

## 2. Introduction to Data

### Project - Analyse NYSE Data

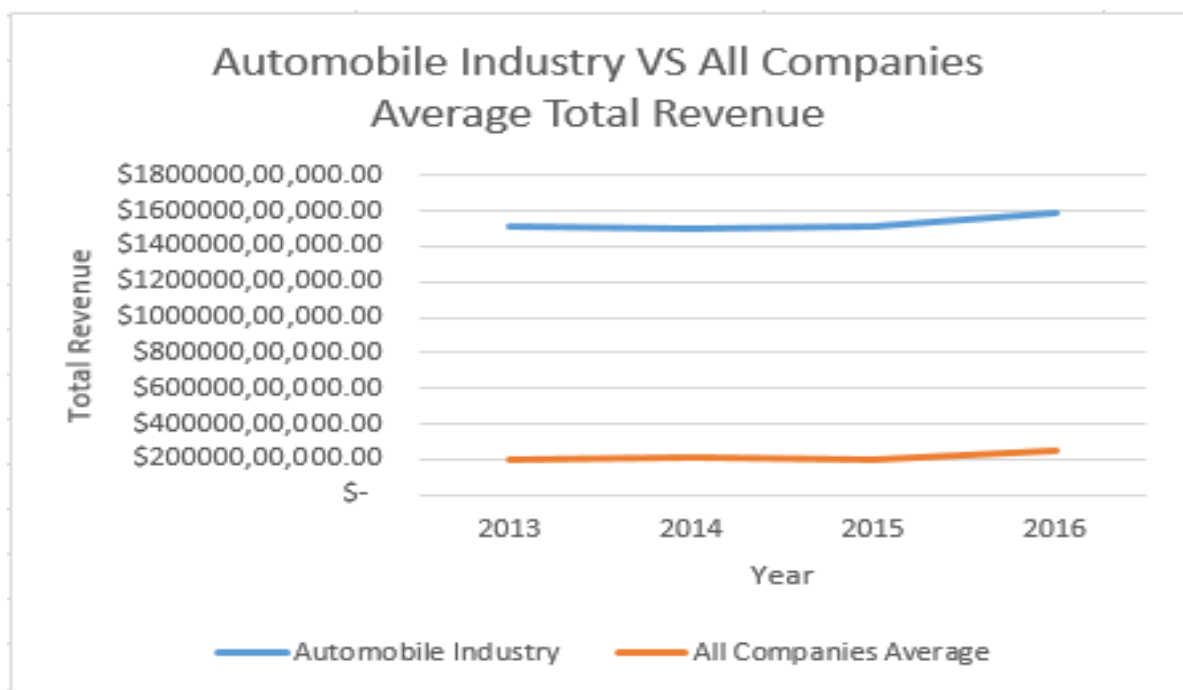
GICS Sector- Consumer Discretionary

GICS Sub Sector – Automobile Manufacturers

Q- Is Automobile Industry spend as much Revenue as the rest of the industries ?

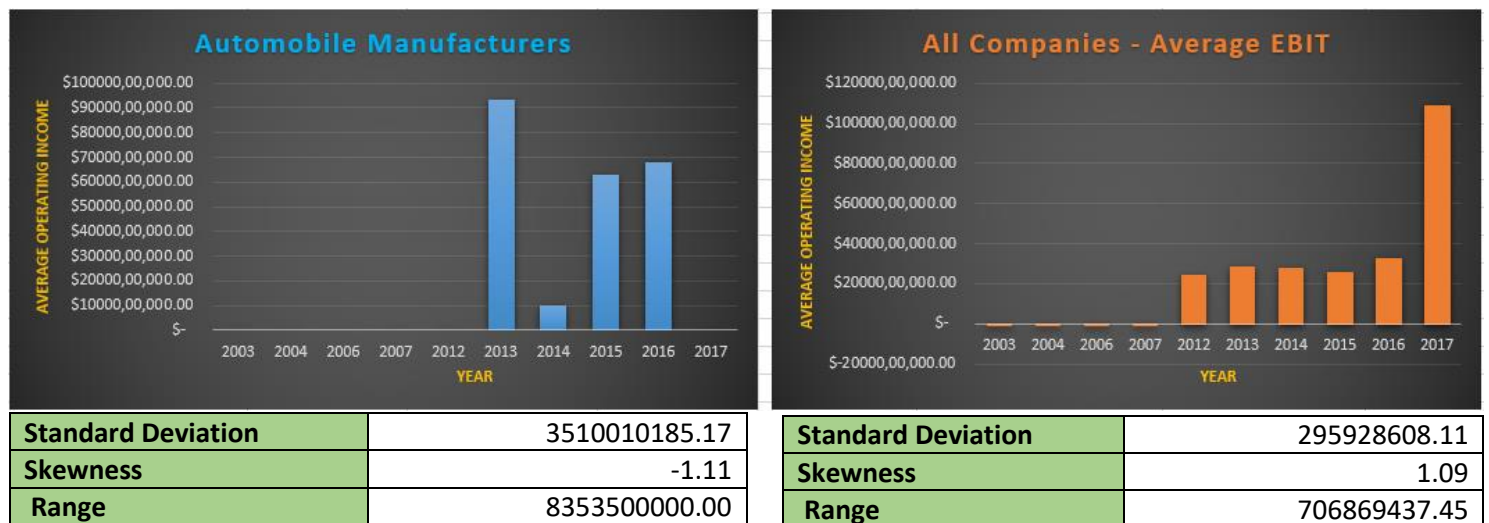


The Above histogram visualisation shows Average Revenue spend for both Automobile Manufacturers and all other companies to the rest of the sectors respectively. The Automobile manufacturers spent between \$140 - \$160 millions between year 2013 till 2017 with maximum spent of \$160 millions in 2017. Whereas, Other companies maximum revenue spent is little more than \$250 million in 2017 and the sudden fall down to nearby \$25 million in 2017.

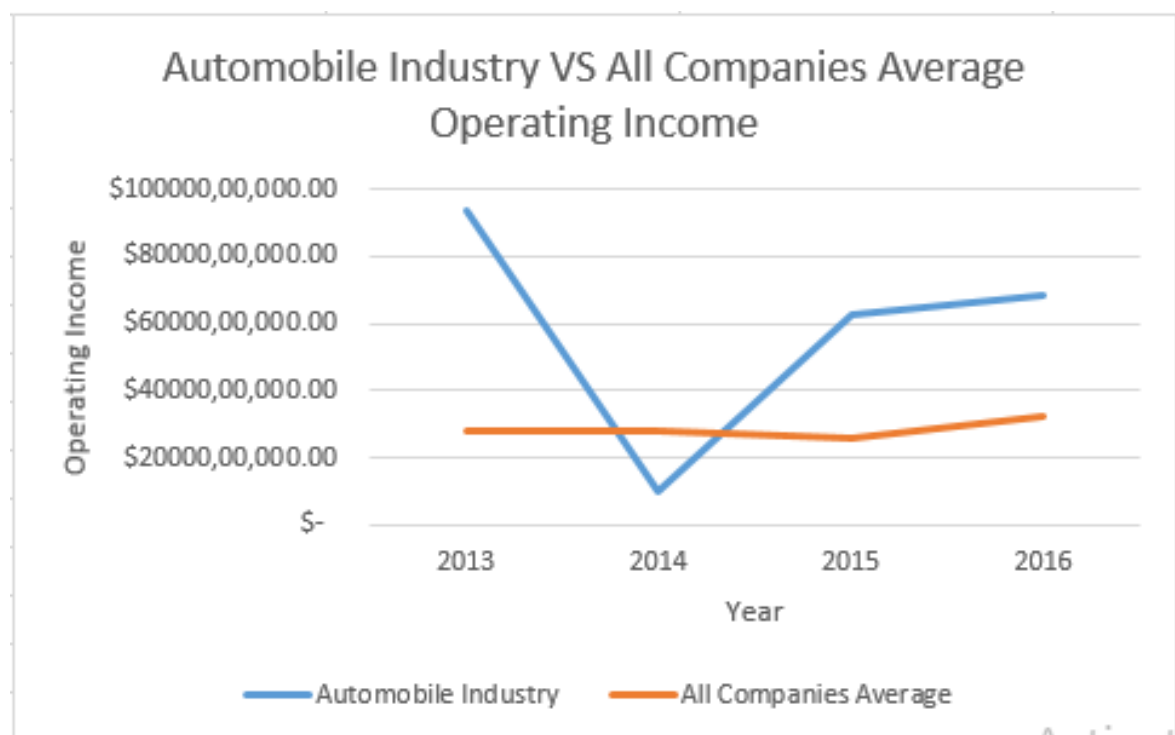


The above line graph shows that the mean Total Revenue spent by the 'Automobile Industry' is much higher compared to all the industries. In between year 2013 and year 2016, the average 'Automobile Manufacturing Industry' spent \$152.8055 million, while on an average every industry spent \$ 21.8225 million.

Q- Does Automobile Industry incur more operating profits because of the higher revenue?



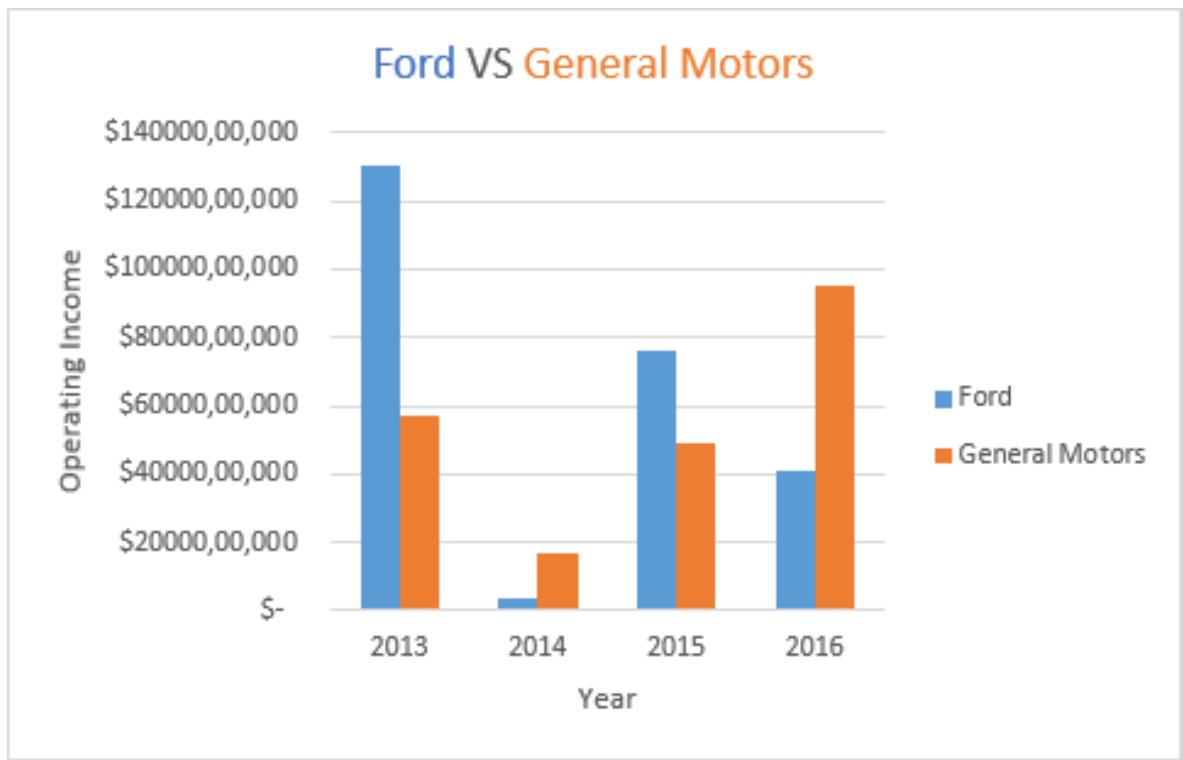
In above histograms indicate that Automobile histogram has higher Standard deviation of 3510010185.17 than that of rest of the companies which is 295928608.11 with left skewed while rest of the companies are right skewed. Also Automobile industry has higher range. This indicates increase in operating profits down the timeline.



From the line graph we can see that in between year 2013 and year 2016 the 'Automobile Industry' earn an average operating income of \$ 5859.5 million, while other companies earn \$ 2853.6 million on an average. This evaluates the question to be true. This projects a good business model structure and healthy growth.

Q- Which among Ford and General motors has better Operation income?

In below histograms indicate that Ford histogram has lower Standard deviation of 3336625341.07 than that of rest of the General Motors which is 6112238815.14 with left skewed while rest of the companies are right skewed. Also Range of Ford is 7723000000.00 while General Motors has higher range that is 14024000000.00.



Standard Deviation	3336625341.07
Skewness	-0.21
Range	7723000000.00

Standard Deviation	6112238815.14
Skewness	1.59
Range	14024000000.00