

# American Airlines Inc.: A Financial Overview

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## Abstract:

The goal of my research is to provide detailed financial information on how American Airlines has been performing over the past five years. This includes a detailed analysis of the company's financial, stock, and operational performance. This has been achieved through statistical methods, interpretation of the financial statements, and calculation of the financial ratios. Based on these methods we can observe that even as the company is growing its sales, its operational margin has been decreasing since 2015.

## Introduction:

The purpose of this research is to identify factors that effect the financial status of American Airlines (AAL).

- I used stock data from the period 2013-2017 for AAL, SPY (S&P 500), and WTI (West Texas Intermediate) crude oil price.
- I conducted a correlation and multiple linear regression analysis over the aforementioned period.
- I calculated the betas.
- Correlation is the statistical strength between two or more variables to show how relatable they are.
- Multiple linear regression models/analyzes the relationship between two or more variables.
- Beta is the measure of market volatility.
- Lastly, I gathered the financial statements from AAL to look at key financial changes, i.e. balance sheet and income statement.

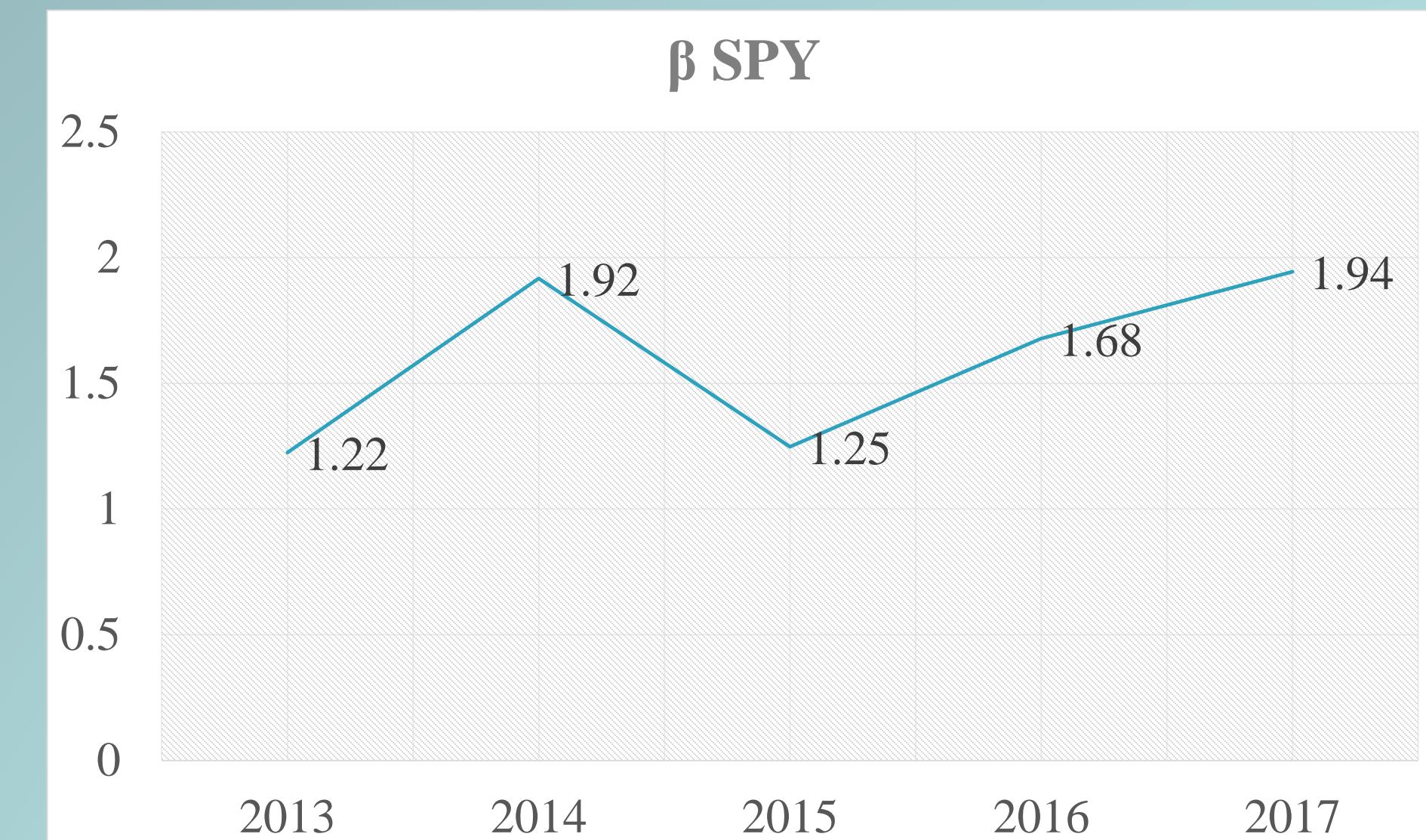


Figure 1: β of AAL 2013 - 2017

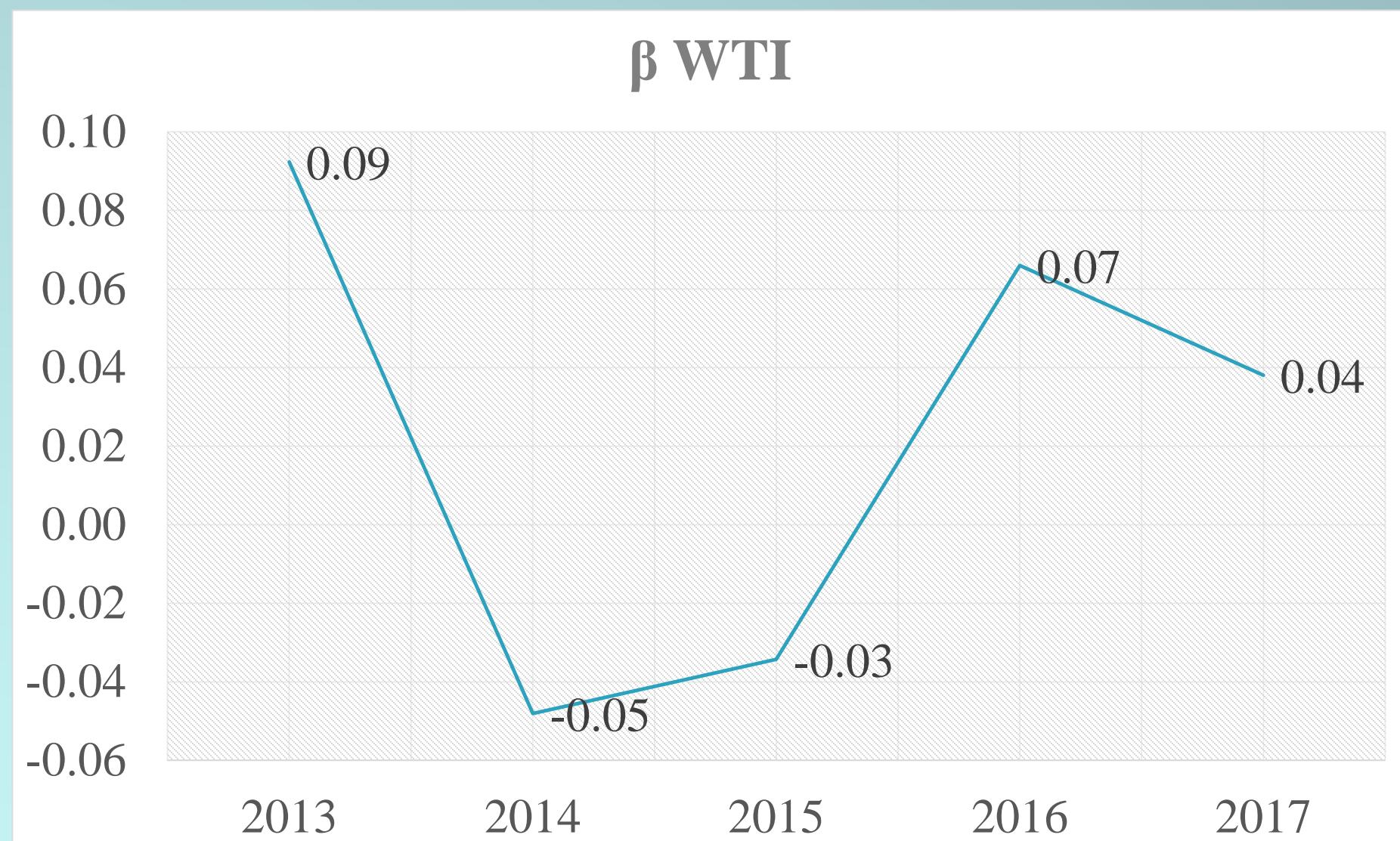


Figure 2: β of AAL 2013 - 2017

Report Date	2017	2016	2015	2014	2013
Cash & Cash Equivalents	295,000	322,000	390,000	994,000	1,140,000
Total Current Assets	9,146,000	10,324,000	9,985,000	12,112,000	14,323,000
Total Assets	51,396,000	51,274,000	48,415,000	43,771,000	42,278,000
Total Current Liabilities	14,964,000	13,872,000	13,605,000	13,435,000	13,806,000
Long-Term Debt	25,301,000	24,573,000	20,807,000	17,963,000	16,825,000
Total Liabilities	47,470,000	47,489,000	42,780,000	41,750,000	45,009,000
Total Shareholder's Equity	3,926,000	3,785,000	5,635,000	2,021,000	-2,731,000

Table1: Elements of Balance Sheet of AAL. 2013 - 2017

Report Date	2017	2016	2015	2014	2013
Net Sales	42,207,000	40,180,000	40,990,000	42,650,000	26,743,000
Cost of Sales	36,672,000	33,573,000	33,392,000	36,857,000	24,186,000
Gross Margin	5,535,000	6,607,000	7,598,000	5,793,000	2,557,000
Selling & General Expense	1,477,000	1,323,000	1,394,000	1,544,000	1,158,000
Total Operating Expense	38,149,000	34,896,000	34,786,000	38,401,000	25,344,000
Operating Income (Loss)	4,058,000	5,284,000	6,204,000	4,249,000	1,399,000

Table 2: Elements of Income Statement of Apple Inc. 2013 – 2017

Liquidity	2016	2015
Current Ratio	1.440	1.592
Quick ratio	1.351	1.473
Cash ratio	0.134	0.173

Table 3: Liquidity Ratios

2014 DuPont Analysis	2016	2015
Profit Margin	0.067	0.186
Asset turnover	0.784	0.847
Financial Leverage	13.547	8.592
ROE	0.707	1.350

Table 4: DuPont Ratios

Year	Correlation
2013	34%
2014	47%
2015	46%
2016	58%
2017	46%

Table 5: Correlation of AAL with SPY

## Conclusion

- The financial overview study of American Airlines shows that the company's stock returns are very volatile in relation to the overall markets.
- We see that the company's cash and current assets are depleting, and that debt and total assets are growing.
- The possible cause for these changes is the merger with US Airways back in 2013 and its subsequent finalization in 2015. the merger cost the company \$11 billion.
- Operating income grew by a compounded annual growth rate of 64% from 2013 to 2015.
- From 2015, the operating income has been decreasing steadily due to an increase in operating expenses.
- Additionally, American Airlines is implementing the delivery of 22 mainline and 5 regional aircraft. This implies that there will be less cash, more debt, and an increase in total assets going forward.
- Overall, the company is steadily growing, but if it is not careful in paying its debts and/or reducing its expenses, it will get into a troublesome financial situation. If successful, the company will benefit from the increasing net sales.

## Method:

To complete my research, I performed the following:

- Gathered stock data from Yahoo finance.
- Worked with the closing prices of the three aforementioned stocks, and computed their returns to show dependence over time.
- Correlation and multiple linear regression analysis.
- Obtained the financial statements of AAL.
- Computed the financial ratios.

## Results

From the information gathered for AAL, there are several trends worth noting.

- Beta:** AAL returns are very volatile with respect to the market (SPY), the peak being 1.94 in 2017. The beta of WTI is negative.
- Financial Statements:** Cash & cash equivalents, and total current assets are decreasing every year. Total assets, total current liabilities, and long term debt are increasing every year.
- Ratios:** The current ratio shows AAL has sufficient liquidity to meet its short term debt. Profit margin has decreased, hinting that total costs are increasing faster than the revenues

## References:

- www.aa.com
- www.mergentonline.com
- www.investopedia.com
- www.yahoo.com/finance