

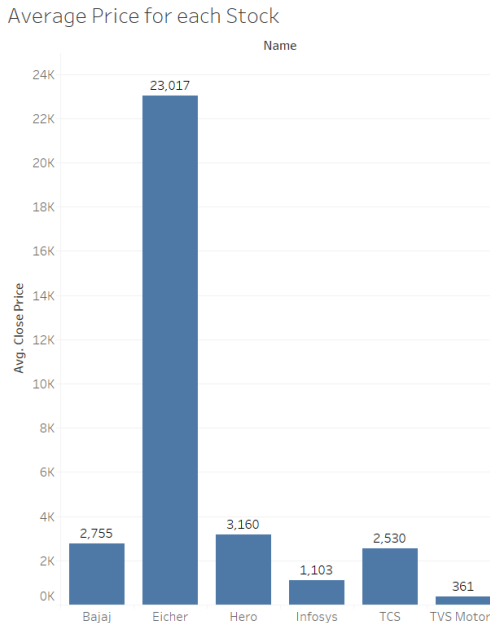
Stock Market Analysis

In this assignment we were given stock price data of six companies- Bajaj, Hero, TVS, Eicher, Infosys and TCS. We used Moving average method to decide when to buy or sell the particular stock. We used 20 Day Moving Average and 50 Day Moving Average and these moving averages give us the indication when to sell or buy.

When the shorter-term moving average crosses above the longer-term moving average, it is a signal to **BUY**, as it indicates that the trend is shifting up. This is known as a **Golden Cross**.

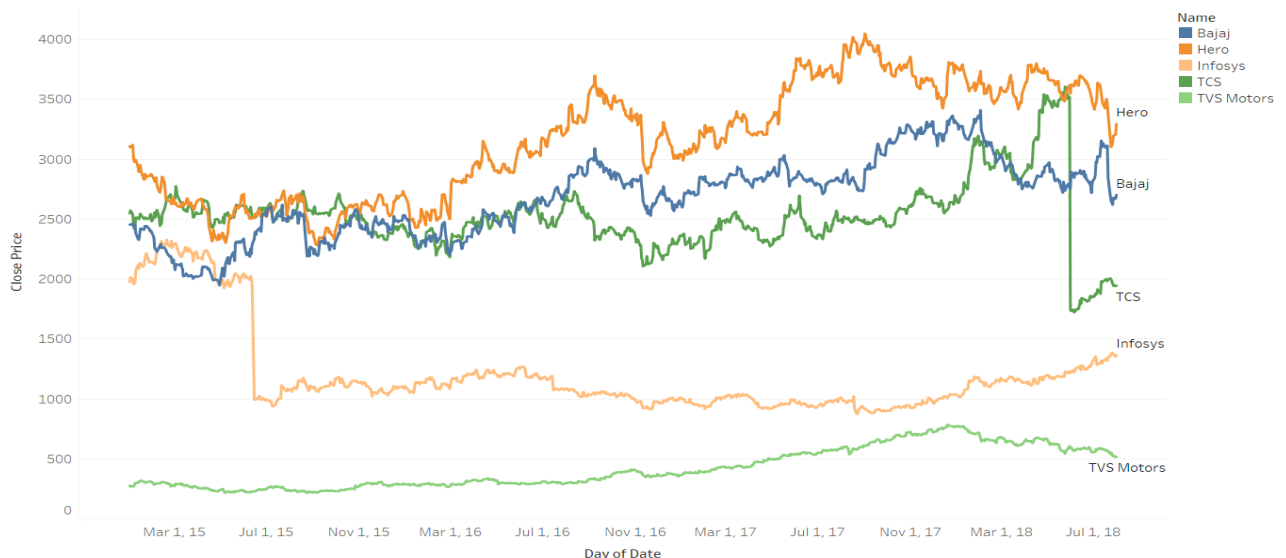
On the opposite when the shorter term moving average crosses below the longer term moving average, it is a signal to **SELL**, as it indicates the trend is shifting down. It is sometimes referred to as the **Death Cross**.

- From our analysis we got to know that Eicher has the highest average value of the stock price and TVS Motors has the lowest.



- Lets see how the price changes with respect to time for these stocks. (Removed Eicher as it is having large values as compared to others)

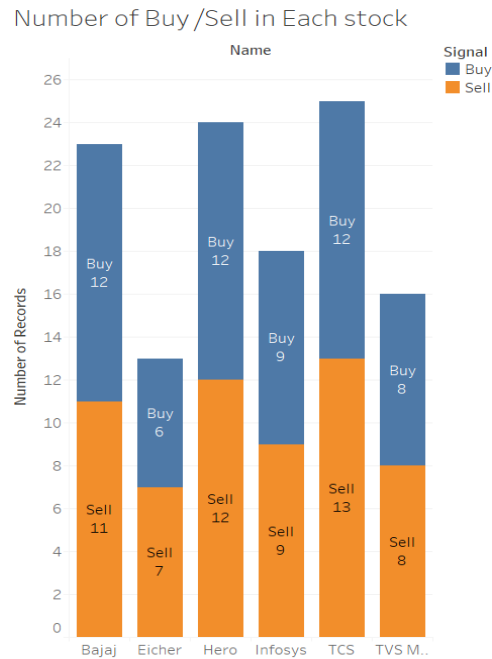
Comparison of Close Price (Excluding Eicher)



The trend of sum of Close Price for Date Day. Color shows details about Name. The marks are labeled by Name. The view is filtered on Name, which keeps Bajaj, Hero, Infosys, TCS and TVS Motors.

- From the above chart we can see that stock prices of Infosys had a steep downfall during July 2015 and for TCS it was June 2018.

- We then using SQL generated buy and sell signal based on the Moving Averages method as discussed at the start of this report. After generating signal for each stock we combined the data and got the below result.



- As you can see Number of Buy/Sell is highest for TCS and Lowest for Eicher, so we can conclude that stocks of Eicher are more stable than TCS. As a greater number of fluctuations leads to disrupt in market due to various macro-economic conditions and government policies.
- At the end of this assignment we created one user defined function to get the signal (Buy/Sell) on a particular date given by the user.

Assignment Complete 😊

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