

# Stock Split Behavior in Bombay Stock Exchange listed Companies: A study

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**Abstract:** This paper explains the behavior of Stock Split in Bombay Stock Exchange listed Companies. The stock reaction is observed on price before and after stock split. This paper also discuss about benefits of stock split, we have taken those companies which are gone for to two times of stock split. "The owner expected to enthrall the more individual investors" of the company. That the stock split will increase the demand of the small investors in a market which will turn improve the stocks liquidity and raise its price of the share in stock exchange market. The splitting company's stock price has been seen to react differently through the stages of the split. Already some researchers believe that stock split will attract the new investors and also small investors of the stock exchange companies. We results come for positive abnormal returns surrounding the stock split event.

**Keywords:** Investors, Liquidity, stock split

## 1. Introduction

A stock split is a simple phenomenon where a company change the number of shares divide into ratio why the company divide into shares for increasing the shares in market then price per share decrease in normal and the value of the company does not change. A stock split is a decision by the company's board of directors basically stock split are a corporate action. Based on the stock split the behavior is different from one company to another company. If the possibility of the companies then the dividing the shares. The one and only way for a company to chance is stock price his by a stock split. This type of event changes the behavior of stock exchange companies. The stock split announce the companies then the number of people and existing share holders they interest to buy the shares then also value the proportionate ownership interest of existing share holders. Stock split is dividing to forward split and backward split the forward split is most beneficial for the existing share holders.

In order to explain the forward and backward split. Forward split as a positive reaction of stock exchange companies and comes positive reaction of the companies it also include grater future earnings expectation then the stock split. Forward split as a positive reaction of the stock exchange companies and comes positive results o the companies. It also includes grater future earnings expectation then the stock split.

## 2. Objectives

The paper focuses on analyzing the impact of Stock Split on the share value

## 3. Literature Review

The many researchers say about the event of stock split the following below:

**"Saraswathi Thirunellai (2014)":** The aim of the current empirical paper investigates the impact of political events and stock market with reference BSE in stock market. Therefore the objective of this paper the price behavior on the political event in BSE. The mainly stock market impact on different macro and micro economic factors in a society. How they impact this paper will be explained EMH (Efficient Market Hypothesis) according to the prices of Securities reflect the macroeconomic information. The EMH study was inception by both practioners and academicians. The security prices unbiased estimation of fundamental values of financial assets. The main aim of this paper is to investigate the price behavior in BSE listed companies in Indian context of the society. This paper depends upon the secondary sources. The objective of this paper examine the reaction of Indian benchmark of the currency demonetization, the data has been collected 2015 to 2016 only. The taking stock split event window -30 to +30 and -15 to +15 the calculating SD of this event window the post and presplit event stock period.

**"Mitesh Patel (2016)":** This paper explain about the stock price and liquidity effects of stock split. The stock split information is available in stock market and prices immediately respond to the available information in stock exchange. The stock market share price in any financial market estimate the value of the investment companies. The present study examines the volume reaction with respect information of the stock split announcement in share market. This paper studies the stock split announcement of the 34 companies in the year of 2016. It's calculating the ARRs, CAARs and abnormal returns of the companies. These are estimating the performance levels of the companies. Te stock split even t is a negative impact on the stock returns in stock market. The stock split decision taken by the company board of director they issuing the number of share with low price to the shareholders of the company it is a great opportunity for the existing share holders purchasing the shares low price in a company. The increase share price of the company then automatically the company growth will be increased. This paper explain the event window is

considered as -20 to +20 to calculate the alpha and beta value of the 20 day stock split event date. The capital market is indicator or predictor of the economy. The stock price volume ratio is decrease after stock split announcement.

**“Asha Nadig (2015)”** : This paper explained the stock split event in Indian context. The stock split is a procedure that increase or decrease a company's shares suppose they split 1 share is divide into two shares the automatically will be increased the shares of the company's. It is an interest of the existing share holders of the companies. The most companies are prefer to the announcement the stock split event it is accessible to as many investors as possible it's not increase the company's overall value it will be divide the forms shares to the affordable prices of the shares in a stock market. These empirical studies have documented market price reactions. The market reactions can be bullish or bearish or neutral it is depending on the significance of the stock prices information these are the 3 types of reactions it will be creates negative or positive results in a stock market. The present study is based on the secondary data relating to the share prices, stock split announcement dates this paper analyze the 14 stock split companies data listed in BSE the paper will be explained the -30 to +30 stock split event time period.

**“EI Ansary(2017)”**: This research aims to study the two types of corporate companies actions stock split and stock dividend on shares prices. Te research provides the taking effective decision making of the investors for the current share prices in a share market the share prices are fluctuating the investor observe they taking the improve the decision making process. The main objective of this paper the two events are independently have a Egyptian stock exchange companies the both events are allowing the shareholders to receive new shares without any bearing charges. The corporate actions could have positive impact on share prices abut different circumstances. The both events are not affecting the operation performance of corporate and there is no change the ownership structure. This paper calculates the AAR and CAARS, ARS of the selected companies. The taking samples of this study the collecting the data during the period from 1997-2014 by companies listed on the EGX. This paper explains the 30days of the before and after event date.

**“Parkas Pinto (2016)”**: This paper studies impact on the two events stock split and right issue announcement on the stock returns of the companies in stock exchange market. It's explains performance of the listed companies in BSE that the current stock prices reflects all the public information about the security in present market conditions in share market. The main objective of this paper examines the abnormal returns surrounding the stock split. This study based on secondary data collection method. The period of study 2011-2014 companies' data in BSE listed companies. The final sample collection this study is consists of 90 companies for stock splits and 29 companies of the right issues. The event window is -30 to +30 day before and after stock split the calculating the AAE and CAAR for the two events for the stock split. The sample companies are showing the positive and negative returns of the companies. Based on these returns the investor taking the decision making for the investing is not. This study using the t-test statistics. Te two events are the content of the impounded in the prices of the stocks in a stock market that they do not get an opportunity to earn returns from the stock for new investors of the companies.

**“Dr.S.Sathya Narayana (2017)”**: This paper mainly explains about the stock split event. The research believes the stock split announces for the future earnings of the company and its positive reaction for the raise funds at a higher price after the split. The stock split announcing increasing the liquidity of their stocks of the companies. The fundamentals of the previous share price movements indicate for the 5-days, 10-days, 30-days, 60-days, 360-days. The exisisting shareholders continue to hold the same percentage of the holding before and after stock split. The company stock split announce for the net positive impact of the company future performance after slit the shares the new investors very much interested of the buying shares for the lower price they getting returns also a stock split prices depends upon the fundamentals of the company. Suppose the company fundamentals are strong then the stock split event will be more effective. This paper study focused on company listed on the NSE. The collecting data of the 2002-2013 companies data only. This data compared with the price and liquidity increase or decrease split event of the NSE companies. The taking post and pre split event time period on stock split event study.

#### 4. Hypothesis Formation

$H_0$ : there is a significance effect on stock split on the share price

#### 5. Methodology

Standard event study methodology as per the market stock split prices as given in the estimation procedure has been used for the research. We are taken from the Secondary data of the sample companies stock split event window listed companies in BSE. This approach assumes that the information was first known the market event date. Collecting the Secondary data for presplit and post split stock split event days for the six company's data following below:

- The event window stock split taken as  $t = -7$  to  $+7$  the relative event day  $t=0$ . This window will help the studying of the pre and post the event.
- The event widow stock split taken as  $t = -15$  to  $+15$  the relative event day  $t=0$ . This window will help the studying of the stock split share prices on the pre and post split event.
- The event window stock split taken as  $t = -30$  to  $+30$  the relative event day  $t=0$ . This window will help the studying of the stock split share price on the pre and post split event window.

#### 6. Data Analysis and Result

The next step in our research is data analysis after completing the data collection then we analyze the stock split company’s data for using the calculation the percentage pre-day and post day share prices for using one formula

$$P = (\text{Pre day share price} - \text{Post day share price}) / (\text{Post day share price})$$

The completion of the percentage on share prices again we calculate the stock split returns and expected returns, SD, Variance based on the company’s stock split event window. The returns means the company getting the returns on share market again they expected returns for the future purpose. Then calculate SD for the average of the company returns again variance analysis is the quantitative investigation of the differences between the actual and planned behavior its means control the overall business. The calculate the Returns and SD, Variance, Expected returns of the -7 to +7 , -15 to +15, -30 to +30 Stock split event window for using formulas following below:

$$R = \text{New share close price} / \text{Previous close share price}$$

$$\text{Expected Returns} = R_1P_1 + R_2P_2 + \dots + R_nP_n$$

$$\text{Variance} = \frac{\sum(xi-x\bar{x})^2}{N}$$

$$SD = \sqrt{\frac{\sum(x-x\bar{x})^2}{n-1}}$$

Following below tables for the performance levels of the companies in share market it is one opportunity for the small investors or new investors for taking best decision and they investing money for the getting the some returns on the investment of the share market.

**Table : 1 Calculate the Presplit and Post split Percentage**

Company Name	Sector	Ratio	Ex-Date	Pre-Day (Share Price)	Post-Day (Share Price)	Percentage(%)
Sunteck Realty Ltd	Real Estate	2:01	July 25,2017	236.48	244.8	-0.033986928
Santowin Corporation Ltd	Textiles processing sector	2:01	May 18,2011	25.43	25.63	-0.007803355
JMT Auto Ltd	Auto motive Industry	2:01	Sep 21,2016	24.15	28.5	-0.152631579
Godrej Properties Ltd	Real Estate	1:02	Nov 21,2013	181	181	0
ELPRO International Ltd	Electrical Industry	2:01	Sep 27,2017	43.42	42.27	0.027206056
MENON Bearings Ltd	Engineering Sector	5:01	Apr 9,2015	25.40	31.67	-0.19797916

**Table 2: Showing Pre-Split values**

Days	SUNTECK			SANTOWIN			JMT		
	7 Days	15 Days	30 Days	7 Days	15 Days	30 Days	7 Days	15 Days	30 Days
Expected Returns	-0.000498	-0.002544	0.000440	0.015596	-0.002369	0.004996	0.002236	-0.004471	-0.004291
Variance	0.000155	0.000123	0.000318	0.000975	0.001182	0.000860	0.000745	0.001594	0.001029
SD	0.012454	0.011086	0.017828	0.031217	0.034385	0.029330	0.027288	0.039921	0.032072
Days	GODREJ			ELPRO			MENON		
	7 Days	15 Days	30 Days	7 Days	15 Days	30 Days	7 Days	15 Days	30 Days
Expected Returns	0.000695	-0.000139	-0.002078	-0.005681	-0.002279	0.003256	0.014179	0.007346	-0.089532
Variance	0.000535	0.000278	0.000210	0.003179	0.001489	0.001899	0.001258	0.000755	0.243248
SD	0.023122	0.016671	0.014496	0.056381	0.038585	0.043574	0.035469	0.027473	0.493201

**Interpretation:**

The above tables shows the stock split performance of the companies we take the descriptive statistics here occurs the negative values and positive values but expected returns occurs the negative values also. The negative values indicate the company is not reached the expected returns.

**Table 3: Showing Post-Split values**

Days	SUNTECK			SANTOWIN			JMT		
	7 Days	15 Days	30 Days	7 Days	15 Days	30 Days	7 Days	15 Days	30 Days
<b>Expected Returns</b>	0.004388	0.002382	0.006502	-0.015978	-0.009820	0.002914	0.002499	0.002564	0.001282
<b>Variance</b>	0.002462	0.000334	0.000741	0.000975	0.001268	0.001199	0.005314	0.002786	0.001769
<b>SD</b>	0.049614	0.018285	S	0.031217	0.035606	0.034629	0.072899	0.052780	0.042058
Days	GODREJ			ELPRO			MENON		
	7 Days	15 Days	30 Days	7 Days	15 Days	30 Days	7 Days	15 Days	30 Days
<b>Expected Returns</b>	-0.008782	-0.006419	-0.002326	0.006970	-0.000427	0.002964909	0.028503	0.017475	0.007333
<b>Variance</b>	0.000211	0.000189	0.000580	0.000961	0.001474	0.001057	0.008732	0.005537	0.003496
<b>SD</b>	0.023122	0.013736	0.024081	0.031002	0.038395	0.032518	0.093444	0.074411	0.059128

**Interpretation:**

The companies are SUNTECK, SANTOWIN, JMT, GODREJ, ELPRO, MENON the performance after splitting the stock the price of the stock also the reduced after the stock split because of the division of the shares into shares. The expected returns there is no negative values of the SUNTECK, MENON, JMT companies.

**7. Findings**

- The above table shows the BSE listed companies the reaction of stock split positively and negatively on the stock split announcement date.
- The above samples prove the split announcement to be significance has the sample collection value close to the standard Deviation.

**8. Conclusion**

The paper full fills the Objectives and also observes the behavior of the stock split companies. The efficiency of Indian share markets his increase. This company indicates the survival of the shares in share markets the companies moves the stock split the benefit to the both companies and also investors.

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