operations. Besides, there is only one major US airlines has a higher ROIC than Southwest. In terms of dividends, Southwest has been paying stable dividends since financial crisis.

Peer Comparison (FY16)

Name	Return on Invested Capital	Return on Assets	Return on Equity
SOUTHWEST AIRLINES CO	17.2%	10.6%	30.0%
DELTA AIR LINES INC	18.9%	6.8%	29.4%
UNITED CONTINENTAL HOLDINGS	16.9%	7.1%	32.4%
AMERICAN AIRLINES GROUP INC	14.5%	6.4%	67.5%
Average	16.9%	7.7%	39.8%

Price Summary

	2015	2016	2017	2018
WTI Crude Oil^a (dollars per barrel)	48.67	43.33	52.24	55.10
Brent Crude Oil (dollars per barrel)	52.32	43.74	54.23	57.10

^a West Texas Intermediate.

Fuel hedging could start paying off: The Company's average economic jet fuel price per gallon decreased 7.2% year-over-year, from \$2.07 for 2015 to \$1.92 for 2016. This is despite of the Company's fuel hedging program, the Company recognized net losses totaling \$820 million in Fuel and oil expense for 2016, compared with net losses totaling \$254 million for 2015. With the crude prices poised to improve in 2017, we foresee Southwest's hedges paying off.

Drivers increasing shareholder value

Positive Industry Outlook: Consolidation in the industry & sustained lower ASM growth for the past few years has rationalized capacity across the industry and has improved pricing power. Business and leisure travel is slated to pick up post-election which should spur demand. Moreover, with more pricing power we see an increase in ancillary fees. Oil price is expected to improve moderately in 2017, but should still stay at sustainable levels. Finally, the new administration's proposal for reduced taxes could further boost margins.

Low Unit Costs & High Load Factor. Southwest CASM has fallen from 11.1c in 2015 to 10.8c in 2016, and at 9.4c, the stage length adjusted CASM is the lowest among major US airlines. Increasing passenger demand resulted in 84% load factor indicating better utilization. Non-fuel unit costs have increased but remained relatively stable for domestic operations. At 41%, labor represents the largest cost driver for southwest. However the good news is that long pending labor contract negotiations ended in OCT 2016, with pilot and ground crew unions ratifying labor agreements. This allows management to focus on growth initiatives.

Technology as a Growth Engine: Since 2014 Southwest begun implementing Amadeus' Altéa reservations solution as the single reservation system for both domestic and international reservations. The implementation will complete by May 2017. The system adds much awaited capabilities such as passenger check-in, boarding and baggage check-in functionalities. Subsequent releases will add functionality to enable revenue enhancements, schedule optimization. With 90%

Exhibit: Industry Performance

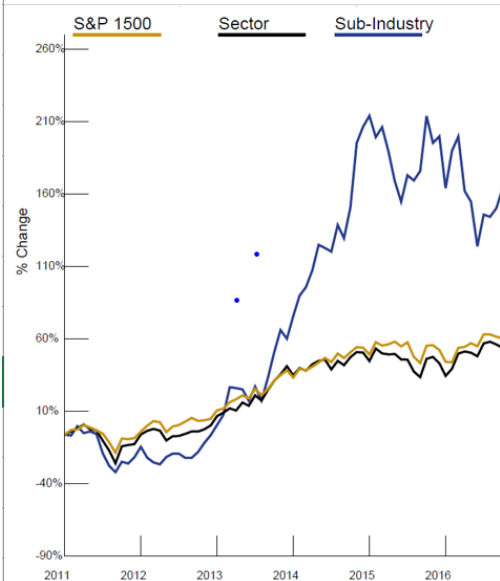
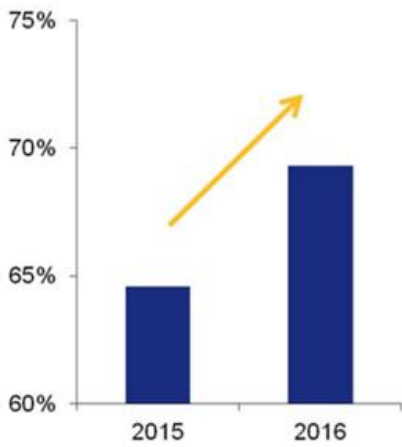


Exhibit: Net Promoter Score



Source: Southwest

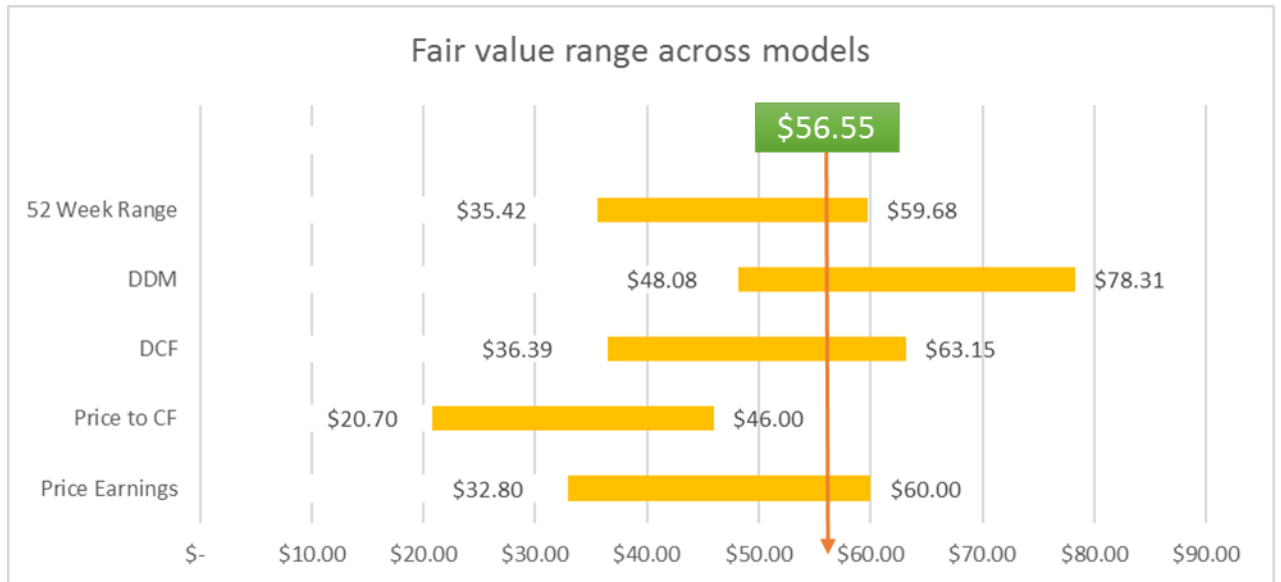
of ticking for Southwest done online and 85% of this through its website, we feel that the new ticketing system will drastically improve customer experience and increase consumer stickiness.

Domestic & International Growth: In 2016 Southwest launched services to Long Beach Airport; Varadero, Havana, and Santa Clara, Cuba from Ft. Lauderdale and Tampa. Service from Los Angeles International Airport to Cancun, Puerto Vallarta, and Los Cabos, Mexico were also added in 2016. We see the trend continuing and opening-up of newer cost sensitive, short distance, international markets like LATAM as most suited for Southwest’s international ambitions.

Up-gauging to Reduce CASM & Improve Unit Margins: In 2016, 76% percent of Southwest’s customers flew nonstop. The company’s average aircraft trip stage length increased to 760 miles, with a duration of 2 hours, as compared to 750 miles with the same duration in 2015. While continuing the incorporation of the Boeing 737-800 aircraft Southwest is increasing capacity on its long-haul flights. The airline has firm delivery or options on 478 Boeing 737s. We believe that an improvement in average gauge going ahead to aid margins.

Valuation

Considering an industry which is fraught with poor performance and with the highest bankruptcy rates, we decided to take a more cautious and rigorous approach to valuation. We used multiple models and arrived at a fair price estimate by allocating weights based on the confidence we had in these models and their underlying assumptions.



Model Comparison

We used the discounted cash flow model, dividend discount model and relative market multiples for estimating the intrinsic value of LUV. DCF was assigned the highest weightage of 60% as we assessed the fundamentals of the company to arrive at the intrinsic value. DDM was weighted at 20% while earnings and

Buy: 12	Hold: 5	Sell: 0	Target
JP Morgan	Overweight	\$	51.50
S&P Net Advantage	Buy		\$50 (2017)
Value Line	Technical:2		\$60~\$90



cashflow multiples were weighted at 15 and 5% respectively. Based on this we value LUV stock at \$56.55.

Discounted Cash Flow Model

We estimated growth in unit revenues (RASM) and capacity (ASM) based on the Southwest's strategy & macroeconomic factors as outlined in the investment drivers. This was translated to revenue growth and finally to assess the growth in free cashflows. Further we considered risk free rate as the 10-year treasury (2.47%) and Beta of 1.15. Cost of debt was assessed by taking the weighted average of the current traded Southwest bonds (YTM 3.67% – 300M maturing in 2026; YTM 2.21% - 300M maturing in 2019). CAPM was used to calculate the cost of equity (8.83%) and WACC (8.08%). Terminal value was estimated using the FED's projected 10 year GDP growth rate. Currently the stock is trading at \$39.60 which is at a 31% discount from an intrinsic value estimate of \$57.32 using DCF.



Exhibit: DCF Assumptions

	2011-2016	2017-2021
Avg Revenue growth	5.00%	5.00%
FCF Growth	15.00%	11.00%
Avg Net Income Margin	7.20%	11.00%
Perpetuity growth rate		2.00%
Avg Debt/Equity	0.3	0.3
Beta	1.15	1.15
Market Risk Premium		6%
Risk Free Rate(10 year Treasury)		2.50%
Cost of Debt (Existing LUV Bond)		3.20%
Tax Rate		37.0%
Cost of Equity		8.83%
WACC	8.20%	8.01%

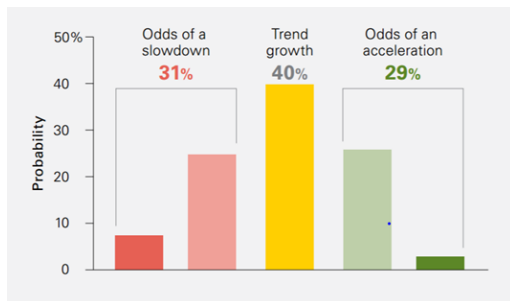
Exhibit: Discounted Cash Model

(\$ millions)	2017	2018	2019	2020	2021
Free Cash Flow	\$ 1,767	\$ 1,961	\$ 2,177	\$ 2,417	\$ 2,682
Terminal Value					\$ 44,648
Total Cashflows	\$ 1,767	\$ 1,961	\$ 2,177	\$ 2,417	\$ 47,331
PV of Flows	\$ 1,636	\$ 1,681	\$ 1,728	\$ 1,776	\$ 32,201
Enterprise Value	\$ 39,022				
Outstanding Debt	\$ 2,391				
Equity Value	\$ 36,631				
Outsatnding Shares	639				
Estimated Fair Value	\$ 57.32				
Discount	31%				

	LUV	Industry
Governance Disclosure Score	57.14	52.68
ESG Disclosure:	47.52	24.69
Social Disclosure Score	36.84	29.82
Environmental Disclosure Score	48.06	33.72

Forecasting growth & determining terminal value

The 5-year growth and terminal value significantly affect the fair value estimate. Being conservative on these adds confidence in our model and the target price. We assumed a 5-year single stage revenue growth capped at 6%. At the same time FCF growth for the next 5 years is 11% (compare at 15% from 2012-2016). At 9.4 cents / ASM, Southwest currently has one of the lowest costs in the industry. Margins could improve with further capacity rationalization and up-gauging while trend growth should continue through the economic recovery.



Sensitivity to growth & WACC

Based on the DCF model the intrinsic value of LUV is \$57.32. Sensitivity to WACC and to growth was also tested. At WACC of 10.5% which is 250 BPS over the current rate of 8%, the fair value is closer to the current traded price. And even at a tepid 3% growth of cashflows the intrinsic value of LUV should be \$43.17, still a 10% upside from the current levels. So **even at the most conservative estimate of growth and aggressive estimate of cost of capital we feel Southwest is undervalued.**

Slowdown	Trend Growth	Accelerate
\$ 34.68	\$ 56.55	\$ 61.43



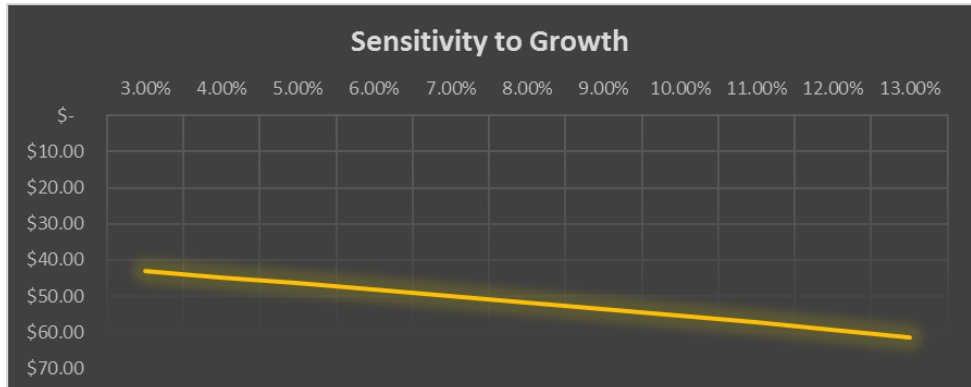
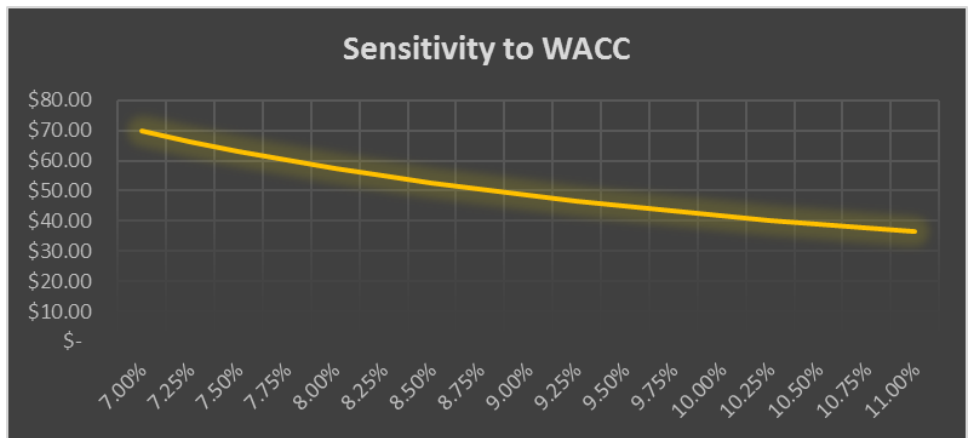


Exhibit: DDM Assumptions

	2012-2016	2017 -2021
DPS Growth	39%	16%
EPS Growth	45%	6%
Revenue Growth	5%	6%
Terminal Growth		2%
Cost of Equity		8.83%
Payout Ratio	10%	10%
Shares Outstanding	\$ 639	
Terminal Dividend	\$ 2,886	
Terminal Value	\$ 42,291	
Equity Value	\$ 44,208	
Fair Value	\$ 69.18	
Current Price	\$ 39.60	
Discount		43%

Dividend Discount Model

After a sustained period of constant dividends, Southwest started increasing dividends since 2012. The DPS growth in the past 5 years was 39% at 10% payout. With the estimated revenue growth of 6% over the next 5 years, we projected net income and while holding the payout ratio at 10% we see a DPS CAGR of 16%. With Southwest's active share buyback program, we assess that the outstanding common shares will be 570 million down from current 630 million by end of 2021. With a terminal value estimate of \$42.3 billion and cost of equity 8.83% (CAPM) we assessed the intrinsic value to be \$69.18.

Exhibit: Dividend Discount Model

(\$ millions)	2016	2017	2018	2019	2020	2021
Revenue	\$ 20,425	\$ 21,651	\$ 22,950	\$ 24,327	\$ 25,786	\$ 27,333
Net Income	\$ 2,247	\$ 2,858	\$ 3,282	\$ 3,746	\$ 4,255	\$ 4,811
Dividends	\$ 221	\$ 281.15	\$ 322.85	\$ 368.55	\$ 418.57	\$ 473.26
DPS	\$ 0.35	\$ 0.45	\$ 0.53	\$ 0.62	\$ 0.72	\$ 0.83
Shares Outstanding	639	625	610	597	583	570
Payout Ratio	10%	10%	10%	10%	10%	10%
PV of Dividends	\$ 203	\$ 258	\$ 297	\$ 339	\$ 385	\$ 435

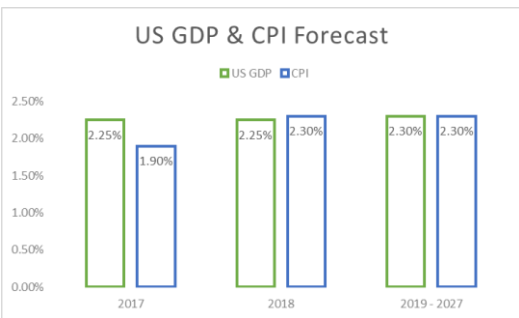
Key Assumptions

- Terminal growth rate set at the 2 [FED's forecasted 10 year GDP growth]
- Current tax rate of 37% for LUV is assumed. New administration's policies might ease this value.
- Market risk premium is considered at 6%

Total Return (Daily)

	LUV	Industry	S&P 500
YTD	-6.35%	-2.41%	4.03%
1 Year	-12.72%	-5.38%	1.72%
Last 3 Years	33.39%	15.58%	6.46%
Last 5 Years	36.82%	19.80%	10.60%





- We assume that Southwest will maintain the current levels of debt to equity.
- DDM: In divided discount model, the current levels of payout ratio are maintained till terminal payout
- DDM: We have considered 10% growth in ratio of NI to revenues due to the improvements in cost efficiency.

Multiples Valuation

Southwest is in a unique position of being both a value and network airline. It's one of the four major domestic airlines along with Delta, United and American, while at the same time has characteristics like, and competes with smaller regional airlines like Spirit, Hawaiian and Alaska. We used PE and PCF (price to cashflow) multiples for these airlines & for the industry to value the stock. PE shows a mean fair value of \$42.60 whereas the estimate using PCF is \$32.39. The current PE multiple is 9.1 (median PE:20) with a relative ratio of 0.48. PE is currently at an historic low with airlines in general having a poor year in 2015 and falling out favor with the street investors. With sound operations, strong 2016 fiscal and high growth prospect we think the stock is undervalued at the current levels.

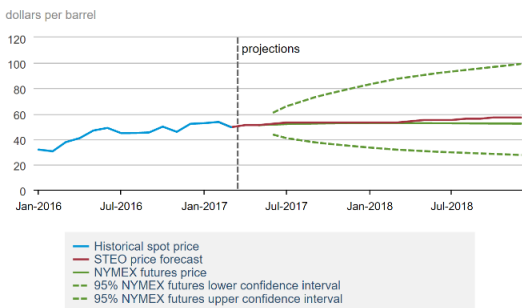
Exhibit: P/E Ratio

Price to Earnings	
DAL	8.2
AAL	8.5
LUV	9.1
JBLU	10
ALK	13.2
SAVE	15

Investment Risks

Risks in the airline industry arise from uncertainties in macro-economic conditions, commodity prices, extensive regulation, competition and even from weather conditions. Southwest and the industry in general are characterized by very high fixed costs and a cyclical and variable demand. This makes the industry and Southwest particularly sensitive to movements in these factors.

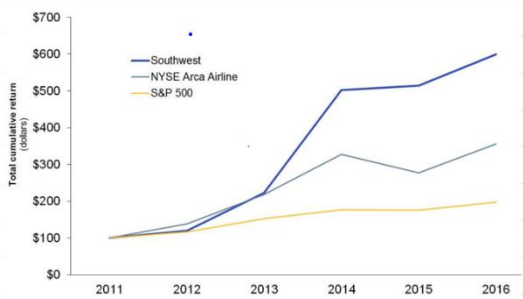
West Texas intermediate (WTI) crude oil price [DOWNLOAD](#)



Macroeconomic & Industry Risks

- I. **Uncertain economic outlook:** Tepid economic growth affects travel patterns and results in reduced spending on leisure and business travel. Short haul flights might be replaced with surface travel. Southwest which has one of lowest stage lengths at 760 miles, could be more sensitive to the reduction in air travel. Although U.S. economy has experienced moderate economic growth since 2010, any continuing or future U.S. or global economic uncertainty could negatively affect earnings.
- II. **Volatility of crude:** With fuel being the 2nd highest (22%) of Southwest's operational cost, changes in the crude prices significantly affects margins. After a sustained period of historically low prices, crude is set to improve in 2017. Southwest manages risk associated with jet fuel volatility by using OTC fuel derivatives to hedge future fuel purchases. There is a risk of Southwest's hedges not providing sufficient protection, or possibility of being wrongly hedged where Southwest could end up paying higher prices. There is also risk of additional collateral to be posted to counterparties which could impact liquidity.
- III. **Unseen events like terror attacks and inclement weather:** Terror attacks or hostilities could result in reduced air travel, increased security burden,

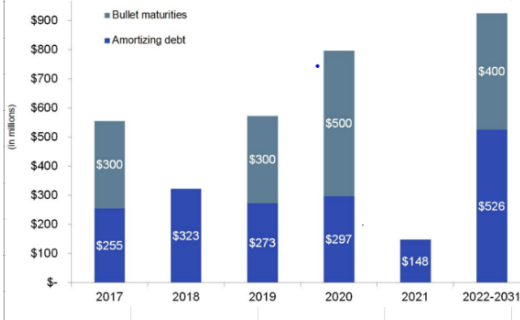
Exhibit: Total cumulative return



or even cripple air connectivity to regions. Extreme weather could result in flight cancellations, suspension of operations resulting in material losses.

Operational Risks

Exhibit: Southwest debt



Source: Southwest

- I. **Negotiating power of unionized workforce:** Union representation covers 83% of Southwest’s workforce. Pilot union was without an agreement on contract for over three years. With most employees represented for collective bargaining purposes by labor unions, exposing Southwest to labor-related events or actions. Southwest announced tentative agreements with most of the union for revised pay scales. This will make labor as the single largest expense. Salaries, wages, and benefits represent 41% company’s operating expenses.
- II. **Single supplier reliance:** Historically Southwest has benefited by operating with a single aircraft type. Benefits outweigh the risks associated with the strategy. However, with Boeing being the sole supplier for aircraft and many of its aircraft parts, any inability of timely delivery of aircraft or spares could result in losses for Southwest. Moreover, with 737 as the predominant carrier, any mechanical or regulatory issue with the model could result in considerable downtime and have negative financial impact.
- III. **Competitive challenges:** Possible price war with one or more competitors could erode margins in a sluggish economy. Moreover, competition with other low-cost carriers could force Southwest to alter its strategy on certain ancillary fees & baggage. This could have adverse impact on differentiation and customer loyalty.

Legal & Regulatory Risks

- I. **Changes in border control and air travel regulations:** The new administration’s stringent policies on immigration and border control could restrict air travel from certain regions. This could also affect travel patterns and can shrink overall air travel
- II. **Pending and new litigations:** Any pending or unforeseen lawsuits on the company could result in monetary damages of injunctive relief causing material damages to the company and to the brand.

References

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Yahoo Finance

Blomberg

Morning Star

Value Line Industry Survey

S&P 500 Net Advantage

Oliver Wayman Industry Report

Appendix 1: DCF: Sensitivity to growth & WACC

\$ 57.32	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%
7.00%	\$ 52.63	\$ 54.61	\$ 56.64	\$ 58.72	\$ 60.87	\$ 63.07	\$ 65.33	\$ 67.66	\$ 70.04	\$ 72.49	\$ 75.01	\$ 77.58
7.50%	\$ 47.50	\$ 49.28	\$ 51.10	\$ 52.98	\$ 54.91	\$ 56.89	\$ 58.92	\$ 61.01	\$ 63.15	\$ 65.35	\$ 67.61	\$ 69.92
8.00%	\$ 43.23	\$ 44.84	\$ 46.49	\$ 48.19	\$ 49.94	\$ 51.73	\$ 53.58	\$ 55.47	\$ 57.41	\$ 59.40	\$ 61.44	\$ 63.54
8.50%	\$ 39.62	\$ 41.09	\$ 42.60	\$ 44.15	\$ 45.74	\$ 47.38	\$ 49.06	\$ 50.78	\$ 52.55	\$ 54.37	\$ 56.23	\$ 58.15
9.00%	\$ 36.52	\$ 37.87	\$ 39.25	\$ 40.68	\$ 42.14	\$ 43.64	\$ 45.18	\$ 46.77	\$ 48.39	\$ 50.06	\$ 51.77	\$ 53.52
9.50%	\$ 33.83	\$ 35.08	\$ 36.36	\$ 37.67	\$ 39.02	\$ 40.41	\$ 41.83	\$ 43.29	\$ 44.79	\$ 46.33	\$ 47.91	\$ 49.52
10.00%	\$ 31.48	\$ 32.64	\$ 33.82	\$ 35.04	\$ 36.29	\$ 37.58	\$ 38.90	\$ 40.25	\$ 41.64	\$ 43.06	\$ 44.53	\$ 46.03
10.50%	\$ 29.41	\$ 30.48	\$ 31.59	\$ 32.72	\$ 33.89	\$ 35.08	\$ 36.31	\$ 37.57	\$ 38.86	\$ 40.19	\$ 41.55	\$ 42.94
11.00%	\$ 27.57	\$ 28.57	\$ 29.60	\$ 30.66	\$ 31.75	\$ 32.87	\$ 34.01	\$ 35.19	\$ 36.39	\$ 37.63	\$ 38.90	\$ 40.20
11.50%	\$ 25.92	\$ 26.86	\$ 27.82	\$ 28.82	\$ 29.84	\$ 30.88	\$ 31.96	\$ 33.06	\$ 34.19	\$ 35.35	\$ 36.54	\$ 37.75
12.00%	\$ 24.43	\$ 25.32	\$ 26.23	\$ 27.16	\$ 28.12	\$ 29.10	\$ 30.11	\$ 31.14	\$ 32.20	\$ 33.29	\$ 34.41	\$ 35.55

Appendix 2: Porters 5 Forces

Bargaining Power of Suppliers

As there are only two major aircraft makers in the world (i.e. Boeing and Airbus), suppliers may take the upper hand.

Threat of New Entrants

For New Entrants, the capital barrier of getting into international routes is high. New entrants are likely to enter domestic routes first. This barrier protects current carriers which have higher ratio of international flights from threat of new entrants.

Threats of Substitutes

As there is no high speed railway in the U.S. yet and we don't see it coming around in the near future, there is no other transportation can substitute airlines.

Bargaining Power of Buyers

After the a series of M&A and capacity rationalization, airlines have a stronger pricing power. In other word, flight fares are supposed to rise in the long term. This benefits current carries' profitability.

Industry Rivalry

U.S. airline industry is imperfectly oligopoly. A few carriers dominate long-haul passenger traffic while several dozen small carriers compete for short-haul flights.



Appendix 3: Historic PE – Southwest Inc.

