



VIDHYAYANA

ISSN 2454-8596  
www.MyVedant.com

An International Multidisciplinary Research E-Journal

---

**“AN IMPACT OF STOCK SPLIT ANNOUNCEMENT AND  
STOCK SPLIT EVENT ON SELECTED COMPANIES’  
SHARE PRICE”**

PRATIK PRAVIN

VIDHYAYANA



## ABSTRACT

Stock split includes the technique of psychological pricing where new prices are more attractive to the incoming new investors as well as to the existing shareholder. Knowledge of share prices and its movement enables investors to choose the companies in which to invest wisely. The objective of this study is to investigate the effect of stock and their abnormal return of selected companies listed at the BSE. This research is based on an event study methodology. Stock's abnormal return was investigated for a period of 7 days before and after of stock split date. The study covered the period of 2018-19 to 2019-20 with a sample size of 5 companies. Secondary data collected from bseindia.com and moneycontrol.com on the daily stock prices of the 5 companies and the BSE Sensex index for 7 day pre and 7 day post-split announcement date and date of split event was used. In conclusion of this research, stock split announcements leads to getting negative returns at some place that helps to predicting the future returns and market efficiency. But at the time of stock splitting it shows positive impact on stock price which means stock splits is helpful for getting abnormal return to investors.

## Key Words:

- To know about splitting of share
- To find out the impact of stock splits announcement on its stock price
- To analyze the stock split impact on selected stock's price
- To find the abnormal change during the splitting

## Introduction

A stock split is a corporate action where a company divides its existing shares into multiple shares. Stock split is not expected to materially affect company's financials. Before and after a stock split, splitting company's existing shareholders continue to hold the same percentage holding in company. After a split, new investors might be attracted to buying the stock as it is available at a lower price, in the hope that they would stand to get good return. A stock split



may have no impact on the fundamentals of the company. However, one would expect the market forces of demand and supply to determine the true price for the share, as the liquidity increases because of the less price of the share become available after the split. The price performance of the share depends on the state of the market in addition to the fundamentals of the company.

The present study is purely based on data gathered from secondary sources. In this study researcher select five companies to analyze “AN IMPACT OF STOCK SPLIT ANNOUNCEMENT AND STOCK SPLIT EVENT ON SELECTED COMPANIES’ SHARE PRICE”. The information for this study is gathered from the time period of 2018-19 to 2019-20

### **Review of Literature**

**Koustubh Kanti and Ray (2011)** stated the market reaction to bonus issue and stock split in India. They found it has impact over market movements. They tested for abnormal returns and liquidity for -30 to +30 days investigation were taken for all the events to find the abnormal returns and the change in liquidity. The results suggested that the Indian market reacts to the stock split announcements but not to bonus issues, and the change in liquidity is significant for stock splits at 1% significance level.

**Deborah A Ford, Hoang H Nguyen and Vat T Nguyen (2012)** examined analyst coverage and market reaction around stock split announcement. Result of this study shows that the raw as well as abnormal returns at the announcement of stock splits were negatively related to the level of analyst coverage. The negative relation explain even after controlling for size, split factors book-to market and post-split target price. The findings of this study suggest that information irregularity is an important factor influencing market reaction to stock split announcements.

**Saraswathi Thirunellai and shreenivas Kunte (2013)** aimed to examine Stock splits: reasons and valuation effects they analyzed four important aspects related to the stock split event: the trading range hypothesis related to the impact on stock price; the effect on the



liquidity of firms that go in for a split; the signaling hypothesis related to the company's growth prospects and the multiple events hypothesis. The results shows that in the post-announcement period, during announcement period the split earned only insignificant excess returns over the market, the firms announcing the split were successful in increasing the liquidity of their stocks. The historical price movement indicates that for a given holding period (5-day, 10-day, 30-day, 60 days and 360 days), buyers of stock in the post-split period getting more return compared to the pre-split/pre-announcement buyers.

### **Hypothesis of the study**

1. **H0:** There is no abnormal change in the share price during announcement period of stock split.  
**H1:** There is an abnormal change in share price during announcement period of stock split.
2. **H0:** There is no abnormal change in share price during stock split.  
**H1:** There is an abnormal change in share price during stock split.

### **Population of the study**

Companies listed on BSE that resorted to stock split during the period 1<sup>st</sup> Jan 2019 to 31<sup>st</sup> Dec 2019.

### **Sample of the study**

For the selection of 5 companies simple random sampling technique is used which are **HDFC Bank, Gujarat Gas Ltd., IST Ltd., Acrysil India, ISGEC Heavy Engineering Ltd.**

### Time period of the study

The study period has been confined from 1<sup>st</sup> Jan 2018 to 31<sup>st</sup> Dec 2019. To study the impact on stock price during the stock split announcement and splitting date 7 days before and 7 days after event data has been used.

### Data Collection

Secondary data was used in this study.

### Data Analysis

For analyse the impact of stock split, before the seven day and after seven day of stock split date is considering.

### Tools and Techniques

Daily share return of each company is calculated according to the following equation. To test for the effect of split on stock price and return of security, the event study methodology is used by the researcher. The first step in this process is to calculate the expected return.

$$\text{Expected Return, } E(R_{it}) = \alpha_i + \beta_i * R_{mt}$$

Where,

$E(R_{it})$  = Expected return on security 'i' during time period 't'.

$\alpha_i$  = alpha coefficient of the security.

$\beta_i$  = beta coefficient of the security.

$R_{mt}$  = Expected return on index (BSE Sensex) during period 't'.

**Abnormal returns (ARs),**  $AR_{it} = R_{it} - E(R_{it})$



VIDHYAYANA

Where,

$R_{it}$  = Actual Returns

$E(R_{it})$  = Expected Return on security

### Average Abnormal Returns (AARs)

$$AAR_{it} = \frac{\sum_{t=1}^N AR_{it}}{N}$$

Where,

$i$  = Number of securities in the study

$N$  = Total number of securities in the portfolio

$t$  = Days surrounding the event day

$t = -7, \dots, 0, \dots, +7$

**t Value for AAR**

$$t(AAR) = \frac{AAR}{\sigma / \sqrt{n}}$$

Where,  $\sigma$  = Standard Deviation



VIDHYAYANA

### Impact of Stock Split Announcement on Share Price

It is a common belief among practitioners that stock splits are perceived by investors as good news. They neither affect the equity of the company nor the shareholders' ownership position. This study extends market reaction to stock split event and provides an explanation for security price reactions to this event.

Abnormal returns is used to describe the returns generated by a given security over a period of time which is different from the expected rate of return. The abnormal return of each company is computed and listed in below table.

**Table no.1**

**Abnormal Returns, Average Abnormal Return(AAR) and t Value of Stock Split Announced of**

| the Companies |                |               |                |                |                |                |                |                 |
|---------------|----------------|---------------|----------------|----------------|----------------|----------------|----------------|-----------------|
| Days          | HDFC           | GUJ           | ITS            | ACRYSI         | ISGEC          | Total AR       | AAR            | t value         |
| -7            | 0.0067         | -0.0068       | -0.0591        | 0.0074         | -0.0002        | -0.0521        | -0.0104        | <b>-2.4285*</b> |
| -6            | -0.0055        | 0.0015        | -0.0045        | 0.0272         | -0.0089        | 0.0097         | 0.0019         | 0.4516          |
| -5            | 0.0049         | -0.0009       | 0.0078         | -0.0183        | 0.0215         | 0.0151         | 0.0030         | 0.7034          |
| -4            | 0.0037         | 0.0011        | 0.0325         | 0.0549         | -0.0116        | 0.0806         | 0.0161         | <b>3.7562*</b>  |
| -3            | 0.0068         | -0.0005       | -0.0479        | 0.0041         | -0.0125        | -0.0500        | -0.0100        | <b>-2.3307*</b> |
| -2            | -0.0063        | 0.0008        | -0.0269        | -0.0197        | 0.0176         | -0.0344        | -0.0069        | -1.6041         |
| -1            | -0.0023        | -0.0005       | 0.0629         | 0.0156         | -0.0053        | 0.0704         | 0.0141         | <b>3.2817*</b>  |
| <b>0</b>      | <b>-0.0028</b> | <b>0.0009</b> | <b>-0.0421</b> | <b>-0.0126</b> | <b>-0.0238</b> | <b>-0.0805</b> | <b>-0.0161</b> | <b>-3.7514*</b> |
| 1             | -0.0218        | 0.0006        | 0.0803         | 0.0016         | 0.0080         | 0.0688         | 0.0138         | <b>3.2079*</b>  |
| 2             | 0.0007         | 0.0002        | 0.0156         | -0.0145        | 0.0029         | 0.0049         | 0.0010         | 0.2265          |
| 3             | 0.0091         | 0.0009        | -0.0386        | -0.0132        | 0.0039         | -0.0379        | -0.0076        | -1.7678         |
| 4             | 0.0019         | 0.0015        | 0.0016         | -0.0191        | 0.0113         | -0.0029        | -0.0006        | -0.1344         |
| 5             | 0.0060         | 0.0000        | 0.0154         | 0.0002         | -0.0117        | 0.0100         | 0.0020         | 0.4641          |
| 6             | 0.0017         | 0.0007        | -0.0026        | 0.0054         | 0.0088         | 0.0141         | 0.0028         | 0.6593          |
| 7             | -0.0028        | 0.0005        | 0.0056         | -0.0190        | -0.0278        | -0.0435        | -0.0087        | <b>-2.0298*</b> |

(\*significant at 5% level, table value is 1.94)

From the above table, it is clearly shown that there is more value of positive returns of Total AR than the negative returns in pre-announcement event window. In post-announcement, positive returns are less than the negative returns which means the investors getting negative abnormal returns after the announcement of stock split.

### AAR, and T test

The abnormal returns of individual security are averaged for each day surrounding the event day i.e. 7 days before the event day and 7 days after the event day. The AAR is the average deviation of actual returns of a security from the expected returns. To study the significance of returns and to test the hypotheses t test was used. The Calculated AAR t value are shown in table 1



The values of AARs presented in table shows that there are fluctuating returns both positive and negative returns around the announcement day of stock split. The AAR was positive for **four** days and negative for **three** days during the seven day pre announcement period. During the post announcement period there was **4** positive AAR and **3** negative AAR but the value of AAR are less as compare to pre announcement period.

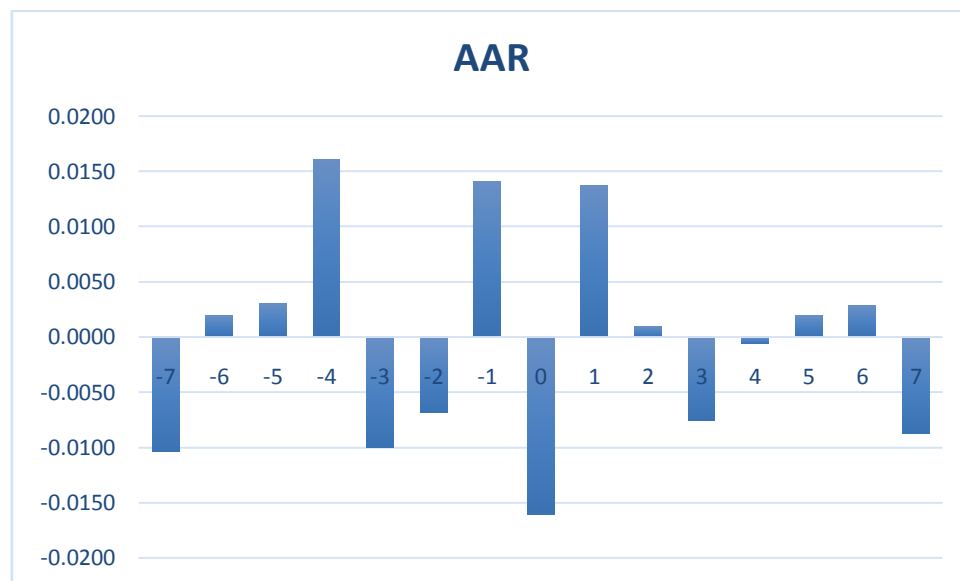


Figure: AAR of stock split announcement

The influence of the announcement was found to be positive for 4 days (1,2,5,6) and significant negative returns for 3 days (3,4,7). The AAR positively significant at 5% level on -4 day and -3, -1 may reflect possibility of leakage the information (insider information - directors, senior officers or major shareholders). It was found that the share price reaction was high fluctuating near the event day. This implies that investors could earn excess return during the event window period. Therefore, the hypothesis  $H_0$  can be rejected and it is implied that **there is an abnormal change in share price during announcement period of stock split.**

**Impact of Stock Split on Share Price**



| Days     | HDFC    | GUJ     | ITS     | ACRYSIL | ISGEC   | Total AR | AAR           | t value        |
|----------|---------|---------|---------|---------|---------|----------|---------------|----------------|
| -7       | 0.0244  | 0.1395  | 0.0004  | 0.0373  | 0.0451  | 0.2467   | <b>0.0493</b> | 0.7443         |
| -6       | 0.0267  | 0.1245  | 0.0502  | 0.0988  | 0.1512  | 0.4514   | <b>0.0903</b> | 1.3619         |
| -5       | 0.0613  | 0.1149  | 0.0585  | 0.1276  | 0.0591  | 0.4214   | <b>0.0843</b> | 1.2714         |
| -4       | 0.0067  | 0.1796  | 0.0294  | 0.0272  | -0.0402 | 0.2026   | <b>0.0405</b> | 0.6113         |
| -3       | 0.0541  | -0.0177 | 0.0098  | 0.0425  | -0.0949 | -0.0062  | -0.0012       | -0.0186        |
| -2       | 0.0779  | -0.0375 | 0.0558  | 0.0146  | 0.2103  | 0.3211   | <b>0.0642</b> | 0.9686         |
| -1       | 0.0202  | -0.0625 | 0.0457  | 0.0141  | -0.0153 | 0.0022   | <b>0.0004</b> | 0.0066         |
| <b>0</b> | -0.4179 | -0.4595 | -0.3753 | -0.7277 | -0.6820 | -2.6625  | -0.5325       | <b>8.0327*</b> |
| 1        | -0.0442 | 0.0309  | -0.0138 | 0.0765  | 0.1576  | 0.2069   | <b>0.0414</b> | 0.6243         |
| 2        | -0.0055 | 0.0452  | 0.0100  | 0.1098  | 0.1152  | 0.2747   | <b>0.0549</b> | 0.8287         |
| 3        | 0.0340  | 0.0065  | 0.0330  | 0.0142  | 0.1098  | 0.1976   | <b>0.0395</b> | 0.5961         |
| 4        | 0.0667  | 0.1269  | 0.0041  | 0.0531  | -0.0633 | 0.1875   | <b>0.0375</b> | 0.5658         |
| 5        | 0.0063  | -0.0728 | 0.0535  | 0.0761  | -0.0342 | 0.0288   | <b>0.0058</b> | 0.0870         |
| 6        | 0.0526  | -0.1701 | 0.0252  | 0.0555  | 0.1057  | 0.0689   | <b>0.0138</b> | 0.2079         |
| 7        | 0.0367  | 0.0521  | 0.0135  | -0.0195 | -0.0240 | 0.0588   | <b>0.0118</b> | 0.1775         |

(\*significant at 5% level, the table value is 1.94)

From the above AR table, it is clearly shown that there is more positive returns than the negative returns in pre and post stock split event window which means the investors getting positive abnormal returns during stock split event.

### AAR, CAAR and t Test

The abnormal returns of individual security are averaged for each day surrounding the event day i.e. 7 days before the event day and 7 days after the event day. The AAR is the average deviation of actual returns of a security from the expected returns. The Calculated AAR and t value are shown in table 2.

The values of AARs presented in table shows that there is more positive abnormal return than the negative return during the stock split. The AAR was positive for **six** days and negative for **one** day during the seven day pre split period. During the post split period there was **7** positive AARS and **0**negative AARS.

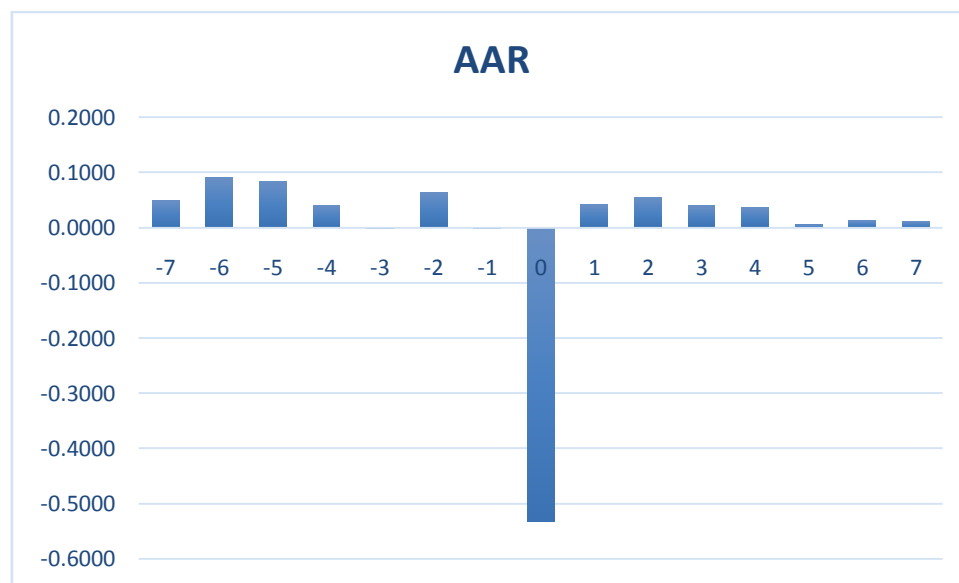


Figure: ARR of stock splits

The influence of the stock split was found to be positive for 13 days (-7,-6,-5,-4,-2,-1,+1,+2,+3,+4,+5 +6 and +7 days), and significant negative returns for two days (-3,0). It was found that the share price reaction was -0.5325 on the event day which shows at day of splitting share has negative abnormal return. Also after the stock splits it provides positive abnormal return for all 7 days. Therefore, the hypothesis  $H_0$  can be rejected and it is implied that **there is an abnormal change in share price during stock split.**



### Scope of the study

The current study is based on 5 selected companies which are listed on BSE India to evaluate the impact of stock split event from the perspective of pre and post-split byevent study methodology. Through this method researcher can analyze different events of stock market like issue of bonus, dividend, bond etc. and also analyze the different indices.

### Limitations of the study

- The study is based on secondary data collected from several websites. The limitations of secondary data, if any, will also influence study.
- Only 5 sample are selected in this study.
- Analysis is done form only 7 day before and after of the stock splits announcement and stock split event day.

### CONCLUSION

So as per the above results researcherconcludes that the announcement date and around the announcement of stock split having negative impact on stock price. 't' values of AAR was used to interpret the results. These facts show that stock split announcements leads to getting negative returns at some place which helps in predicting the future returns and market efficiency. But at the time of stock splitting it shows positive impact on stock price which means stock splits is helpful forgetting abnormal return to investors.

### REFERENCES

#### Articles

- Koustubh Kanti and Ray (2011). *Market reaction to bonus issue and stock split in India*. The IUP Journal of Applied Finance.



VIDHYAYANA

ISSN 2454-8596  
www.MyVedant.com

## An International Multidisciplinary Research E-Journal

---

- Deborah A Ford, Hoang H Nguyen and Vat T Nguyen (2012). *Analyst coverage and market reaction around stock split announcement*. Taylor & Francis Journals Applied Financial Economics.
- Saraswathi Thirunellai and shreenivas Kunte (2013). *Stock splits: reasons and valuation effects*. Sodhganga

### Websites

- <https://www.moneycontrol.com>
- <https://www.bseindia.com>



VIDHYAYANA