

Stock Analysis Assignment

Summary:

Stock price data for six stocks Eicher Motors, Hero, Bajaj Auto, TVS Motors, Infosys, and TCS were provided from Jan 2015 to July 2018. Closing price w.r.t to each stock was used to calculate 20 days and 50 days Moving Averages, the difference between which was used to find the Signal that indicates whether to Sell, Buy or Hold the respective stock at any particular day; based on the principle of Golden cross and Death cross.

Inference:

It was noted that Moving Average despite being a fair predictor of whether to purchase or sell a stock, does not give the most optimal output.

For example:

The highest stock price for Bajaj Auto from Table Bajaj2 is 3409.5 and the Moving Average technique is signaling you to **Buy** the stock for that day, which is not ideal as the price did not go up after that. In-fact at the end of the period, the Closing Price rests at 2700.7; thus you will end up with a loss if you follow the algorithm blindly.

Result :

Best Predictions based on the Signals calculated from my analysis are as follows:

- Bajaj Auto:
 - Buy the share at 2221.95 on 18-May-2015
 - Sell the share at 3303.20 on 25-Jan-2018
- Eicher Motors:
 - Buy the share at 17257.2 on 11-Jan-2016
 - Sell the share at 31368.2 on 13-Oct-2017
- Hero MotoCorp:
 - Buy the share at 2605.05 on 20-Oct-2015
 - Sell the share at 3794 on 04-Oct-2017
- Infosys:
 - Buy the share at 935.4 on 25-Oct-2017
 - Sell the share at 2216.6 on 31-Mar-2015
- TCS:
 - Buy the share at 2359.05 on 02-Jan-2017
 - Sell the share at 2829.95 on 22-Mar-2018
- TVS Motors:
 - Buy the share at 241.3 on 07-Oct-2015
 - Sell the share at 719.7 on 29-Jan-2018

Best predictions are calculated based on the fact that the ideal situation to sell a share is when the cost price is at its peak, trending downwards, and to buy a share is when the cost price is at its lowest, trending upwards.

From the above results, we can deduce that all the stocks except for Infosys is having initial positive trends and that maximum profit can be made by dealing stocks on Eicher Motors, even though it's the most expensive.