

# ANALYSIS REPORT

The following report is on the sentiment analysis of Dow Jones Industrial Average and the Event study on the Apple stocks during the announcement of 2016 WWDC.

## Data Collected

The data collected is from 08-08-2008 to 01-07-2016.

## Sentiment Analysis

Combined_News	Subjectivity	Polarity	Compound	Negative	Neutral	Positive
Georgia downs two Russian warplanes as countri...	0.267549	-0.048568	-0.9983	0.212	0.729	0.059
Why wont America and Nato help us? If they won...	0.374806	0.121956	-0.9977	0.202	0.738	0.061
Remember that adorable 9-year-old who sang at ...	0.536234	-0.044302	-0.9975	0.225	0.684	0.091

Figure 1: Sentiment Values Obtained Using vaderSentiment

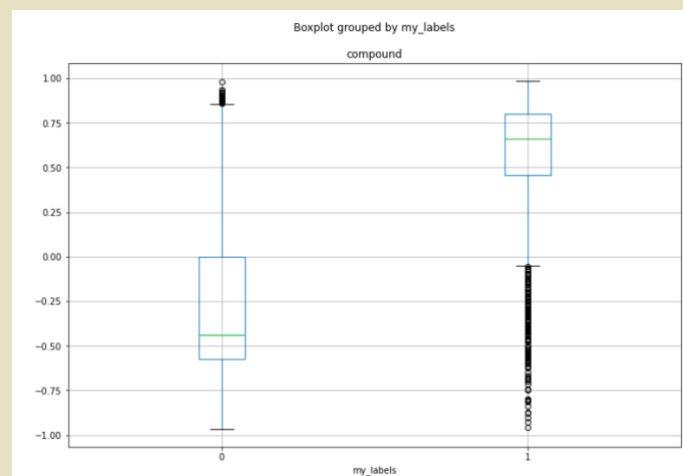


Figure 2: Box Plot Showing relation between Labels and obtained Compound Value

## Overview on Apple Stock Data:

	Open	High	Low	Close	Adj Close	Volume
count	90	90	90	90	90	90
mean	25	25	24	25	23	151840848
std	1	1	1	1	1	59347970
min	22	22	22	22	21	77645600
25%	23	24	23	23	22	116146600
50%	24	24	24	24	23	134739800
75%	26	26	26	26	24	167212700
max	28	28	27	28	26	458408400

Figure 3: Basic initial stats on the data

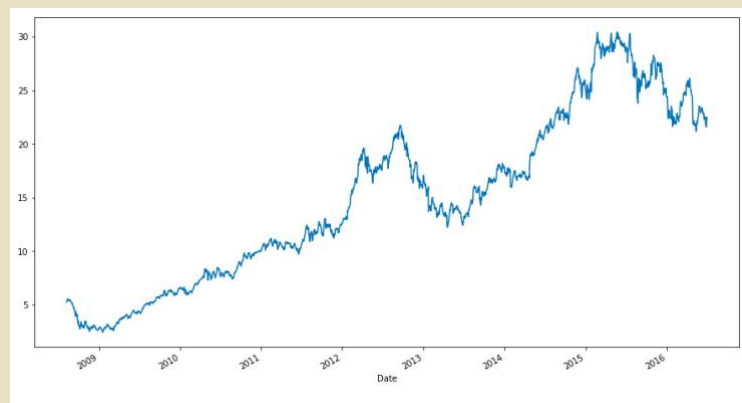


Figure 4: Stock Fluctuations for Apple Inc over the selected Period

## Event Study on Apple Stocks

	Date	Close	closeApple	rrDija	rrApple	MAR	MKAR	RAR
48	2016-04-25	17977.240234	26.270000	-0.000727	0.006971	0.008548	0.007699	4.748251
49	2016-04-22	18003.750000	26.420000	0.001474	0.005694	0.007271	0.004220	4.746970
50	2016-04-21	17982.519531	26.492500	-0.001180	0.002740	0.004318	0.003920	4.744021
51	2016-04-20	18096.269531	26.782499	0.006306	0.010887	0.012464	0.004581	4.752154
52	2016-04-19	18053.599609	26.727501	-0.002361	-0.002056	-0.000478	0.000305	4.739227
53	2016-04-18	18004.160156	26.870001	-0.002742	0.005317	0.006895	0.008060	4.746601
54	2016-04-15	17897.460938	27.462500	-0.005944	0.021811	0.023388	0.027755	4.763100
55	2016-04-14	17926.429688	28.025000	0.001617	0.020276	0.021853	0.018658	4.761551

Figure 5: Event Study Analysis Results.

From the results obtained as shown above we get the following insights on the day the WWDC announcement was made (18-4-2016):

- Mean Adjusted Return: 0.006895
- Market Adjusted Return: 0.008060
- Risk-Adjusted Return: 4.746601