

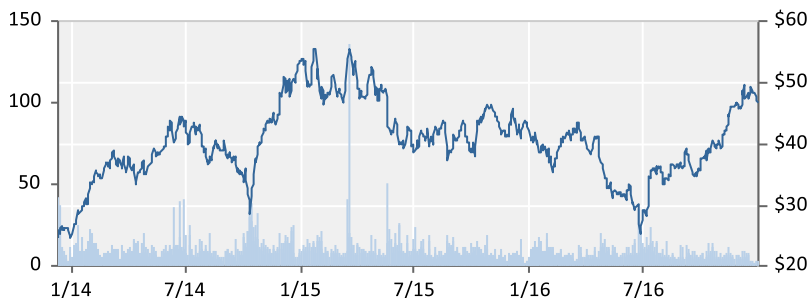
Recommendation	NEUTRAL
Target (today's value)	\$50
Current Price	\$46.30
52 week range	\$24.85 - \$50.64

Major Airline

American Airlines Group, Inc.



Share Data	
Ticker:	AAL
Market Cap. (Billion):	\$24.19
Inside Ownership	1.0%
Institutional Ownership	77.6%
Beta	1.38
Dividend Yield	0.86%
Payout Ratio	4.3%
Consensus Long-Term Growth Rate	-5.9%



Summary: I recommend a neutral rating with a target of \$50. AAL has the opportunity to further increase efficiency and margins through its continued integration with US Airways and the expected increase in passenger revenue per available seat mile in 2017. An increase in the price of oil, economic instability, and the continued popularity of ultra-discount carrier may provide serious headwinds for AAL. The stock is moderately undervalued based on multiples and DCF analysis, but it has a few positive catalysts.

Key Drivers:

- Oil:** Jet fuel accounted for approximately 21.6% of operating costs for AAL, down from over 30% historically. Management at AAL has an aversion to entering into fuel hedging contracts so AAL reaps the benefit of low prices. Jet fuel cost to the company typically follows trends in Brent oil. Fuel costs are up over the past year.
- International Operations:** Operating primarily in the U.S., approximately 30% of AAL's revenue is still earned internationally. Foreign exchange rates and foreign economic activity greatly impact AAL's ability to generate a profit with international operations. AAL has a large presence in Latin America and is the premier major U.S. airline with flights to Cuba. AAL is a member of the Oneworld Alliance.
- Operating Efficiency:** AAL began integrating US Airways in 2013 and is currently refining the synergistic abilities of merging the two firms. Bankruptcy and mergers have been common in the airlines industry during past economic downturns. AAL has recovered exceptionally well from filing bankruptcy in 2011 and has increased EBIT margins consistently each year since merging with US Airways in 2013.
- Competition:** AAL competes domestically with major and ultra-low cost carriers in a regional arena. AAL is developing basic/premium economy options in order to compete with these airlines, and this is set to debut in Q1 2017. AAL's success relies on its ability to maintain margins, especially while competing with low-cost fares.

Valuation: Using a relative valuation approach, American Airlines appears to be fairly valued in comparison to the airline industry. Due to greater ability to forecast long-term inputs, I prefer DCF analysis. A combination of the approaches suggests that AAL is moderately undervalued, as the stock's value is about \$50 and the shares trade at \$46.30.

Risks: Threats to the business include declining passenger yield, high fixed cost structure leading to vulnerabilities in sustained economic downturns, geopolitical events, inefficiencies from the US Airways integration, increased tax and fee structure, increased low-cost competition, and higher oil prices.

	'14	'15	'16E	'17E	'18E
Sales (billions)					
Year	\$42.7	\$41.0	\$38.9	\$40.3	\$42.8
Gr %		-3.9%	-5.0%	3.5%	6.1%
Cons	-	-	\$40.1	\$40.0	\$41.0
EPS					
Year	\$4.02	\$11.39	\$5.54	\$5.03	\$5.94
Gr %		183.4%	-51.4%	-9.2%	18.1%
Cons	-	-	\$5.70	\$5.58	\$4.49

Ratio	'14	'15	'16E	'17E	'18E
ROE (%)	-96.6%	198.8%	61.1%	59.0%	64.9%
Industry	19.2%	62.8%	33.4%	22.8%	25.1%
NPM (%)	6.8%	18.6%	7.9%	6.2%	6.2%
Industry	5.8%	13.1%	11.1%	8.2%	8.4%
A. T/O	1.00	0.89	0.78	0.77	0.77
ROA (%)	6.7%	16.6%	6.1%	4.8%	4.8%
Industry	6.0%	11.5%	9.1%	6.4%	6.8%
A/E	-14.33	11.97	9.97	12.41	13.58

Valuation	'15	'16	'17E	'18E
P/E	6.2	4.4	10.4	9.2
Industry	12.6	9.4	12.0	10.5
P/S	0.72	0.65	0.59	0.57
P/B	7.5	5.7	3.8	3.9
P/CF	4.4	4.1	5.2	5.1
EV/EBITDA	9.7	5.9	9.1	8.9

Performance	Stock	Industry
1 Month	0.5%	6.4%
3 Month	27.5%	32.4%
YTD	10.2%	16.7%
52-week	9.1%	15.1%
3-year	88.4%	118.9%

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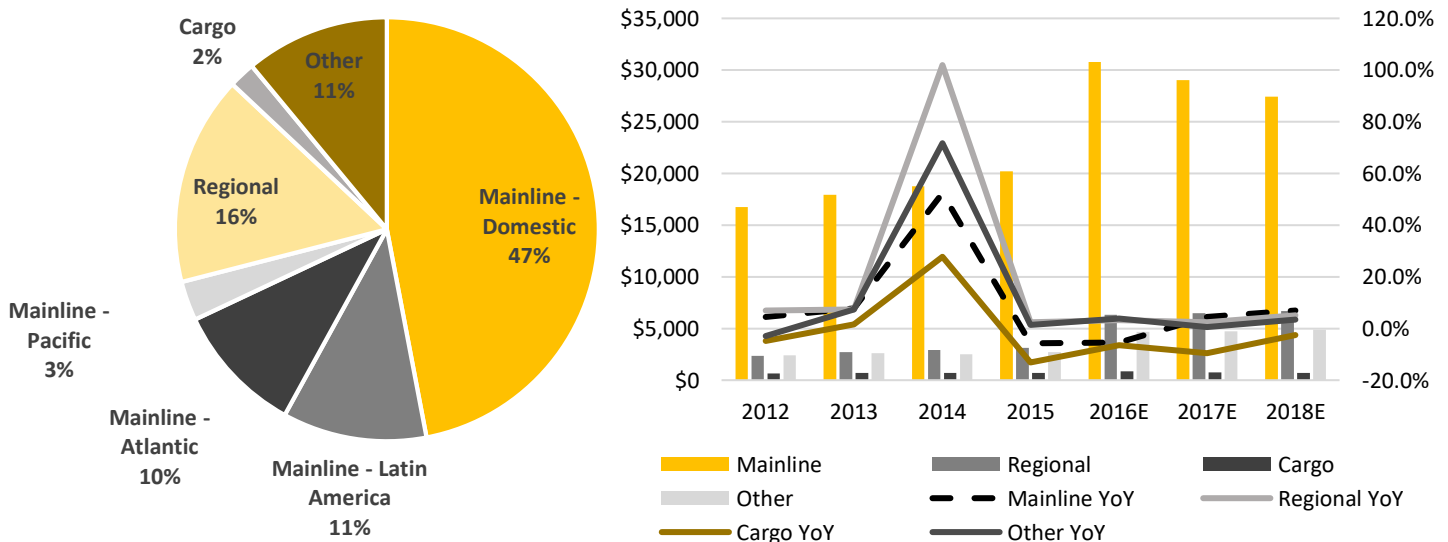
Company Overview

American Airlines Group, Inc. (AAL) is the largest U.S. airline transporting passengers and freight within the U.S. and abroad through its Latin American, Atlantic, and Pacific routes. AAL conducts more than 6,700 flights daily out of hubs in Charlotte, Chicago, Dallas/Fort Worth, Los Angeles, Miami, New York, Philadelphia, Phoenix, and Washington D.C.. AAL maintains the trade name “American Eagle” for three subsidiaries, Envoy Air Inc, PSA Airlines Inc. and Piedmont Airlines Inc, in addition to holding contracts with regional carriers to provide a feeder system from uneconomical markets into AAL hubs. AAL utilizes a “wheel-and-spoke” model for air transportation. AAL formed through the merger of U.S. Airways and AMR Corporation on December 9, 2013, and concluded the final US Airways flight on October 16, 2015. The merger was preceded by a bankruptcy filed by AMR Corporation on November 29, 2011. AAL has a reputation for quality travel at moderate industry pricing. AAL has focused on promoting its brand through loyalty programs and cross-marketing campaigns with Oneworld alliance members. AAL is headquartered in Dallas/Fort Worth, Texas.

AAL generates 70.8% of its revenue from its mainline operations, 15.8% from its regional affiliates, 11.5% from airport services and other revenues, and 1.9% from cargo revenue. AAL reports revenues earned from its segments in four categories:

- **Mainline Passenger:** AAL’s main fleet branded as “American” flying out of the major hubs, both domestic and international. Mainline revenues experienced a 10% compound annual growth rate over the past four years, with negative growth rates in 2015 and 2016. Projected growth rates are 4.0% and 7.0% in 2017 and 2018, respectively.
- **Regional Passenger:** AAL’s subsidies and regional affiliates under the tradename “American Eagle.” Typically, the flights have higher margins than its mainline fleet. Regional revenues experienced a 22.9% compound annual growth rate over the past four years. Projected growth rates are 3.0% and 5.0% in 2017 and 2018, respectively.
- **Cargo:** AAL transports cargo worldwide through the use of international affiliates and hubs. Cargo revenues experienced a 0.1% compound annual growth rate over the past four years, with negative growth rates in 2015 and 2016. Projected growth rates are -5.0% and -2.5% in 2017 and 2018, respectively.
- **Other:** Consisting of other related operating expenses. The largest portion in this category is the AAdvantage loyalty program associated with Citibank, Barclaycard US, and MasterCard credit card agreements. Other revenues experienced a 17.5% compound annual growth rate over the past four years. Projected growth rates are 12.0% and 11.7% in 2017 and 2018, respectively.

Figures 1 & 2: Revenue Sources for AAL, EOY 2015 (left) and Revenue History Since 2009 (right)



Source: Company reports, 10-K 2015

Business/Industry Drivers

Though several factors may contribute to American’s future success, the following drivers have the largest impact on the industry and business:

- 1) Oil Pricing
- 2) International Operations
- 3) Operational Efficiency
- 4) Competitor Analysis
- 5) Macroeconomic Factors

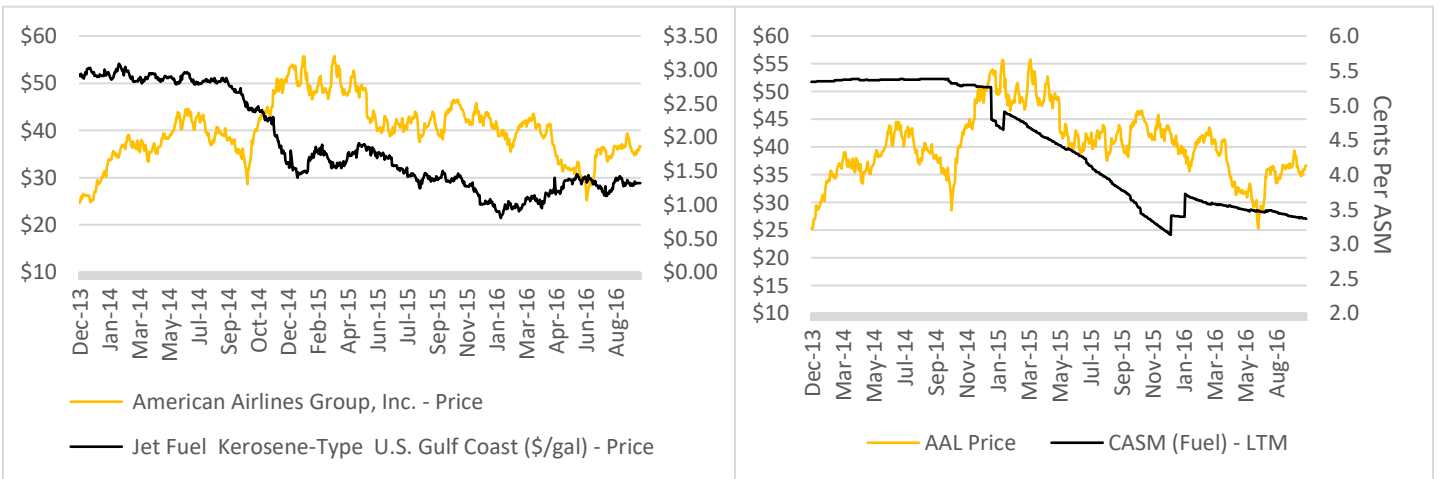
In summary, a one cent change in average jet fuel prices impacts EPS by approximately \$0.06. Costs per available seat mile increases have decreased EPS by approximately \$0.97 in 2016. The increase in labor costs reduced EPS by \$1.27. International routes have returned a combined \$1.88 to EPS. Loyalty program and credit card agreement changes will contribute \$0.23 in 2016 to EPS and grow to \$1.13 in 2018. In 2016, integration costs associated with the U.S. Airways merger reduced EPS by \$1.13.

Oil Pricing

In 2015, fuel costs constituted 17.9%, down from 27.6% in 2014, of the mainline operating expenses. The reduction in fuel costs contributed \$3.17 to EPS $(34786 \times (27.6\% - 17.9\%) \times (1 - 0.372) / 668.393)$. The cost of jet fuel per gallon decreased 40.9% in the same time period while AAL did not materially decrease consumption. AAL estimates for each cent increase in the cost per gallon of jet fuel operational expenses increase by \$44 million. The benefits from the decrease in the price of fuel was offset by a decrease in yield from passenger revenues and increase in labor costs. The decrease in passenger yield decreased EPS by \$2.35. The increase in labor costs decreased EPS by \$1.27. Jet fuel coincides with the price of Brent crude oil.

AAL will not hedge fuel costs in order to take advantage of the current low prices.

Figures 3 & 4: AAL Price v. Price of Jet Fuel per Gallon (left) and Mainline Fuel CASM v. AAL Price (right)



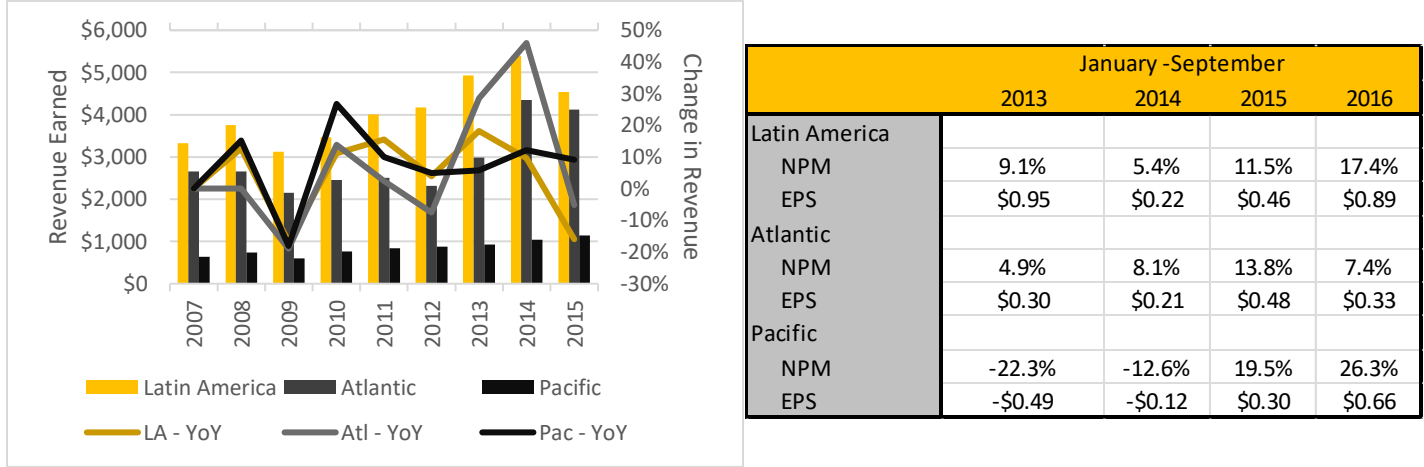
Source: Factset

Industry Fleet Age
 AAL – 10.4 yr
 LUV – 12.0 yr
 UAL – 14.1 yr
 DAL – 17.1 yr
 Source: www.airfleets.net

Unless executive management believes the cost of jet fuel will increase 30-50% in a short time period, AAL will not enter into fuel hedging agreements. Competitors have entered into fuel hedging agreements and have not realized the low cost of jet fuel between 2015 and 2016. In the short-term, AAL management’s decision is beneficial in comparison to AAL’s competitors. As oil prices have a high volatility due to unstable geopolitical situations in the supply chain, the chance of fuel costs going up are of constant concern.

AAL has the youngest fleet of the major airlines in the U.S. and has orders for up to 500 new fuel-efficient planes through 2023. The airplane renovation and replacement program affects up to 40% of AAL's fleet. Beginning in 2013, management expects the majority of capital expenditure to be complete prior to 2018. This will further decrease the fuel portion of cost per available seat mile and increase operating margins. The firm reduced fuel consumption by 33 million gallons by decreasing in capacity along low demand routes and increasing capacity along high demand routes. Using the current jet fuel price of \$1.53 per gallon, this reduced consumption lead to an increase in \$0.06 to EPS (33M x 1.532 x (1 - 0.372) / 553.540). The new capital expenditures towards upgraded airplanes may allow for AAL to secure new routes and increase free cash flow.

Figures 5, 6, & 7: International Revenues, Absolute & Percent Change (left), Net Profit Margin & EPS Contribution by Region (right)



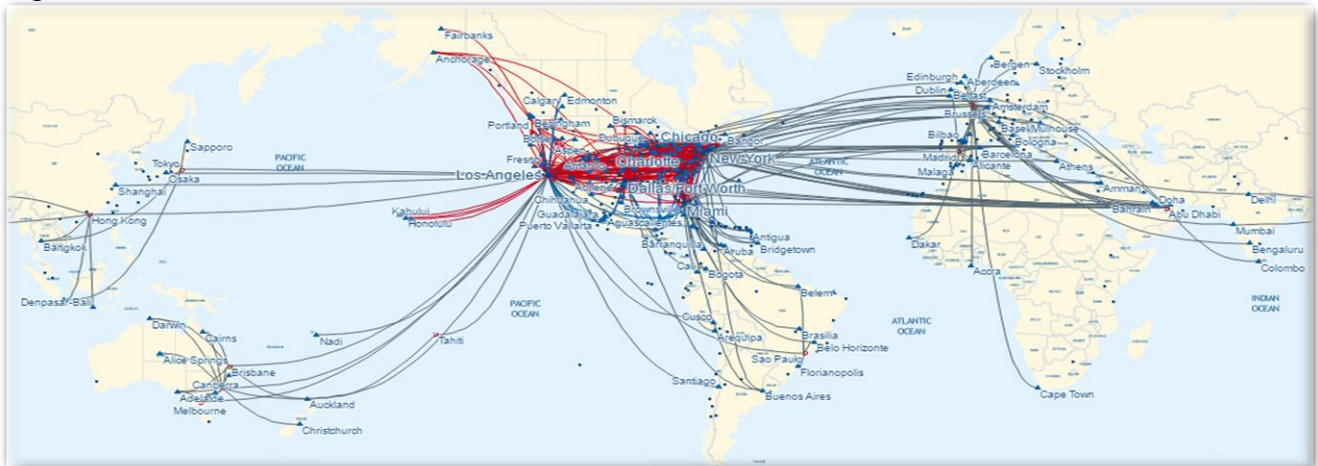
Source: Bloomberg/USDOT

International Travel

Approximately 30% of AAL's revenues are from international routes, primarily in Latin America, Europe, and Asia. U.S. Airline industry passenger traffic and number of flights have increased in 2016, while load factor has decreased. According to the USDOT, AAL's operating revenues for the first nine months of 2016 from international routes has increase by 10.6% compared to 2015. The largest international regional growth has come from the Pacific region.

Economic and political events may affect the demand of travel into and out of the countries AAL operates flights. Due to international agreements, foreign airlines cannot travel between airports within foreign countries, but can travel from one country to another. With developed countries pivoting to institute greater control over greenhouse gas production, global airlines are constantly under pressure to decrease emissions and face increased taxes or fees in relation to carbon-allowances. These policies can have a detrimental effect on profit margins as costs cannot easily be passed onto customers due to the competitive pricing structure of the airline industry.

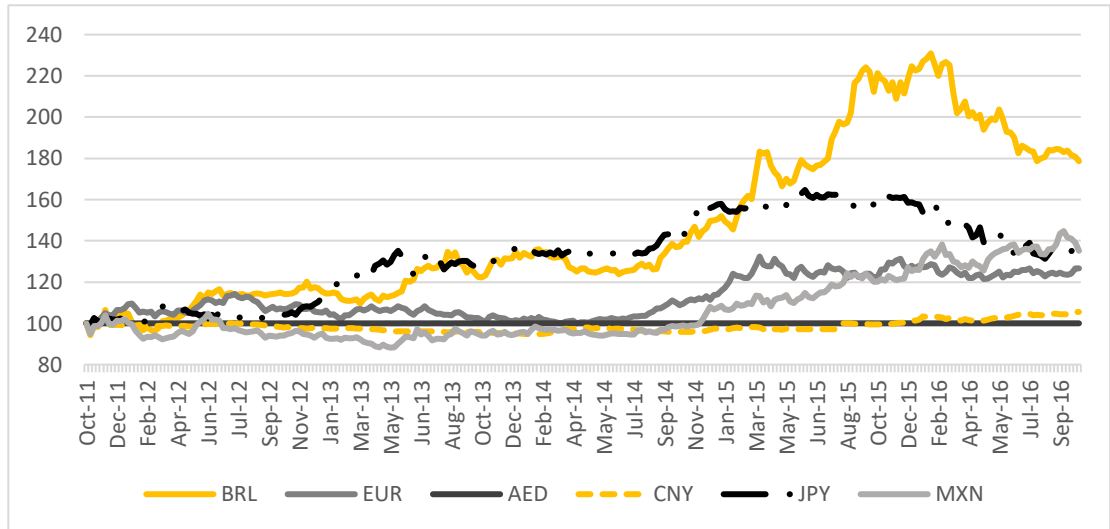
Figure 8: American Airline Routes



Source: American Airlines

Foreign currency valuation relative to the U.S. dollar improved or remained unchanged after falling in 2015, leading to reduced yields. In regards to regions AAL services, Brazil, China, Japan, the United Arab Emirates, and Europe are the most notable. In 2015, the Brazilian Real depreciated up to 70%, but in 2016 it has rebounded. The economic shock from BREXIT and potential continued flight of countries from the E.U. may result in continued depreciation of the Euro as the U.K. and E.U. determine exactly how to proceed. The U.A.E. Dirham is pegged to the dollar, providing the least volatile yields.

Figure 9: Relative Currency/USD Value



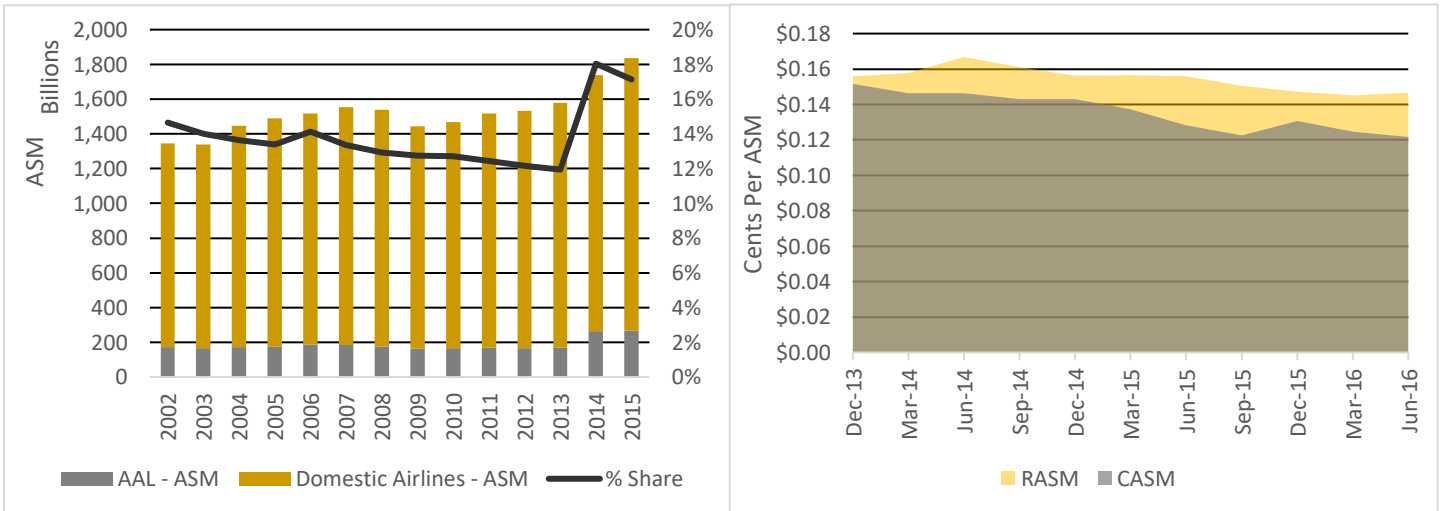
Source: FactSet

The American Airlines and US Airways merger created the largest U.S. airline according to revenue.

Operating Efficiency

With the completion of US Airways integration in 2015, AAL management has pivoted their focus from synchronizing the companies' systems toward increasing competitive efficiencies. One major process with the merger was a seamless transition of the ticketing and flight scheduling systems. The synergies allowed for relatively stable operating costs per available seat mile (CASM) excluding fuel in 2015. Although CASM decreased 3.4% in the first three quarters of 2016 compared to 2015, the majority of this reduction came from fuel related expenses. ASM increased by 2.2% in 2016, while applicable costs increased by 3.6%. This equated to a decrease of \$0.97 to EPS in 2016 $(239372/203282) \times (\$0.1005 - 0.0975) \times (1 - 0.372) / 553.540$.

Figures 10 & 11: AAL ASM to Aggregate ASM (left) and Quarterly RASM to CASM (right)

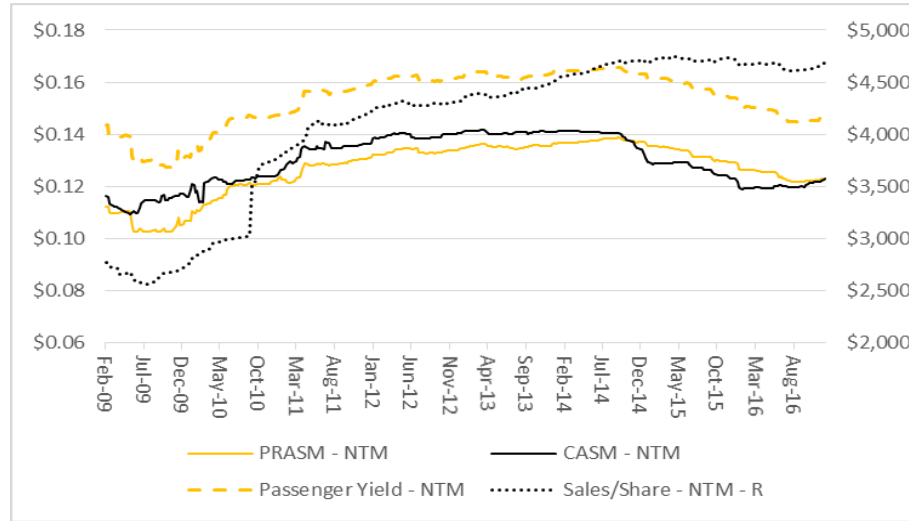


Source: FactSet/USDOT/Company Reports

As of December 31, 2015, AAL has approximately \$12B in NOL carryforward tax benefits.

American Airlines filed for bankruptcy in November 2011, allowing for cost restructuring in addition to net operating loss carryforwards. The majority of cost savings came from labor costs through renegotiating labor contracts. Approximately 82% of AAL’s workforce has union representation. Labor costs decreased from an industry high of 33.2% of sales in 2011 to 21.5% in 2013; accounting for approximately \$1.5B in savings, or \$3.61 towards EPS (1500 * (1-0.372) / 261.07). The bankruptcy and US Airways merger was a boom for investors and executives, while the majority of cost came to the employees. An investor acquiring American Airlines immediately before bankruptcy announcement with a holding period through October 2016 would have realized a return of 103.1% and a geometric mean return of 8.3% (1:0.0665 of AMR to AAL shares within 120 days of December 6, 2013).

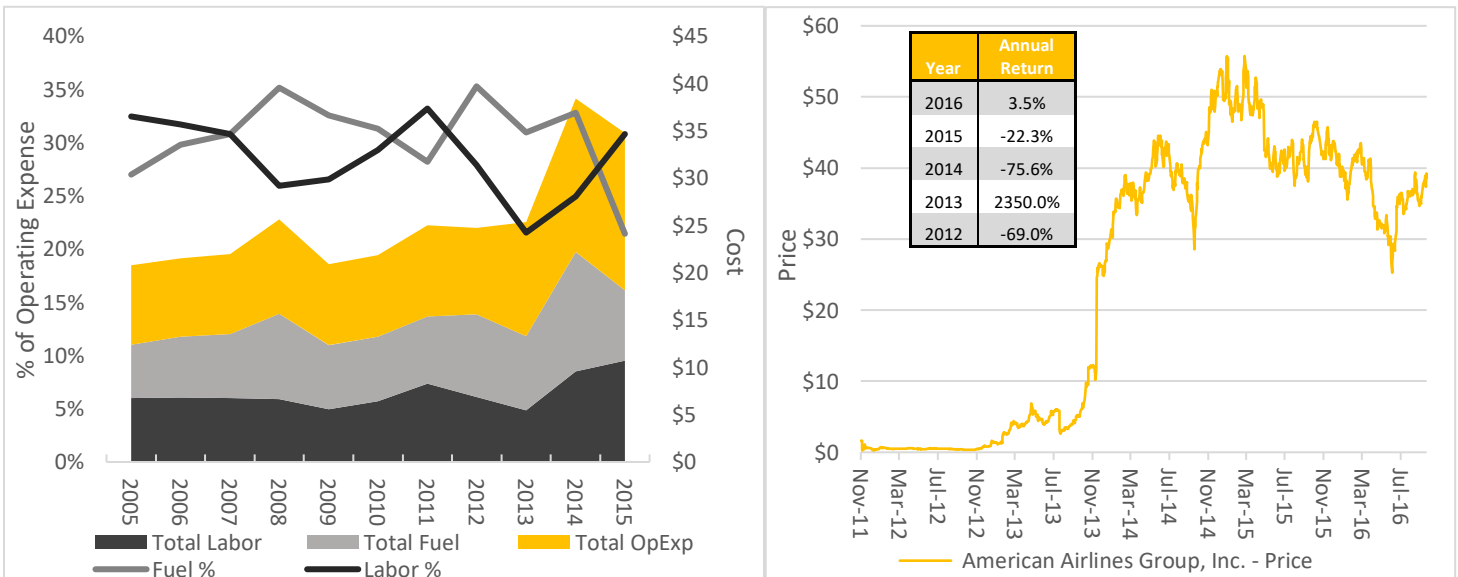
Figure 12: Industry Metrics, Feb 2009 – Dec 2016



Source: Factset

The industry has seen headwinds arise from increased capacity and reduced yields in 2016. In 2015 and 2016, capacity has increased by 4.3% and 4.0% respectively. Yield decreased from 20.2% in 2014 to 19.1% in 2015 and 16.7% in 2016. The decrease in fuel prices has alleviated the potential loss to AAL. In H1 2016, AAL’s capacity as measured by ASM increased by 2.7% since H1 2015. In the same period, AAL’s load factor decreased 0.6%, and CASM excluding fuel increased by 2.0%. 2016 Q2 was the second best Q2 in the company’s history with after-tax income with \$950M.

Figures 13 & 14: Operating Revenue Percentages (left) and Price of A.A. from Bankruptcy Declaration to Present



Source: Factset/Company Reports, 10-K 2004-15/Google Finance

Competitor Analysis

From 2000 to 2016, 14 mergers and 58 bankruptcies have occurred within the airline industry.

A period of consolidation has occurred in the US Airline industry in the past 15 years. The three main major airlines in the U.S. are AAL, Delta Airlines, and United Airlines. AAL was the most recent major airline to declare bankruptcy (Chapter 11). Among regional U.S. airlines, the largest companies are Southwest Airlines, Spirit Airlines, Alaska Airlines, and JetBlue. Competitively, regional airlines typically have higher operating and profit margins compared to major airlines due to the scope of operations being much more localized so each company is better able to control costs. Low profit margins, high debt to equity, and government regulations keep barrier to entry high for new carriers. Airlines face major headwinds during economic downturns, and an indicator of financial strength during these times is cash burn rate. AAL leads its competitors with approximately \$7.5B in cash and short-term investments, or approximately 19% of sales.

Margin Increase 2011 – 2016
 Gross: 13.76 – 34.10
 EBITDA: 4.76 – 21.71
 Source: Factset

All U.S. carriers have pivoted their strategy from an all-inclusive travel experience towards a la carte service. From in-flight meals to carry-on baggage, carriers are attempting to increase revenue streams by charging passengers as needed. The strategy allows the carrier to quote low cost flights in order to cater to price sensitive customers and increase load factor, advertising a sort of price flexibility to passengers. Now that the integration of US Airways is mostly complete, AAL management has expressed a desire to create a differentiated “economy – basic” and “economy – premium” seating for coach classes in order to compete with other airlines within the next 12 months. In 2016, AAL spent \$1B in integration expenses with expectations to be fully integrated by 2019. These expenses decreased EPS by \$1.13 (1B x (1-0.372) / 553.540).

Figure 15: Competitor Statistics 2015

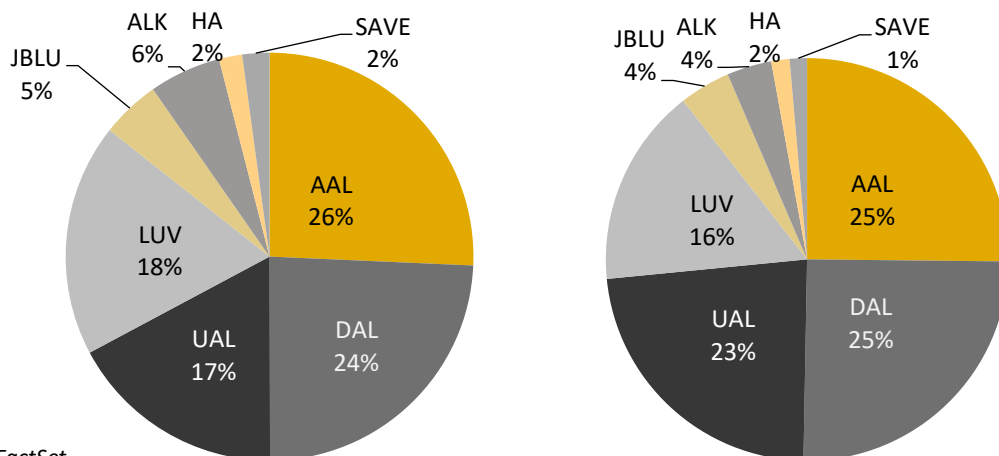
Airline	Op Margin	P/Sales	CF/Share	Current	CFO/CL	On-Time	Cancellations
AAL	17.79%	0.71	9.09	0.73	45.93	79.06%	1.48%
DAL	20.69%	1.01	9.85	0.52	45.19	85.65%	0.49%
UAL	15.82%	0.57	15.89	0.63	48.27	79.43%	1.25%
LUV	22.87%	1.45	4.84	0.54	43.72	79.75%	1.34%
SAVE	24.19%	1.35	6.53	2.2	101.45	69.69%	1.90%

Source: Factset/USDOT

Aside from building brand loyalty, frequent flier programs bring in additional revenue streams.

Airlines have developed relationships with credit card companies to create frequent flyer mile programs in order to build brand loyalty. AAL was the first carrier to offer these benefits to passengers and currently partners with Barclaycard US, Citibank, and MasterCard. In addition to frequent flyer miles, major airlines build customer loyalty through airport lounges for exclusive passengers or exclusive credit card holders. These benefits are able to sway customer purchasing behaviors, increasing potential margins. AAL changed its AAdvantage program benefits from a miles traveled method to a per dollar spent method. This change is estimated to bring in additional pretax revenue \$200M in 2H 2016, \$550M in 2017, and \$800M in 2018. Due to the change, EPS will increase \$0.23 in 2016, \$0.69 in 2017, and \$1.13 in 2018.

Figures 16 & 17: Comparison of AAL Comps by Enterprise Value (left) and Revenue (right)



Source: FactSet

Macroeconomic Trends

The airline industry is cyclical in nature and positively correlated with consumer confidence and the ISM. The airline industry is negatively correlated with the unemployment rate. Generational lifestyle habits will increasingly shape the airline industry into the future. As AAL has only been trading since December 2013, the composite used in computing correlations contains DAL, UAL, AAL, LUV, ALK, JBLU, SAVE, and HA in order to encompass approximately 90% of the airline industry.

Millennials prioritize international travel with limited discretionary income compared to previous generations.

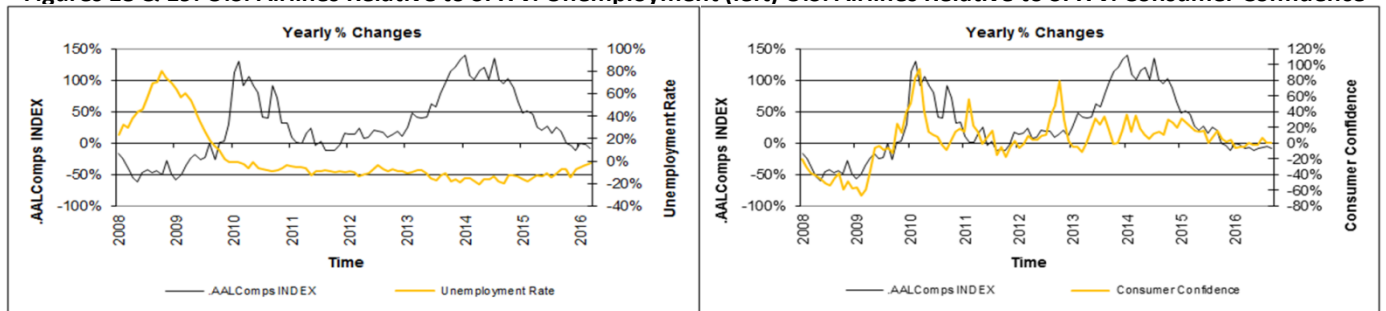
Millennial travel behaviors and technological savvyness will continue to change the business landscape in the coming decades. Millennials (18-35) outnumber the Babyboomers as the largest generation in the U.S. As Millenials continue to enter the workforce, their discretionary spending will increase in proportion to their purchasing power. While being four times less likely than non-Millennials to be loyal to an airline brand, the Boston Consulting Group estimates Millennials to encompass 54% of business travel by 2025. As of 2013, Millennials accounted for 35% of business travel. Approximately 75% of Millennials aged 18-24 report wanting to travel abroad for leisure and report spending a larger proportion of discretionary income on travel compared to other generations.

The airlines industry has a beta of 1.12 and 0.218 R² to Y/Y% changes in consumer confidence. In relation to the S&P 500, the airlines industry’s relative performance has a correlation of 0.645 and 0.417 R² to changes in consumer confidence. If consumers believe the economy is doing well and feel secure in their ability to pay all of their necessary expenses, they allocate more discretionary income to vacations.

The airlines industry has a beta of -1.08, correlation of -0.534, and 0.286 R² to the changes in U.S. unemployment rate. In relation to the S&P 500, the airlines industry’s relative performance has a correlation of -0.401 and 0.161 R² to the U.S. unemployment rate. A large portion of airline industry revenue comes from business travelers. Absolute levels of business travel increase when employment levels increase. Additionally, as more individuals are employed, they are able to travel for leisure. Finally, during times of duress, as businesses are reducing employees they are also reducing travel budgets.

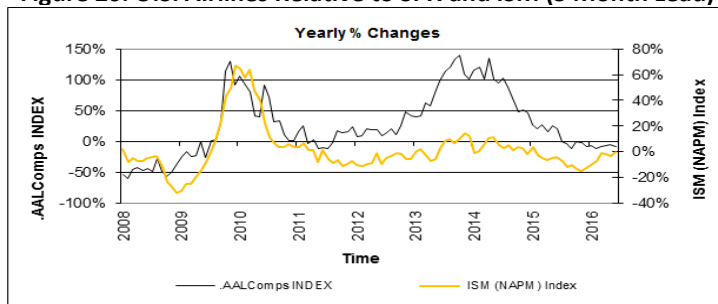
With 3 months of lead time, the airlines industry has a beta of 1.64 and 0.342 R² to Y/Y% changes in the ISM (NAPM). In relation to the S&P 500, the airlines industry’s relative performance has a correlation of 0.494 and 0.245 R² to ISM (NAPM). When manufacturing increases, businesses have higher income and are able to afford the expedited and relatively expensive transportation of cargo and personnel via air carriers.

Figures 18 & 19: U.S. Airlines Relative to SPX v. Unemployment (left) U.S. Airlines Relative to SPX v. Consumer Confidence



Source: Bloomberg

Figure 20: U.S. Airlines Relative to SPX and ISM (3 Month Lead)

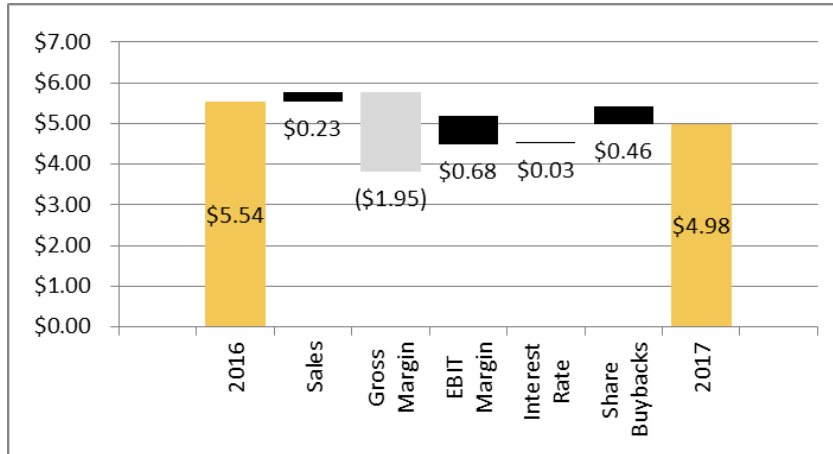


Financial Analysis

I anticipate EPS to decrease from \$5.54 in FY2016 to \$4.98 in FY 2017. Declining gross margins should decrease earnings by \$1.95, offset by a \$0.23 per share increase due to sales growth, \$0.68 per share increase due to EBIT margin, and \$0.49 per share increase due to debt interest rate reductions and share buyback programs. The forecasted restructuring of debt and drop in interest rates from 4% interest rate to 3.5% increases EPS by \$0.03. Finally, I forecasted an additional \$1.5B in share repurchases compared to AAL management’s current agreement of \$1.1B. This cash utilization assumption is in line with current cash and cash equivalent levels and above the \$6.5B minimum level set forth by management. The increase in share buybacks increases EPS by \$0.46.

EPS is expected to decline in 2017 and rise in 2018.

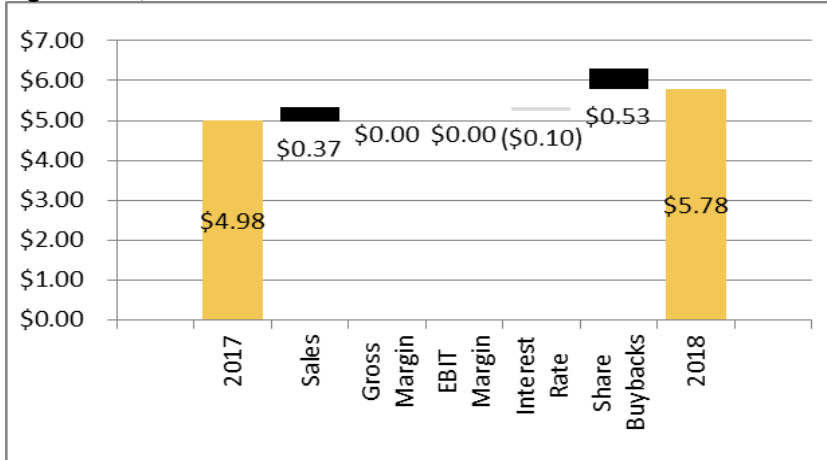
Figure 21: Quantification of 2017 EPS drivers



Source: Company Reports, IMCP

I expect 2018 EPS to increase \$4.98 to \$5.78. American Airlines will lose \$0.10 of earnings from increased interest payments through raising debt, but gain \$0.37 and \$0.53 from increased sales in and from share buybacks. I anticipate unchanged gross margin and net profit margin. Managements’ current share repurchase agreement goes through 2017. I expect the increased cash flow from operations to be applied to share repurchase programs as management has expressed preference to share repurchases over increasing dividend payments.

Figure 22: Quantification of 2018 EPS drivers



Source: Company Reports, IMCP

I am slightly more optimistic than consensus estimates for 2017 due to aggressive share repurchase programs. However, I anticipate stronger growth in 2018 driven primarily by AAL's major capital expenditures occurring in 2017, freeing up additional cash flow to be directed towards shareholders.

Figure 23: EPS and YoY growth estimates

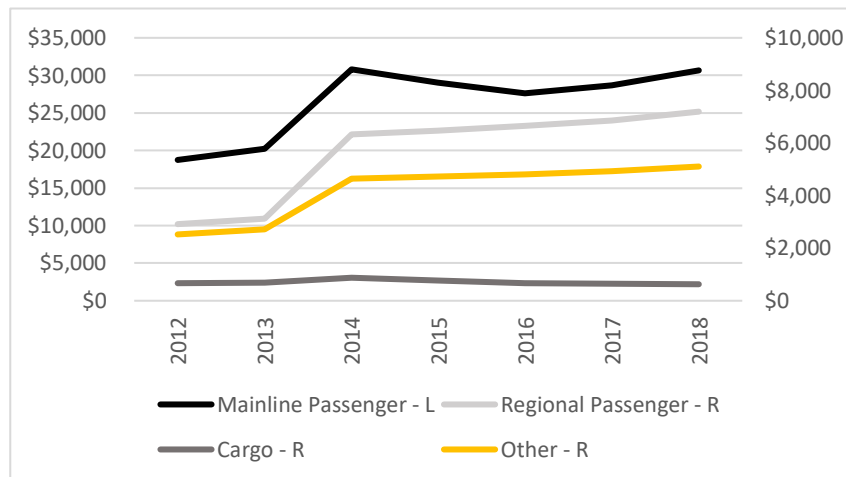
	2017E	2018E
Revenue - Estimate	\$40,302	\$42,760
YoY Growth	3.5%	6.1%
Revenue - Consensus	\$41,448	\$42,978
YoY Growth	3.3%	3.7%
EPS - Estimate	\$4.98	\$5.78
YoY Growth	-10.1%	16.1%
EPS - Consensus	\$4.69	\$5.37
YoY Growth	-17.7%	14.5%

Source: Factset, IMCP

Revenues

American Airlines revenues peaked in 2014 after merging with US Airways. Upon entering integration efforts, AAL mainline sales decreased in 2015 and 2016 while regional revenues have increased over the same time period. I expect mainline passenger revenues to increase in 2017 due to the completion of major merger activities increasing operational efficiencies and the introduction of low cost economy class ticket prices.

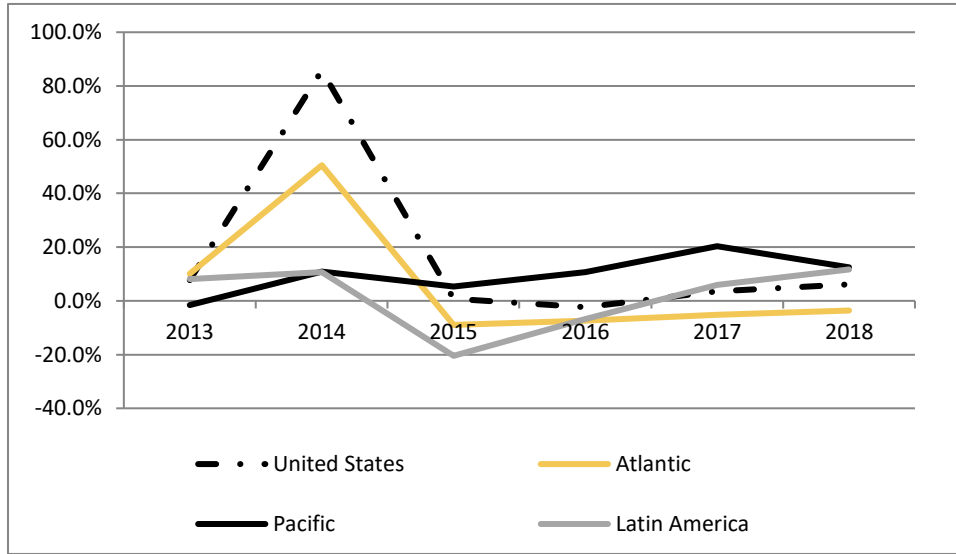
Figure 24: American Airlines segment revenues, 2012 – 2018E



Source: Company Reports, IMCP

International traffic will between Latin America may be bolstered by the anticipated strengthening of Latin American economies, American Airlines being the sole major U.S. airline with flights to Cuba, and an increase in travel to Pacific nations. Given strong anti-immigration and closed borders rhetoric during the 2016 elections, international travel to the U.S. from foreign nationals may decline if limitations are enacted. Any sanctions would primarily affect Atlantic and Latin American routes. High profile terror attacks in European countries throughout 2016 could also lower Atlantic travel.

Figure 25: American Airlines geographic revenue growth, 2013 – 2018E

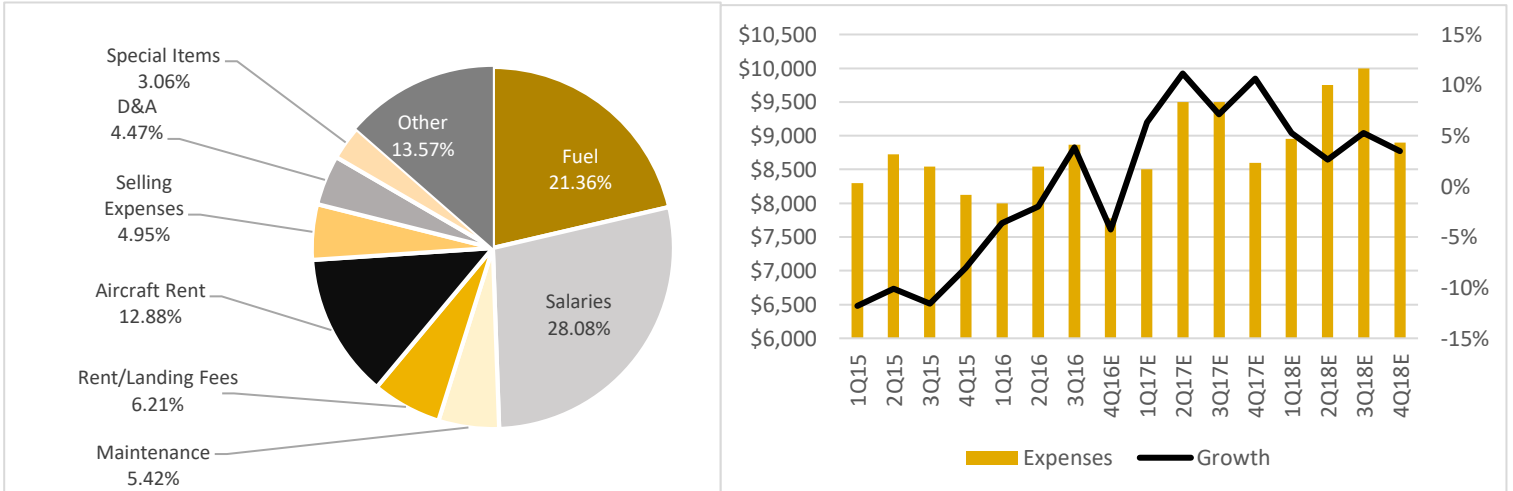


Source: Company Reports, IMCP

Operating Income and Margins

Operating expenses are composed primarily of labor expense and fuel expense. Other operating expenses include ground and cargo handling, crew travel, aircraft food and catering, passenger accommodation, airport security, and assorted fees. Aircraft rent contains capacity purchases from third-party regional carriers. I expect most of the savings from AAL’s profit maximizing initiatives to come out of the aircraft rent, selling, and maintenance expenses. As fuel is dictated by market value and management does not participate in hedging activities, this expense will vary along with oil prices. Labor agreements have been reached with all unionized employees employed by AAL with increased expenses expected for 2016 and 2017.

Figures 26 & 27: Composition of 2015 operating expenses (left) and operating expenses vs YoY operating expense growth



Source: Company Reports

Fuel costs have increased in 2016 and are expected to increase in 2017 and 2018. Historically, fuel costs have been approximately 30% of expenses. The decreasing age of AAL’s fleet will mitigate the increase in fuel costs due to increased fuel efficiency, increased revenue potential with new seating arrangements, reduced maintenance requirements, and decreased need to rent capacity from third party airlines.

Figure 28: AAL operating margins, 2014 – 2018E

	2014	2015	2016E	2017E	2018E
Sales	\$42,650	\$40,990	\$38,941	\$40,302	\$42,760
Direct Costs	\$37,106	\$33,422	\$31,437	\$32,753	\$34,842
Fuel	\$12,601	\$7,856	\$6,070	\$7,083	\$8,076
Growth		-37.7%	-22.7%	16.7%	14.0%
Labor	\$9,648	\$10,711	\$11,782	\$12,268	\$13,023
Growth		11.02%	10.00%	4.12%	6.15%
Gross Income	\$5,544	\$7,568	\$7,504	\$7,549	\$7,918
Gross Margin	13.00%	18.46%	19.27%	18.73%	18.52%
Operating Expenses	\$1,476	\$2,111	\$1,748	\$2,713	\$2,787
Operating Income	\$4,068	\$5,457	\$5,756	\$4,836	\$5,131
Operating Margin	9.54%	13.31%	14.78%	12.00%	12.00%

Source: Company Reports

Return on Equity

American Airlines has had an unusual change in ROE during 2014 due to an almost \$8B negative equity balance from the merger with US Airways and resulting stock distributions. In 2015, nearly \$3B in tax credits from the net operating losses over the past few years resulted in abnormally high ROE for 2015. AAL retains the opportunity to utilize approximately \$12B in tax credits which may result in similarly high ROE in future years. Without accounting for tax credits, I expect ROE to normalize in 2016 and be primarily driven by AAL's leverage ratio.

Figure 29: ROE breakdown, 2013 – 2018E

5-Stage DuPont	2013	2014	2015	2016E	2017E	2018E
Tax Burden Ratio	-386.1%	89.7%	164.9%	62.8%	62.8%	62.8%
Interest Burden Ratio	36.2%	79.0%	84.6%	84.7%	82.4%	81.9%
Operating Profit Ratio	4.9%	9.5%	13.3%	14.8%	12.0%	12.0%
Asset Turnover Ratio	81.3%	99.8%	89.5%	77.9%	76.6%	77.4%
Financial Leverage Ratio	-6.138	-14.332	11.970	9.974	12.411	13.577
ROA	-5.58%	6.74%	16.61%	6.13%	4.76%	4.78%
ROE	34.2%	-96.6%	198.8%	61.1%	59.0%	64.9%

Source: Company Reports

I expect ROE to remain stable, but ROA will decrease in 2016 as net income rises less than assets due to capital expenditures related to new aircraft. This decrease will be met with increased borrowing at low rates secured with the airplanes as collateral. ROE is stable in 2017 as the increase in the leverage ratio offsets the impact of ROA decreasing from 6.13% to 4.76%. AAL has a comfortable debt to asset ratio for an airline, with a massive amount of cash reserves to ensure liquidity during times of economic duress. Due to this liquidity, I expect AAL to increase cash reserves as a percentage of additional debt taken on. The sales revenue weighted-average cash and short-term investments to current liability ratio of the top four U.S. airlines is 0.39 while AAL's ratio is 0.51. Finally, I conservatively anticipated a decrease in AAL's operating profit ratio due to the potential increase in fuel costs and labor negotiations.

Free Cash Flow

Figure 30: Free cash flows 2010 – 2016E

Free Cash Flow							
	2010	2011	2012	2013	2014	2015E	2016E
NOPAT	\$152,493	\$145,489	\$241,718	\$60,254	\$59,329	\$66,975	\$93,293
<i>Growth</i>		-4.6%	66.1%	-75.1%	-1.5%	12.9%	39.3%
NWC*	48,064	115,277	(26,482)	167,228	160,410	135,138	127,279
Net fixed assets	1,414,100	1,544,520	1,679,577	1,530,431	1,340,195	1,383,756	1,219,143
Total net operating capital*	\$1,462,164	\$1,659,797	\$1,653,095	\$1,697,659	\$1,500,605	\$1,518,893	\$1,346,422
<i>Growth</i>		13.5%	-0.4%	2.7%	-11.6%	1.2%	-11.4%
- Change in NWC*		67,213	(141,759)	193,710	(6,818)	(25,272)	(7,859)
- Change in NFA		130,420	135,057	(149,146)	(190,236)	43,561	(164,613)
FCFF*		(\$52,144)	\$248,420	\$15,690	\$256,383	\$48,687	\$265,765
<i>Growth</i>			-576.4%	-93.7%	1534.1%	-81.0%	445.9%
- After-tax interest expense	2,210	2,351	4,707	5,626	7,508	14,182	16,461
FCFE**		(\$54,495)	\$243,713	\$10,064	\$248,875	\$34,505	\$249,304
<i>Growth</i>			-547.2%	-95.9%	2372.9%	-86.1%	622.5%
FCFF per share*		(\$0.60)	\$3.03	\$0.20	\$3.57	\$0.75	\$4.33
<i>Growth</i>			-604.9%	-93.3%	1656.4%	-79.0%	477.9%
FCFE per share**		(\$0.63)	(\$2.97)	\$0.13	\$3.47	\$0.53	\$4.06
<i>Growth</i>			371.4%	-104.4%	2569.2%	-84.7%	666.0%

Source: Company Reports, IMCP

AAL's free cash flow has been volatile over the last several years due to the firm's reorganization post-merger with US Airways. The firm has raised its debt by an estimated \$6.5B, or 38.95%, since 2013 while cutting other liabilities in half from \$20.8B to \$10.6B. At the same time, AAL began a fleet renewal program ordering up to 500 airplanes through 2021. As of 3Q 2016, AAL's fleet contains 922 aircraft. The firm has utilized over \$9B to repurchase approximately 200M shares. In the second half of 2014, AAL began to pay a quarterly dividend of \$0.10 per share. I forecast that NOPAT will grow at a much slower pace than net operating capital over the next two years, and AAL's cash and cash equivalent accounts of \$6.75B give it the ability to meet any funding shortfalls that may arise. With the firm's aggressive share repurchase program, I fully expect management to continue to utilize excess cash in a similar manner for the next two years.

I expect FCFF (ex-cash) to decline 25.5% in 2017 as the result of a 3.0% increase in net fixed assets and a further decrease by 27.2% in 2018 due to a 5.6% increase in net fixed assets. Taking cash and debt into consideration, I forecast FCFE to increase 6.1% in 2018 due to the majority of the fleet purchase program occurring by 2017.

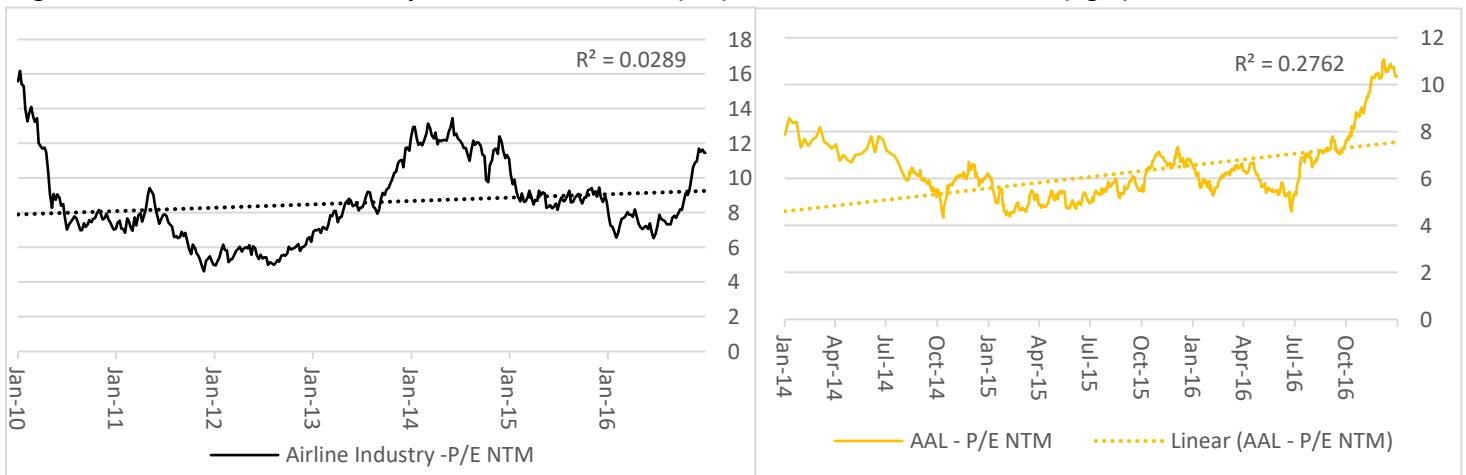
Valuation

AAL was valued using multiples and a 3-stage discounting cash flow model. Based on earnings multiples, the stock is slightly under-valued relative to other firms and is worth \$48; however, due to the volatility of AAL’s earnings the past few years, as well as the effect of recent nonrecurring expenses and revenues, this metric may be unreliable. Relative valuation shows AAL to be fairly-valued based on its fundamentals versus those of its peers in the airline industry. A detailed DCF analysis values AAL slightly higher, at an average of \$51; I give this value a bit more weight because it incorporates assumptions that reflect AAL’s ongoing changes integral to operations. As a result of these valuations, I value the stock at \$50.

Trading History

The U.S. airline industry is currently trading above its seven year linear NTM P/E of 9.5 at 11.45. This is the result of recent stock price appreciation last seen in Q1 and Q4 2015 while earnings have decreased from the same time periods. Most analysts believe the airline industry to fare well in the next two years with low fuel prices and stable economic indicators. AAL’s current NTM P/E is at 10.35 compared to the linear NTM P/E of 7.5. I anticipate some reversion to the industry mean of 9.5. The market’s optimism is reflected in the higher P/E and indicates expectations that earnings will rebound. The upward trend in P/E reflects the market’s view that the industry has improved in addition to generally higher multiples for the overall market.

Figures 31 & 32: U.S. Airline Industry NTM P/E, 2010 – 2017 (left) & AAL NTM P/E, 2014 – 2017 (right)



Source: Factset

Assuming the firm maintains a 9.5 NTM P/E at the end of 2017, it should trade at \$54.91 by the end of 2017.

- Price = P/E x EPS = 9.5 x \$5.78 = \$54.91

Discounting \$54.91 back to today at a 14.25% cost of equity (explained in Discounted Cash Flow section) yields a price of \$48.06.

Relative Valuation

American Airlines is currently trading at a P/E much lower than its peers, with a P/E TTM of 5.0 compared to an average of 10.7. Investors are unwilling to pay a premium for AAL because it is the latest airline to go through bankruptcy and still must fully complete all merger activities. EPS were inflated by 60.6% in 2015 due to the net operating loss tax credits. Additionally, AAL's P/S ratios are significantly lower than those of its peers – roughly half the average for the group. However, AAL's P/B is 78% above the industry average. This is a reflection of AAL's relatively high Debt to Equity ratio (and high ROE as a result) and moderately high net margin compared to its competitors.

Figure 34: AAL comparable companies

Ticker	Name	Current Price	Market Value	Price Change						Earnings Growth					Beta	LT Debt/ S&P		LTM Dividend		
				1 day	1 Mo	3 Mo	6 Mo	52 Wk	YTD	LTG	NTM	2015	2016	2017		2018	Pst 5yr	Equity	Rating	Yield
AAL	AMERICAN AIRLINES GROUP INC	\$46.30	\$24,191	(0.8)	0.4	22.8	57.9	9.3	(0.8)	-9.4	-51.7%	183.3%	-51.4%	-9.2%	18.1%	0.97	490.7%	0.86%	4.3%	
DAL	DELTA AIR LINES INC	\$49.48	\$36,839	0.6	2.4	23.8	34.6	(2.4)	0.6	8.8	-20.6%	86.9%	5.4%	-22.4%	7.0%	0.91	51.7%	1.37%	9.8%	
UAL	UNITED CONTINENTAL HLDGS INC	\$72.71	\$23,124	(0.2)	5.0	36.5	75.8	26.9	(0.2)	-7.5	-17.1%	363.8%	-54.7%	-31.4%	16.2%	0.63	122.8%	B-	0.00%	0.0%
SAVE	SPIRIT AIRLINES INC	\$57.09	\$4,011	(1.3)	1.5	30.5	23.9	43.3	(1.3)	6.8	-8.3%	40.3%	0.9%	-9.6%	13.1%	0.22	66.6%		0.00%	
LUV	SOUTHWEST AIRLINES	\$49.98	\$30,681	0.3	4.3	25.8	26.2	16.1	0.3	8.1	-1.8%	86.8%	27.9%	-33.2%	24.5%	0.99	28.9%	B+	0.75%	10.0%
SKYW	SKYWEST INC	\$36.55	\$1,886	0.3	0.0	31.9	34.6	92.2	0.3		2.5%	230.9%	33.0%	24.4%	15.9%	1.81	118.5%	B-	0.52%	6.3%
JBLU	JETBLUE AIRWAYS CORP	\$22.39	\$7,258	(0.1)	7.0	26.8	34.6	(1.1)	(0.1)	2.6	-13.4%	61.5%	15.2%	-13.7%	5.6%	0.59	44.5%	B	0.00%	
ALK	ALASKA AIR GROUP INC	\$88.00	\$10,938	(0.8)	3.7	31.2	49.8	9.3	(0.8)	-0.7	-4.1%	51.5%	11.1%	-7.7%	15.8%	0.62	65.0%	B+	1.24%	14.3%
Average			\$17,366	(0.3)	3.0	28.7	42.2	24.2	(0.3)	1.2	-14.3%	138.1%	-1.6%	-12.8%	14.5%	0.84	123.6%		0.59%	7.5%
Median			\$17,031	(0.2)	3.1	28.7	34.6	12.7	(0.2)	2.6	-10.8%	86.9%	8.3%	-11.6%	15.9%	0.77	65.8%		0.64%	8.1%
SPX	S&P 500 INDEX	\$2,258		0.8	3.0	4.5	7.4	10.5	0.8			1.0%	0.7%	11.7%						

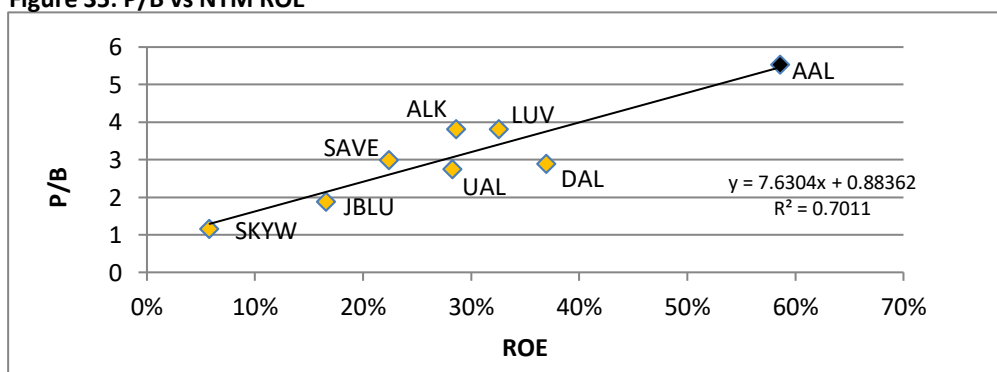
Ticker	Website	2016		P/E							2016			EV/		P/CF		Sales Growth			Book Equity
		ROE	P/B	2014	2015	2016	TTM	NTM	2017	2017E	NPM	P/S	OM	ROIC	EBIT	Current	5-yr	NTM	STM	Pst 5yr	
AAL	http://www.aa.com	61.1%	5.47	11.5	4.1	5.0	10.3	9.2	7.8	14.9%	0.60	16.2%	35.6%	5.9	6.2	4.6	1.5%	2.5%	13.1%	\$8.46	
DAL	http://www.delta.com	37.0%	2.91	14.7	7.9	8.0	10.1	9.6	9.0	11.8%	0.93	20.0%	25.9%	5.2	5.6	5.9	1.0%	0.9%	5.0%	\$16.99	
UAL	http://www.unitedcontinentalholdings.com	28.3%	2.74	16.7	3.6	9.2	11.1	11.6	10.0	17.6%	0.63	15.2%	45.2%	4.7	14.1	5.2	0.7%	1.7%	10.3%	\$26.55	
SAVE	http://www.spirit.com	22.4%	2.94	18.4	13.1	13.9	15.2	14.4	12.7	13.5%	1.77	22.6%	21.4%	5.3			17.1%		22.3%	\$19.40	
LUV	http://www.southwest.com	32.6%	3.82	21.9	11.7	14.2	14.5	13.7	11.0	12.9%	1.51	23.2%	22.9%	6.4	8.8	8.5	2.6%	2.0%	10.4%	\$13.07	
SKYW	http://www.skywest.com	5.8%	1.16	66.5	20.1	12.8	12.5	12.1	10.5	3.0%	0.61	9.1%	3.9%	10.4	4.1	2.4	0.2%		2.3%	\$31.39	
JBLU	http://www.jetblue.com	16.6%	1.88	18.4	11.4	9.9	11.5	11.4	10.8	9.7%	1.10	20.4%	13.5%	7.0	4.9	5.5	6.8%	7.3%	11.2%	\$11.88	
ALK	http://www.alaskaair.com	28.6%	3.79	20.0	13.2	12.3	12.8	12.9	11.1	14.3%	1.89	24.8%	29.3%	7.2	7.9	6.6	12.7%	22.6%	7.9%	\$23.23	
Average		29.0%	3.09		23.5	10.6	10.7	12.2	11.9	10.4											
Median		28.5%	2.93		18.4	11.5	11.1	12.0	11.9	10.6											
SPX	S&P 500 INDEX			19.3	19.1	19.0			17.0	15.2											

Source: Factset

A more thorough analysis of P/B and ROE is shown in figure 35. The calculated R-squared of the regression indicates that over 70% of a sampled firm's P/B is explained by its NTM ROE. AAL has the highest P/B and ROE of this grouping, and according to this measure is fairly valued. Given the tailwinds that the airline industry has seen in Q4 2016, I believe that P/B and ROE will remain high for AAL in the coming months relative to the industry with a reversion to industry mean of 3.5 by 2023.

- Estimated P/B = Estimated 2016 ROE (61.1%) x 7.630 + 0.883 = 5.55
- Target Price = (Estimated P/B (5.55) / Current P/B (5.47)) x Current Price (46.30) = \$46.97

Figure 35: P/B vs NTM ROE



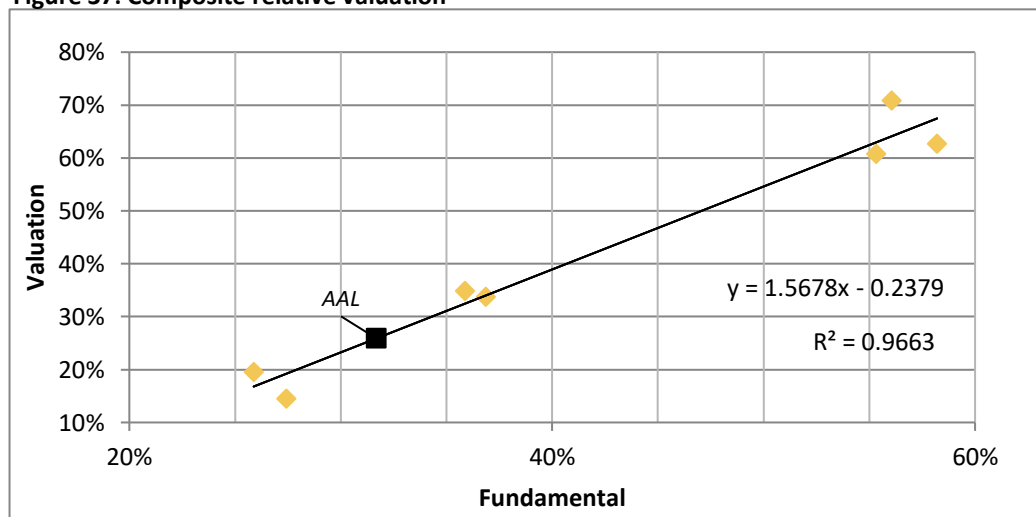
For a final comparison, I created a composite ranking of several valuation and fundamental metrics. Since the variables have different scales, each was converted to a percentile before calculating the composite score. I applied the greatest fundamental weighting to equity/long term debt and NTM sales growth as airlines are highly levered and cyclical. I applied a larger weight to expected earnings growth in 2017 and 2018 to capture the market’s perception of short-term earnings. One can see that AAL is on the line, so it is fairly valued based on its fundamentals with an R-squared of 0.966.

Figure 36: Composite valuation, % of range

Ticker	Name	Fundamental Percent of Range					Valuation Percent of Range				
		20.0%	20.0%	25.0%	10.0%	25.0%	10.0%	10.0%	20.0%	35.0%	25.0%
		Earnings Growth		1/(LTD/ Equity)	NPM 2016	Sales Growth NTM	P/E		P/B	P/S	EV/ EBIT
		2017	2018				NTM	2017			
AAL	AMERICAN AIRLINES GROUP INC	42%	66%	0%	81%	8%	7%	0%	100%	0%	21%
DAL	DELTA AIR LINES INC	19%	7%	53%	61%	5%	0%	5%	40%	25%	9%
UAL	UNITED CONTINENTAL HLDGS INC	3%	56%	19%	100%	3%	20%	44%	36%	2%	0%
SAVE	SPIRIT AIRLINES INC	41%	40%	40%	71%	100%	100%	100%	42%	91%	10%
LUV	SOUTHWEST AIRLINES	0%	100%	100%	68%	14%	83%	83%	61%	70%	30%
SKYW	SKYWEST INC	100%	55%	20%	0%	0%	45%	53%	0%	0%	100%
JBLU	JETBLUE AIRWAYS CORP	34%	0%	63%	46%	39%	27%	41%	17%	39%	40%
ALK	ALASKA AIR GROUP INC	44%	54%	41%	77%	74%	54%	70%	61%	100%	45%

Source: IMCP

Figure 37: Composite relative valuation



Source: IMCP

Discounted Cash Flow Analysis

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

For the purpose of this analysis, the company’s cost of equity was calculated to be 14.25% 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 2.27%.
- A beta of 1.55 was utilized since the company has higher risk than the market.
 - Beta of 1.55 = weighted-average of largest four U.S. Airlines’ 52 week betas relative to firm market capitalization as reported by Factset.
- 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 14.25% = (2.27 + 1.55 (10.0 – 2.27)).

Stage One - The model's first stage simply discounts fiscal years 2017 and 2018 free cash flow to equity (FCFE). These per share cash flows are forecasted to be \$3.05 and \$2.01, respectively. Discounting these cash flows, using the cost of equity calculated above, results in a value of \$4.21 per share. Thus, stage one of this discounted cash flow analysis contributes \$4.21 to value.

Stage Two - Stage two of the model focuses on fiscal years 2019 to 2023. 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 14.25% cost of equity. I assume 3.0% sales growth 2023. The ratio of NWC to sales and NFA turnover to sales will remain at 2018 levels. Also, the NOPAT margin is expected remain the same at 7.5%. Finally, AAL management is expected to repurchase shares at 8% per year through 2020 and at 7% through 2023 down closer to a pre-merger level of 310,900,000.

Figure 38: FCFE and discounted FCFE, 2017 – 2023

	2017	2018	2019	2020	2021	2022	2023
FCFE	\$3.05	\$2.01	\$4.07	\$4.56	\$5.05	\$5.59	\$6.19
Disc. FCFE	\$2.67	\$1.54	\$2.73	\$2.67	\$2.59	\$2.51	\$2.44

Added together, these discounted cash flows total \$17.15 (Stage 2 equals \$12.94).

Stage Three – Net income for the years 2019 – 2023 is calculated based upon the same margin and growth assumptions used to determine FCFE in stage two. EPS is expected to grow from \$4.98 in 2017 to \$9.84 in 2023.

Figure 39: EPS estimates for 2017 – 2023

	2017	2018	2019	2020	2021	2022	2023
EPS	\$4.98	\$5.78	\$6.47	\$7.24	\$8.02	\$8.89	\$9.84

Stage three of the model requires an assumption regarding the company's terminal price-to-earnings ratio. For the purpose of this analysis, it is generally assumed that as the company's merger synergies materialize, its P/E ratio will converge near to the historical average the airline industry. Therefore, a P/E ratio of 9.5 is assumed at the end of AAL's terminal year. While this is high considering AAL had a P/E of less than 3 in July 2016, the major airlines in the U.S. have a historical average P/E of approximately 9.5 and 2023 reflects normalized EPS. As of December 2016, AAL traded at a high NTM P/E of 11.

Given the assumed terminal earnings per share of \$9.84 and a price to earnings ratio of 9.5, a terminal value of \$93.48 per share is calculated. Using the 14.25% cost of equity, this number is discounted back to a present value of \$36.79.

Total Present Value – given the above assumptions and utilizing a three stage discounted cash flow model, an intrinsic value of \$53.94 is calculated (4.21 + 12.94 + 36.79). Given AAL's current price of \$46.69, this model indicates that the stock is undervalued.

Scenario Analysis

American Airlines' volatility in relation to economic cycles makes predictions difficult at best. As AAL has completed the majority of the legwork to fully integrate US Airways' assets into one comprehensive fleet, the market has been inefficient in pricing in future earnings and cost saving measures. I evaluated different scenarios for AAL based on major factors as they affect AAL's sales growth, gross margins, EBIT margin, operating efficiency, and P/E. The target price for a bull scenario is \$60 driven primarily by 4% sales growth with a 1% decrease in net profit margin. The target price for a bear scenario is \$35 with 3% sales reduction and 5% decrease in operating and profit margins.

Sales Growth – Strong growth assumes that AAL’s premium economy beginning in January 2017 is able to secure market share from low-cost carriers while maintaining current customer base at current sales levels. This will reverse the negative revenue trend of 2015 and 2016. Additionally, strong sales growth assumes a strong world economy, primarily in the U.S., as well as currency appreciation in Latin American countries. Modest growth does not rely on strengthening foreign currencies, but would require a stable world economy as travel decreases during times of economic duress. Weak or declining sales growth results from stagnant or decreasing travel demand by businesses during periods of economic weaknesses. Increased use of price comparison websites would reduce sales revenues to AAL.

Gross Margin – Increases in fuel cost due to a decrease in supply of oil production would decrease gross margins. As OPEC recently announced a reduction in fuel production, fuel prices are expected to increase. This cost increase may be offset by increased production of non-OPEC countries exporting oil into the market when prices increase. If AAL management expects oil prices to increase rapidly, they may start to enter hedge contracts. All of AAL’s employees are currently in labor agreements at the end of 2016. AAL’s labor costs will stabilize in 2017 followed by \$1.5B in pension liabilities coming to term in 2018. With the agreements in place, I do not predict volatile labor costs to effect margins. As some recent agreements are tentative until ratified, the effects of the agreements are uncertain.

Operating Efficiency – In 3Q 2016, AAL completed transitioning to a single system to schedule pilots and airplanes for routes and service. This is expected to increase operational efficiency by reducing lag times in service bays and allow for superior customer service by reducing the chance of delays. In the event this does not come to fruition, costs will increase or remain the same. The full extent of cost saving measures attributable to the merger has not been seen on financial reports.

Price to Earnings – The four major U.S. airlines have a price weighted average NTM P/E of approximately 9.5. Additionally, a regression of the past seven years indicates a NTM P/E of 9.5 for these airlines as well. AAL, for the time of December 2013 to the present, has a regression NTM P/E of approximately 7.5 and is currently trading at a NTM P/E of around 10. The market may be pricing in the expected decrease in earnings for 2017 and eventual rebound in 2018. If P/E decreases to AAL’s three year P/E of 8, the stock would be overpriced using the above model.

In 2016, AAL was profitable despite a 5% decrease in sales from 2015 as EBIT margin improved. AAL has greatly reduced gross margin to SG&A in 2016. If gross margins improve while SG&A as a percent of sales is flat, the stock should greatly increase in value regardless of the rate of sales growth. If AAL is not able maintain its SG&A/sales ratio, however, the stock is at best fairly valued without exceptionally strong sales growth. These margins may become threatened depending on the popularity of AAL’s upcoming basic and premium economy class seats.

I recommend watching AAL’s ability to maintain its SG&A/sales ratio through 2017 and 2018. Other significant impacts to EPS would include decreased share repurchases. The above model assumes a 12% EBIT margin. If EBIT margin falls below 10%, I would be cautious in purchasing AAL.

Business Risks

Economic Downturns:

Airline industry revenues are greatly influence by the U.S. economy as well as other economies American Airlines and its partners operate in. Leisure and business travel is influenced by the ability of prospective customers to afford air travel. In the search for low fares, customers may turn to ultra-low cost carriers or choose not to travel by airplane. During times of economic duress, AAL is currently engaged in contracts restricting its ability to optimize all travel routes by culling aircraft in operation to meet traveler demand.

Fuel Prices:

Jet fuel is a primary cost associated with AAL's daily operations. The price of fuel has been volatile over the past several years, and may continue to be into the near future. Due to the highly competitive market place, AAL may not be able to raise rates in order to compensate for the increased cost of fuel for months at a time. Multiple factors influence the price at which AAL 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. Currently, American Airlines does not enter into hedging contracts and is fully exposed to the fluctuation of jet fuel prices.

With only a handful of aircraft suppliers, AAL's fleet renewal and retirement plans may be impacted negatively by airplane manufacturers inability to deliver the aircraft. AAL's fleet does contain older, less fuel efficient airplanes which would be expected to continue operations in this event.

Labor issues:

High labor costs due to labor agreements has in the past, and may in the future, affect profitability. All labor union represented workers are under a current agreement. In the event an employee union and AAL being unable to reach an agreement in the future, AAL employees are unable to strike with union support unless multiple events occur first. Congress can step into the negotiations to ensure employee strikes do not occur and business can resume uninterrupted.

Political Reforms and Taxes:

The airline industry is heavily taxed and is a major target in efforts around the world to curtail greenhouse gas emissions. Along certain routes, air travel is restricted due to government noise regulations at certain times of the night. In addition to government imposed taxes, airports impose fees on airlines per ticket sold and other fees. These fees periodically increase. All taxes and fees are difficult for airlines to pass onto customers due to the competitive environment and regulations dictating what fees are required to be included in the price of ticket.

Competitive Environment:

The airline industry is highly competitive with low margins, especially with the advent of ultra-low cost carriers, such as Spirit. In lieu of this, major airlines are enacting separate "al a carte" style tickets with reduced benefits in order to compete at lower prices, further sacrificing margins. Additionally, online travel pricing websites decrease revenues received by airlines.

In the event airline prices increase while gasoline prices remain relatively low, potential customers may elect to drive to destinations or take road trips as opposed to flying to their destinations. Business customers are less likely to switch to this alternative due to the hourly cost of an employee driving long distances.

Appendix 1: Income Statement

Income Statements (in millions)							
Items	2012	2013	2014	2015	2016	2017E	2018E
Sales revenue	24855	26743	42650	40990	38941	40302	42760
Direct costs	23862	24491	37106	33422	31437	32753	34842
Gross Profit	993	2252	5544	7568	7504	7549	7918
SG&A, R&D, and other	624	941	1476	2111	1748	2713	2787
Earnings before interest & tax	369	1311	4068	5457	5756	4836	5131
Interest expense	606	836	856	841	878	852	931
Earnings before tax	-237	475	3212	4616	4878	3984	4200
Taxes	-569	-346	330	-2994	1813	1481	1561
Net operating profit after tax	332	821	2882	7610	3065	2503	2639
Other	2208	2655	0	0	0	0	0
Net income	-1876	-1834	2882	7610	3065	2503	2639
Dividends			148	278	224	201	183
Basic Shares	249.5	280.2	717.5	668.4	553.5	497.9	444.5
Earnings per share	\$ (7.52)	\$ (6.55)	\$ 4.02	\$ 11.39	\$ 5.54	\$ 4.98	\$ 5.78
Dividends per share			\$ 0.20	\$ 0.40	\$ 0.40	\$ 0.40	\$ 0.40

Appendix 3: Sales Forecast

Sales (in millions)							
Items	2012	2013	2014	2015	2016	2017E	2018E
Sales	\$24,855	\$26,743	\$42,650	\$40,990	\$39,724	\$41,114	\$43,621
<i>Growth</i>		7.6%	59.5%	-3.9%	-3.1%	3.5%	6.1%
Mainline Passenger	18,743	20,218	30,802	29,037	27,585	28,689	30,697
<i>Growth</i>		7.9%	52.3%	-5.7%	-5.0%	4.0%	7.0%
% of sales	75.4%	75.6%	72.2%	70.8%	69.4%	69.8%	70.4%
Regional Passenger	2,914	3,131	6,322	6,475	6,650	6,849	7,192
<i>Growth</i>		7.4%	101.9%	2.4%	2.7%	3.0%	5.0%
% of sales	11.7%	11.7%	14.8%	15.8%	16.7%	2.0%	16.5%
Cargo	675	685	875	760	677	643	627
<i>Growth</i>		1.5%	27.7%	-13.1%	-10.9%	-5.0%	-2.5%
% of sales	2.7%	2.6%	2.1%	1.9%	1.7%	1.6%	1.4%
Other	2,523	2,709	4,651	4,718	4,812	4,933	5,105
<i>Growth</i>		7.4%	71.7%	1.4%	2.0%	2.5%	3.5%
% of sales	10.2%	10.1%	10.9%	11.5%	12.1%	12.0%	11.7%
Geographical Markets							
United States	14,287	15,376	28,568	28,761	28,085	29,067	30,840
<i>Growth</i>		7.6%	85.8%	0.7%	-2.3%	3.5%	6.1%
% of sales	57.5%	57.5%	67.0%	70.2%	70.7%	70.7%	70.7%
Latin America	5,813	6,288	6,964	5,539	5,164	5,468	6,107
<i>Growth</i>		8.2%	10.8%	-20.5%	-6.8%	5.9%	11.7%
% of sales	23.4%	23.5%	16.3%	13.5%	13.0%	13.3%	14.0%
Atlantic	3,411	3,756	5,652	5,146	4,767	4,523	4,362
<i>Growth</i>		10.1%	50.5%	-9.0%	-7.4%	-5.1%	-3.5%
% of sales	13.7%	14.0%	13.3%	12.6%	12.0%	11.0%	10.0%
Pacific	1,344	1,323	1,466	1,544	1,708	2,056	2,312
<i>Growth</i>		-1.6%	10.8%	5.3%	10.6%	20.3%	12.5%
% of sales	5.4%	4.9%	3.4%	3.8%	4.3%	5.0%	5.3%

Appendix 4: Ratios

Ratios							
Items	2012	2013	2014	2015	2016	2017E	2018E
Profitability							
Gross margin	4.0%	8.4%	13.0%	18.5%	19.3%	18.7%	18.6%
Operating (EBIT) margin	1.5%	4.9%	9.5%	13.3%	14.8%	12.0%	12.0%
Net profit margin	-7.5%	-6.9%	6.8%	18.6%	7.9%	6.2%	6.1%
Activity							
NFA (gross) turnover		1.20	1.44	1.17	0.99	0.98	0.99
Total asset turnover		0.81	1.00	0.89	0.78	0.76	0.75
Liquidity							
Op asset / op liab	0.48	0.49	0.46	0.36	0.37	0.39	0.46
NOWC Percent of sales		-19.4%	-14.9%	-16.5%	-20.0%	-20.7%	-19.1%
Solvency							
Debt to assets	36.3%	39.7%	41.0%	42.5%	45.3%	47.3%	49.5%
Debt to equity	-312.5%	-210.3%	876.8%	364.9%	531.6%	622.5%	710.5%
Other liab to assets	43.0%	49.2%	27.2%	22.4%	20.6%	19.7%	18.6%
Total debt to assets	79.3%	88.9%	68.2%	64.9%	65.9%	67.0%	68.1%
Total liabilities to assets	111.6%	118.9%	95.3%	88.4%	91.5%	92.4%	93.0%
Debt to EBIT	23.13	12.81	4.36	3.77	4.06	5.27	5.62
EBIT/interest	0.61	1.57	4.75	6.49	6.56	5.65	5.33
Debt to total net op capital	68.2%	78.1%	70.3%	65.9%	72.9%	76.6%	79.9%
ROIC							
NOPAT to sales		8.5%	8.6%	21.9%	9.3%	7.5%	7.5%
Sales to IC		1.57	1.83	1.45	1.23	1.23	1.22
Total		13.3%	15.6%	31.9%	11.4%	9.3%	9.2%
Total using EOY IC	-4.1%	10.5%	14.5%	28.9%	11.3%	9.1%	8.9%
ROE							
5-stage							
EBIT / sales		4.9%	9.5%	13.3%	14.8%	12.0%	12.0%
Sales / avg assets		0.81	1.00	0.89	0.78	0.76	0.75
EBT / EBIT		36.2%	79.0%	84.6%	84.7%	82.3%	81.2%
Net income / EBT		-386.1%	89.7%	164.9%	62.8%	62.8%	62.8%
ROA		-5.6%	6.7%	16.6%	6.1%	4.7%	4.6%
Avg assets / avg equity		(6.14)	(14.33)	11.97	9.97	12.43	13.74
ROE		34.2%	-96.6%	198.8%	61.1%	58.8%	63.3%
3-stage							
Net income / sales		-6.9%	6.8%	18.6%	7.9%	6.2%	6.1%
Sales / avg assets		0.81	1.00	0.89	0.78	0.76	0.75
ROA		-5.6%	6.7%	16.6%	6.1%	4.7%	4.6%
Avg assets / avg equity		(6.14)	(14.33)	11.97	9.97	12.43	13.74
ROE		34.2%	-96.6%	198.8%	61.1%	58.8%	63.3%
Payout Ratio		0.0%	5.1%	3.7%	7.3%	8.1%	7.2%
Retention Ratio		100.0%	94.9%	96.3%	92.7%	91.9%	92.8%
Sustainable Growth Rate		34.2%	-91.7%	191.5%	56.7%	54.1%	58.8%

Appendix 5: Cash Flow Statement

Cash Flow Statement (in millions)						
Items	2013	2014	2015	2016	2017E	2018E
Cash from Operatings (understated - depr'n added to net assets)						
Net income	-\$1,834	\$2,882	\$7,610	\$3,065	\$2,489	\$2,530
Change in Net Working Capital ex cash	\$3,361	-\$569	\$284	\$1,082	\$179	\$288
Cash from operations	\$1,527	\$2,313	\$7,894	\$4,147	\$2,668	\$2,818
Cash from Investing (understated - depr'n added to net assets)						
Change in NFA	-\$11,517	-\$3,520	-\$6,955	-\$1,923	-\$996	-\$1,022
Change in Marketable Securities	-\$4,699	\$1,802	\$445	-\$510	-\$500	-\$500
Cash from investing	-\$16,216	-\$1,718	-\$6,510	-\$2,433	-\$1,496	-\$1,522
Cash from Financing						
Change in Short-Term and Long-Term Debt	\$8,264	\$921	\$2,841	\$2,782	\$2,000	\$2,500
Change in Other liabilities	\$10,692	-\$9,049	-\$912	-\$206	-\$100	-\$100
Change in Debt/Equity-Like Securities	\$0	\$0	\$0	\$0	\$0	\$0
Dividends	\$0	-\$148	-\$278	-\$224	-\$201	-\$183
Change in Equity ex NI and Dividends	-\$3,422	\$7,274	-\$3,718	-\$4,085	-\$2,607	-\$2,500
Cash from financing	\$15,534	-\$1,002	-\$2,067	-\$1,733	-\$908	-\$283
Change in Cash	\$845	-\$407	-\$683	-\$19	\$263	\$1,013
Beginning Cash	\$1,330	\$2,175	\$1,768	\$1,085	\$1,066	\$1,329
Ending Cash	\$2,175	\$1,768	\$1,085	\$1,066	\$1,329	\$2,342

Appendix 6: 3-stage DCF Model

DCF Model							
	First Stage			Second Stage			
Cash flows	2017	2018	2019	2020	2021	2022	2023
<i>Sales Growth</i>	3.5%	6.1%	3.0%	3.0%	3.0%	3.0%	3.0%
<i>NOPAT / S</i>	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	7.5%
<i>S / NWC</i>	(4.18)	(4.18)	(4.18)	(4.18)	(4.18)	(4.18)	(4.18)
<i>S / NFA (EOY)</i>	0.97	0.98	0.98	0.98	0.98	0.98	0.98
<i>S / IC (EOY)</i>	1.26	1.27	1.27	1.27	1.27	1.27	1.27
<i>ROIC (EOY)</i>	9.5%	9.6%	9.6%	9.6%	9.6%	9.6%	9.6%
<i>ROIC (BOY)</i>		10.1%	9.9%	9.9%	9.9%	9.9%	9.9%
<i>Share Growth</i>		-9.2%	-8.0%	-8.0%	-7.0%	-7.0%	-7.0%
Sales	\$40,302	\$42,760	\$44,043	\$45,364	\$46,725	\$48,127	\$49,571
NOPAT	\$3,039	\$3,224	\$3,321	\$3,420	\$3,523	\$3,629	\$3,738
<i>Growth</i>		6.1%	3.0%	3.0%	3.0%	3.0%	3.0%
- Change in NWC	-225	-588	-307	-316	-326	-335	-346
<i>NWC EOY</i>	-9645	-10233	-10540	-10857	-11182	-11518	-11863
<i>Growth NWC</i>		6.1%	3.0%	3.0%	3.0%	3.0%	3.0%
- Chg NFA	1196	2308	1316	1355	1396	1438	1481
<i>NFA EOY</i>	41,549	43,857	45,172	46,527	47,923	49,361	50,842
<i>Growth NFA</i>		5.6%	3.0%	3.0%	3.0%	3.0%	3.0%
Total inv in op cap	971	1720	1009	1039	1070	1102	1135
Total net op cap	31904	33623	34632	35671	36741	37843	38979
FCFF	\$2,068	\$1,505	\$2,312	\$2,381	\$2,453	\$2,526	\$2,602
<i>% of sales</i>	5.1%	3.5%	5.2%	5.2%	5.2%	5.2%	5.2%
<i>Growth</i>		-27.2%	53.7%	3.0%	3.0%	3.0%	3.0%
- Interest (1-tax rate)	535	585	602	620	639	658	678
<i>Growth</i>		9.2%	3.0%	3.0%	3.0%	3.0%	3.0%
FCFE w/o debt	\$1,533	\$920	\$1,710	\$1,761	\$1,814	\$1,868	\$1,924
<i>% of sales</i>	3.8%	2.2%	3.9%	3.9%	3.9%	3.9%	3.9%
<i>Growth</i>		-40.0%	85.9%	3.0%	3.0%	3.0%	3.0%
/ No Shares	503.0	456.7	420.1	386.5	359.5	334.3	310.9
FCFE	\$3.05	\$2.01	\$4.07	\$4.56	\$5.05	\$5.59	\$6.19
<i>Growth</i>		-33.9%	102.1%	12.0%	10.8%	10.8%	10.8%
* Discount factor	0.88	0.77	0.67	0.59	0.51	0.45	0.39
Discounted FCFE	\$2.67	\$1.54	\$2.73	\$2.67	\$2.59	\$2.51	\$2.44
Third Stage							
Terminal value P/E							
Net income	\$2,503	\$2,639	\$2,718	\$2,800	\$2,884	\$2,970	\$3,060
<i>% of sales</i>	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%
EPS	\$4.98	\$5.78	\$6.47	\$7.24	\$8.02	\$8.89	\$9.84
<i>Growth</i>		16.1%	12.0%	12.0%	10.8%	10.8%	10.8%
Terminal P/E							9.50
* Terminal EPS							\$9.84
Terminal value							\$93.49
* Discount factor							0.39
Discounted terminal value							\$36.79
Summary							
First stage	\$4.21	Present value of first 2 year cash flow					
Second stage	\$12.94	Present value of year 3-7 cash flow					
Third stage	\$36.79	Present value of terminal value P/E					
Value (P/E)	\$53.94	= value at beg of fiscal yr 2017					

Appendix 8: Porter’s 5 Forces

Threat of New Entrants – Low

The barriers to entry into the Airline industry are extensive and prohibitive to new startup airlines. In addition to acquiring high-cost capital, a myriad of government regulations, airport bureaucracy, technology systems, and low margins make for a restrictive climate for start-up companies.

Threat of Substitutes - Moderate

With the availability of automobiles, ships, and trains, the airline industry constantly competes for customers with cheaper substitutes. The major benefit air travel offers is shorter lead times, in either personal travel or cargo transport. Negative reports from the media, such as terrorist attacks and airplane accidents, have higher visibility and affect demand greater than in substitute industries.

Supplier Power - High

Fewer than a dozen aircraft manufacturers exist, increasing the ability for the supplier to control pricing. Airplanes are capital intensive to purchase, as well as build. Boeing can build a single 777 in approximately 83 days. Atypical suppliers include employee unions. In order to retain competent workers and skilled pilots, AAL has to negotiate labor terms when contracts expire.

Buyer Power – Very High

Consumers have a great degree of power over airlines due to low costs to switch and ease of comparison between companies. Recently, with low fuel prices, customers may elect to drive to a destination instead of fly. Personal travelers have preferences with airlines, but do not generally have loyalty to a single airline. AAL mitigates this through rewards programs with credit card partners. Business customers have less price elasticity in regards to traveling.

Intensity of Competition – Very High

American Airlines has major hubs in several large cities with direct flights between these hubs and regional flights to airports outside of the direct flights. Regional airlines may be able to substitute direct flights for a cheaper cost to the smaller airports. With the two main factors for customers’ decision being cost and timeline, competing on these metrics will sway consumers to adopt a competitor. American Airlines was the first to offer frequent flier miles with a credit card in order to help establish customer loyalty. Other airlines have adopted similar programs in order to better compete, and some allow the transfer of miles between carriers. Aggressive discounting by one will usually cause others to follow suit, hurting profit margins for all participants.

Appendix 9: SWOT Analysis

Strengths	Weaknesses
High EBIT Margins Youngest Fleet Loyalty Programs	No Fuel Hedging Cyclical Increasing Labor Costs
Opportunities	Threats
Continued Cost Reductions New Economy Class Seating Stable Economic Environment	Currency Headwinds Ultra-low Cost Carriers Increased Gov’t Regulations