

## Impact of SBI & SBT Merger Events on Shareholders' Wealth

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### ABSTRACT

*This study is an attempt to analyse the impact of merger in the banking sector of India. The State Bank of India (SBI) is the largest bank in the Indian banking system. In the year 2016, SBI announced its proposal to merge with its five associate banks. It was one of the largest bank mergers in the country. The central cabinet provided approval to this merger in the month of February 2017. Hence the study focuses on how these announcements influenced the share price of SBI and SBT, the stock exchange, and whether it impacted the valuation of the merged entity. It also compares the impact of the announcement on the wealth of shareholders in both the time periods. Event analysis was used to arrive at findings and conclusions. The event of stock exchange announcement resulted in increased return to SBI and SBT investors only for limited days. The event of cabinet clearance did not make any significant influence on SBI and SBT stock prices and investor return. The stock market during the event window was quite efficient, as the abnormal return (AR) during this period is not significant.*

**Keywords:** Mergers & Acquisitions, SBI, SBT, shareholders' wealth, event study.

### INTRODUCTION:

Consolidation of firms is a common phenomenon in the corporate world. The relevance of merger is growing day by day. The Merger and Acquisition route is chosen by companies to improve the capital base of the company, to obtain more market share, or to avoid competition. Merger and acquisition is the process of one company being absorbed by another. Currently almost every industry is witnessing merger and acquisition, in both the financial and the non-financial sectors.

India recently experienced the biggest merger in the banking domain. SBI merged with its five associate banks, the State Bank of Travancore (SBT), State Bank of Bikaner and Jaipur (SBBJ), State Bank of Mysore (SBM), State Bank of Patiala (SBP) and State Bank of Hyderabad (SBH). This merger was announced in the stock exchange on 18<sup>th</sup> August 2016 and the central cabinet gave approval to this merger on 15<sup>th</sup> February 2017. The merger was completed and became a reality on 1<sup>st</sup> April 2017. This study tracks the effect of this merger on shareholders' wealth and compares it over different time slices of occurrence.

### REVIEWS OF RELATED STUDIES:

There are a number of studies available related to merger and acquisition, especially in the field of banking sector. The works that come under merger and acquisition follow the event study methodology, and concentrates on the various major sectors' consolidation as explained below.

Most of the Merger and Acquisition studies gave the result that the target firm's shareholder got a positive gain (Beitel, Schiereck, & Wahrenburg, 2004; Cakici, Hessel, & Tandon, 1996; Doukas, Holmen, & Travlos, 2002), while the bidder's firm got a negative return (Manasakis's 2009, Beitel et al., 2004; Corhay & Rad, 2000; Datta & Puia, 1995; DeLong, 2001; Doukas et al., 2002; Goergen & Renneboog, 2004). In another work it was found that the target firm got a larger return, while the acquirer got a lesser one (Sugianto, 2000). Some studies which analysed mergers in the banking sector alone concluded that a merger had significant impact on the

shareholders' wealth (Juma, Wawire, Byaruhanga, Okaka, & Odera, 2012), while some argued that the acquirer bank's shareholders did not get any value from the mergers (Sharma, 2009). In another study, Michael (2013) said that the merger and its changes created a positive impact to the shareholders and capital base of the bank. In this study on merger and acquisition of SBI with its associates bank, it was concluded that there was an information inefficiency in the Indian capital market.

This work analyses the impact of merger and acquisition on the shareholders' wealth. It considers SBI as the acquirer and SBT as the target firm. It follows event study methodology, and considers share price and market indices as the indicators of shareholder value.

### **STATEMENT OF THE PROBLEM:**

SBT incurred losses in its quarterly financial statement which ended in 2016 December. SBT also faced severe issues in its assets quality as depicted in the 2016 assets quality review of Reserve Bank of India. It worsened due to the apportionment of certain amount to protect for unrecognised stressed assets (source: livemint (2017)). As per these issues, the study considered the merger between SBI and SBT as related to two events, namely stock exchange announcement and the clearance from central cabinet. The study analysed both the events so as to know their influence on SBI and SBT shareholders' return. But the past studies have proved that a major number of the mergers and acquisitions have created negative gain to the acquirer's shareholders and positive gain to the target firm's shareholders. This study analyses whether the previous findings are true with respect to the SBI's merger and acquisition of SBT.

### **SIGNIFICANCE AND SCOPE OF THE STUDY:**

SBI is a prominent bank, and it plays a vital role in the Indian banking industry. As per the recommendation of the second banking sector reforms in 1988 (Rangarajan committee), one bank should be working at the international level, and the other banks should be working at a national level. To attain these objectives SBI preferred a merger between its associate banks, and it was implemented on 1<sup>st</sup> April 2017. This work is confined into the merger between SBI and its major associate bank and the only nationalised bank from the Kerala region, the SBT. So this work analyses only the impact of the merger announcement in stock exchange and cabinet clearance on shareholders' wealth of SBI and SBT in a very short period of time.

### **OBJECTIVES OF STUDY:**

Major objectives of this study are shown below.

- ✓ Compare the two events in terms of their effect on returns of shareholders, and find their relative influence on stock prices.
- ✓ Testing the efficiency of market during the event periods

### **HYPOTHESES:**

In this study, the hypothesis is set as shown below.

Ho: There is no significant abnormal return to the shareholders' wealth within the event window

Ho: There is no significant impact of event on the shareholders' wealth

### **DATA AND METHODOLOGY:**

This study mainly focuses on the wealth of shareholders in different event periods, and also compares the returns earned by the shareholders in two event periods. Here the study considers the event period of SBI's merger announcement with one of its associate banks, the SBT. There are two event times viz merger announcement in stock exchange (first event), and merger clearance given by the central cabinet (second event). This work follows secondary data only. Data required for the study is extracted from CMIE ProwessIQ and Thomson Reuters. The data collected for the study are daily closed share price of SBI & SBT and their market indices. Here BSE S&P 500 is considered as market index for the analysis to find the market return. Period of study is confined to the thirty days before and after the first event (stock exchange announcement), thirty days before and only eighteen days after the second event (cabinet approval on 15-02-17) due to the delisting of SBT from BSE. This period is from 05-07-2016 to 03-10-2016 (sixty one days) in the case of the stock exchange announcement, and from 05-01-2017 to 15-03-2017 (forty nine days) in case of the cabinet approval. It analyses the impact of a merger announcement in a short period of time.

This study uses the event study methodology with its popular market model. . In the first event period, the study follows a sixty one- day event window from -30 to 30. Here,  $e = 0$  means event day,  $e = -30$  to  $-1$ , the pre event period and  $e = 1$  to 30 indicates the post event period. In the second period, the study follows a forty nine day event window from -30 to 18, i.e,  $e = -30$  to  $-1$ , the pre event and  $e = 1$  to 18, the post event time. The market model equations used for the study are given below.....

$$R_{i,t} = \alpha_i + \beta R_{m,t} + \varepsilon_{i,t} \dots\dots\dots(1)$$

$t = -30 \dots$  to  $\dots 30$  (or 18) days

$i$  = firm

$m$  = Market index

where,

$R_{i,t}$  = daily share return of the firm  $i$  on the day  $t$

$\alpha_i$  = intercept value of the firm  $i$

$\beta_i$  = beta coefficient of the firm  $i$

$R_{m,t}$  = rate of return of market index of the day  $t$  of share  $i$

$\varepsilon_{i,t}$  = error term

The daily share return of the firm  $i$  on day  $t$  is found using the formula

$$R_{i,t} = \frac{P_{t0} - P_{t-1}}{P_{t-1}} \dots\dots\dots(2)$$

$t = -30 \dots, \dots +30$  (or 18) days

where,

$P_t$  = Price of share on day  $t$

$P_{t-1}$  = Price of share on day  $t-1$

Market return of the day  $t$  of share  $i$ , can be calculated with the formula

$$R_{m,t} = \frac{M_{rit} - M_{rit-1}}{M_{rit-1}} \dots\dots\dots(3)$$

$t = -30 \dots +30$  (or 18) days

where,

$M_{rit}$  = rate of return of market index on day  $t$

$M_{rit-1}$  = rate of return of market index on day  $t-1$

After calculating the return on day  $t$  of the firm  $i$ , it is required to find the abnormal return of the firm  $i$  on a day  $t$ . The equation for the abnormal return is given below...

$$AR_{i,t} = R_{i,t} - (\alpha_i + \beta_i R_{m,t}) \dots\dots\dots(4)$$

Then the study calculates cumulative return of the firm  $i$  by using the equation (5)

$$CAR_i = \sum AR_{it} \dots\dots\dots(5)$$

This study used the 't' test for testing the significance of the values considered.

Another important analysis in this study is checking the efficiency of the market and how the information related to the merger announcement and cabinet clearance were reflected in the share prices. Here the study uses the parametric test to find the 't' value test statistics and analyses its statistical significance at 5% level of significance with proper degree of freedom. It tests whether the null hypothesis (no significant abnormal return after event date) is accepted or not. The model followed by the study to find the t value is,

$$t = \frac{AR}{\sigma(AR)}$$

where,

$AR$  = abnormal return,  $\sigma(AR)$  is the standard error of abnormal return. Standard error of abnormal return is found by

$$S.E = \frac{SD}{\sqrt{N}}$$

where,

$SD$  means the standard deviation of abnormal return and  $N$  means total number of observations.

Then, if the t statistics is significant at 5% level , the abnormal return exhibits significance, which means that there is information leakage , and it is reflected in the share price (not efficient) . Otherwise, the market is efficient.

## RESULTS DISCUSSION:

This work gives importance to two events of the SBI's merger with one of its associate banks, the SBT. The study classifies the results into two sections.

### **Stock Exchange Announcement of SBI and SBT Merger:**

Announcement of M&A between SBI and SBT in stock exchange was done on 18<sup>th</sup> August 2016. The study considers how this announcement influenced the shareholders' wealth and if this announcement helped the shareholders to get more return on their investment in both SBI and SBT. Firstly, the study brings in the evaluation of SBI and its investor returns on, before and after the event period and considers whether it was significant or not. It evaluates the performance of SBI and SBT, the changes in their share prices and market indices on the sixty one days. It means that the study uses the thirty days before and thirty days after the event day (18<sup>th</sup> August 2016). The results of the event studies covering the amount of abnormal return, cumulative abnormal return and its significance as per the value of t test are shown in table 1 (see Appendix).

The table exhibits the sixty one day event window of the SBI (acquirer). It shows the results of share price responses of the SBI towards the event of merger announcement in the stock exchange. Under this analysis, it was observed that the Abnormal Return (AR) was negative for fifteen days and positive for fifteen days prior of the event day. The AR was negative for eighteen days and positive for twelve days after the event day. On the other hand, the Cumulative Abnormal Return (CAR) values were negative for fourteen and positive for sixteen days before the event date. In the case of after the event date, the study observed that twenty three days gave a negative return and only seven days produced a positive return. On the date of merger event ( $t=0$ ), investors got only negative return in the AR and the CAR, and there was no statistically significant result. Considering the returns under the entire event window, AR showed thirty four days of negative and twenty seven days of positive returns. The CAR exhibited thirty seven days of negative and only twenty four days of positive return in the event window. Three days before the event date, the shareholders got a 5.6% AR, and this was the highest amount of return during the event window. The day after the event date also produced a positive return of 3.8%. These values (5.6% and 3.8%) under the AR show a 5% level of significance. The thirteen days after the event also created a positive value of 2.7% return to the investors. The study evaluated the entire event window, and only three days showed significant AR values, i.e. the t values are greater than the critical value  $\pm 1.96$ . On the other fifty eight days out of sixty one, the values were insignificant, i.e. the t values were lesser than the critical value  $\pm 1.96$ . It means that the shareholders got no proper earnings from the investment on a daily basis. Here, 95.08% of the days show an insignificant return in the AR values, which is approximately of zero value.

Then the study analyses the impact of announcement on the return of investors in SBT under the same event window and the same event day. The results of this analysis are shown in table 2 (see Appendix). It presents the market reactions on the basis of share price movements to the merger announcement of SBI and SBT. It was announced on 18-08-2016, the event date ( $t = 0$ ). Here, the study considered a sixty one day event window of SBT, and is divided into two parts. It covers the thirty days before and after the event date. It exhibits the AR and CAR amount earned by the shareholders during this event window. The AR before the event date created nineteen days of negative return and eleven days of positive returns to the investors. Returns earned by the investors after the event date are sixteen days of negative value and fourteen days of positive value. Apart from AR, the study evaluated the CAR value before and after the event date. Before the date, CAR showed fifteen days of negative and positive returns, and then a twenty days of negative and ten days of positive amount after the event. When the study considers the entire event window, the days of negative and positive returns to the investors were the same for both AR and the CAR.

The highest amount of return earned by the investors during the event period was 5.8% and it was on the day after the event date. Also some other dates before the event, especially the twenty eighth and twenty fourth days created a higher return of 4.4% and 3.4% respectively. The date of event did not create a good return and caused no statistical significance. The study finds that only three days showed any statistical significance to AR, namely the twenty eighth day, twenty fourth and first day after the event date. All other days gave insignificant values. It means that 95.01% of days showed an insignificant value to the investor.

Next, the study tries to analyse the impact of cabinet clearance on the return of shareholders' in both banks.

### **Cabinet Clearance to the Merger of SBI and SBT:**

SBI announced its proposal to merge with its associates, including SBT on 18<sup>th</sup> August 2016. But this merger got approval from the union cabinet only on 15<sup>th</sup> February 2017. Apart from the announcement's impact in stock exchange, cabinet clearance for the merger also has relevance in the Indian capital market. The merger can become a reality only when it gets the clearance from the central ministry. So the day of obtaining this approval is considered as the other major event in the merger between SBI and its associates. Here, the study analyses the impact of cabinet clearance for the merger (event) on the shareholders' wealth of SBI and SBT in a short period of time. Analysis related to SBI and SBT are explained below.

Share price responses of the SBI shareholders when the cabinet gave clearance to the merger proposal of the SBI with its associate banks are explained in table 3 (see Appendix). Here, the event window considers the forty nine days; thirty days before the event and eighteen days after the event. In the case of AR before the event, a negative return was created on fifteen days and a positive return on the other fifteen days to the shareholders. While considering the after-event time (eighteen days), a negative return was created on ten days and a positive return on the other eight days to the investor. Whereas the CAR exhibited a sixteen days' negative and fourteen days' positive value before the event. After the event date, it gave a nine days' negative and a nine days positive returns. On the date of the event, both the AR and CAR provided small yet positive returns to the SBI (acquirer) shareholders which were not statistically significant. Considering the study in whole, both the AR and CAR under the event window, a twenty three days of positive and negative returns were provided to the shareholders.

In this event window, the highest amount of AR was availed on the ninth day after the event date. It showed a 2.5% return to the investor and the thirteenth day before the event period generated a 2.1% return. The study points out that only these two dates gave a significant value at 5% level and that the other values were not significant. It means that the shareholders got no proper earnings from the investment on a daily basis, that is, on 95.91% of the days, the AR showed an insignificant return which was approximated to zero value. Then, the study analyses the impact of cabinet clearance on the SBT's shareholder return. The results are explained below.

Table 4 (see Appendix) presents the share price movement in the market around the date of the cabinet clearance given for the merger proposal. Here, the study considered thirty days before and eighteen days after the event date. Thus the study evaluated the forty nine days share price movement totally in the event window to know the actual behaviour of the market. It exhibited the AR and CAR amount earned by the shareholders during this event window. Here, the AR before the event date showed a negative value for sixteen days and fourteen days of positive values. After the event date, negative and positive values were generated on ten and eight days respectively. The CAR created a seventeen days' negative and thirteen days' positive return before the event date and generated a seven days' negative and eleven days' positive amount after the event date. On the date of the event, the market generated a negative AR as well as a positive CAR, but was not statistically significant. If considering the entire event window, the total negative and positive values for AR and CAR are twenty six days and twenty two days respectively.

During the event window, the highest amount of return of 3.2% was earned by the shareholders on the day after the cabinet clearance. In the case of AR, only three days showed statistically significant returns i.e. on the second and fifteenth day before the event and the day after the event. It points out that on 93.9% days, the returns were not statistically significant which approximates around the value zero.

## CONCLUSION:

The wealth effects of merger and acquisition on the shareholders' of SBI and SBT is the prime concern of this study. The study did not consider any other issues or the benefits of the merger between SBI and SBT. As discussed earlier, it brought into account two event periods and its impacts on the investors' return. In the case of the event stock exchange announcement; SBI got a negative gain after the announcement, except on the first and thirteenth day after the event. These days (+1 and +13) after the event show a significant return in SBI. The SBT shows a significant return on the next date of event, but not on following days. The third day for the SBI, and the twenty eighth and twenty fourth days before the event for the SBT, provided significant returns. This is comparable to other studies on the merger and acquisition. That is, the shareholders of both the acquirer firm and the target firm (the SBT) got negative returns on the major days. But the negative value just before the event day indicates that the information to the related merger was acknowledged in the market, or was spread as a rumour. Considering the event based on the cabinet clearance for the merger, the SBI investors got a continuously negative gain, and the SBT investors got similar results except on minor days. The study states that the most of the returns obtained by investors in SBI and SBT are not significant. It means that there is no significant impact of cabinet clearance for merger on the wealth of shareholders. Thus, the study concluded that majority of the abnormal return was insignificant, which indicates an efficient market. Since the t value on majority of the days is less than the critical value ( $\pm 1.96$ ), the study accepts the null hypothesis. It means that there is no significant abnormal return to the shareholders in both the acquirer and target banks, and that both the events made no positive impact on the shareholders' wealth.

## REFERENCES:

- Beitel, P., Schiereck, D., & Wahrenburg, M. (2004). Explaining M&A success in European banks. *European Financial Management*, 10(1), 109–139.
- Cakici, N., Hessel, C., & Tandon, K. (1996). Foreign acquisitions in the United States: Effect on shareholder wealth of foreign acquiring firms. *Journal of Banking and Finance*, 20(2), 307–329.
- Corhay, A., & Rad, A. T. (2000). International acquisitions and shareholder wealth: Evidence from the Netherlands. *International Review of Financial Analysis*, 9(2), 163–174.
- Datta, D. K., & Puia, G. (1995). Cross-border acquisitions: An examination of the influence of relatedness and cultural fit on shareholder value creation in US acquiring firms. *Management International Review*, 35(4), 337–359.
- DeLong, G. (2001). Stockholder gains from focusing versus diversifying bank mergers. *Journal of Financial Economics*, 59(2), 221–252.
- Doukas, J., Holmen, M., & Travlos, N. (2002). Diversification, ownership and control of Swedish corporations. *European Financial Management*, 8, 281–314.
- Juma, O. N., Wawire, P. T., Byaruhanga, J., Okaka, O., & Odera, O. (2012). Impact of bank mergers on shareholders' wealth. *International Journal of Business and Social Research (IJBSR)*, 2(6), 162-177.
- Livemint (2017). <https://www.livemint.com/Industry/mf507dGEvv1gCGRknnY9GM/SBI-merger-with-five-associate-banks-from-1-April.html> Retrieved February 24, 2017, from <https://www.livemint.com>
- Mallikarjunappa, T., & Dsouz, J. J. (2013). A Study of Semi-Strong Form of Market Efficiency of Indian Stock Market. *Amity Global Business Review*, 60-68.
- Manasakis, C. (2009). Shareholder wealth effects from mergers and acquisitions in the Greek banking industry. *Int. J. Banking, Accounting and Finance*, 1(3), 242-256.
- Michael, N. B. (2013). Bank Mergers and Acquisition and Shareholders' Wealth Maximization in Nigeria. *Journal of Applied Finance & Banking*, 3(3), 255-270.
- Sharma, V. (2009). *Do Bank Mergers Create Value? An Event Study Analysis*. Macalester : Macalester College.
- Sikarwar, E. (2012). Impact of Merger Announcements on Shareholder's Wealth : An Event Case Study of State Bank of India. *Asian Journal of Research in Banking and Finance*, 2(1), 1-15.
- Sugiarto, A. (2000). *The Effect of Mergers and Acquisitions*. Melbourne: Victoria University of Technology .

## APPENDIX

**Table 1: SBI Investors' return on 18<sup>th</sup> August 2016**

| Date | AR       | CAR      | t Value  | Sign* | Date | AR       | CAR      | t Value  | Sign* |
|------|----------|----------|----------|-------|------|----------|----------|----------|-------|
| -30  | 0        | 0        | 0        | 0     | 0    | -0.00274 | -0.0048  | -0.21272 | NO    |
| -29  | -0.01171 | -0.01171 | -0.90785 | NO    | 1    | 0.038686 | 0.035943 | 3.000335 | YES   |
| -28  | -0.00738 | -0.01908 | -0.57208 | NO    | 2    | -0.00763 | 0.031061 | -0.59137 | NO    |
| -27  | 0.002166 | -0.00521 | 0.167987 | NO    | 3    | -0.00061 | -0.00824 | -0.04748 | NO    |
| -26  | -0.00063 | 0.001534 | -0.04898 | NO    | 4    | -0.00665 | -0.00727 | -0.51604 | NO    |
| -25  | 0.006483 | 0.005851 | 0.502793 | NO    | 5    | -0.00987 | -0.01652 | -0.76516 | NO    |
| -24  | 0.009975 | 0.016458 | 0.773653 | NO    | 6    | -0.0116  | -0.02147 | -0.8998  | NO    |
| -23  | 0.003613 | 0.013588 | 0.280206 | NO    | 7    | 0.003028 | -0.00857 | 0.23482  | NO    |
| -22  | -0.00661 | -0.003   | -0.51283 | NO    | 8    | -0.00918 | -0.00615 | -0.71203 | NO    |
| -21  | 0.001913 | -0.0047  | 0.148334 | NO    | 9    | -0.00536 | -0.01455 | -0.41606 | NO    |
| -20  | -0.00619 | -0.00428 | -0.48038 | NO    | 10   | 0.00051  | -0.00485 | 0.039565 | NO    |
| -19  | -0.01542 | -0.02161 | -1.19578 | NO    | 11   | 0.003539 | 0.004049 | 0.274459 | NO    |
| -18  | -0.01956 | -0.03498 | -1.51691 | NO    | 12   | -0.0045  | -0.00096 | -0.34915 | NO    |
| -17  | 0.011058 | -0.0085  | 0.857584 | NO    | 13   | 0.027401 | 0.022899 | 2.125087 | YES   |
| -16  | -0.00822 | 0.002836 | -0.63764 | NO    | 14   | -0.00239 | 0.025013 | -0.18519 | NO    |
| -15  | 0.00302  | -0.0052  | 0.234247 | NO    | 15   | -0.00152 | -0.00391 | -0.11825 | NO    |
| -14  | 0.000395 | 0.003416 | 0.030664 | NO    | 16   | -0.01085 | -0.01237 | -0.84111 | NO    |
| -13  | -0.00698 | -0.00658 | -0.54134 | NO    | 17   | 0.010625 | -0.00022 | 0.824074 | NO    |
| -12  | -0.0082  | -0.01518 | -0.63622 | NO    | 18   | -0.00779 | 0.002831 | -0.60449 | NO    |
| -11  | 0.006878 | -0.00133 | 0.533439 | NO    | 19   | -0.01271 | -0.02051 | -0.98607 | NO    |
| -10  | 0.010896 | 0.017774 | 0.845084 | NO    | 20   | -0.0001  | -0.0128  | -0.0069  | NO    |
| -9   | -0.00797 | 0.002929 | -0.61794 | NO    | 21   | -0.00117 | -0.00126 | -0.09089 | NO    |

| Date | AR       | CAR      | t Value  | Sign* | Date | AR       | CAR      | t Value  | Sign* |
|------|----------|----------|----------|-------|------|----------|----------|----------|-------|
| -8   | 0.006695 | -0.00127 | 0.519223 | NO    | 22   | -0.01202 | -0.0132  | -0.93248 | NO    |
| -7   | -0.00808 | -0.00139 | -0.6269  | NO    | 23   | 0.005425 | -0.0066  | 0.420722 | NO    |
| -6   | 0.013081 | 0.004998 | 1.014493 | NO    | 24   | -0.00884 | -0.00342 | -0.68575 | NO    |
| -5   | 0.006494 | 0.019575 | 0.503669 | NO    | 25   | 0.004351 | -0.00449 | 0.337422 | NO    |
| -4   | -0.02257 | -0.01608 | -1.75063 | NO    | 26   | -0.00898 | -0.00463 | -0.69651 | NO    |
| -3   | 0.056769 | 0.034197 | 4.402808 | YES   | 27   | 0.008171 | -0.00081 | 0.633706 | NO    |
| -2   | 0.013908 | 0.070678 | 1.078687 | NO    | 28   | 0.013382 | 0.021553 | 1.037895 | NO    |
| -1   | -0.00205 | 0.011854 | -0.1593  | NO    | 29   | 0.000248 | 0.01363  | 0.01922  | NO    |
|      |          |          |          |       | 30   | -0.01219 | -0.01194 | -0.94538 | NO    |

\*at 5% level of significance

**Table 2: SBT Investors' return on 18<sup>th</sup> August 2016**

| Date | AR       | CAR      | t Value  | Sign | Date | AR       | CAR      | t Value  | Sign |
|------|----------|----------|----------|------|------|----------|----------|----------|------|
| -30  | -        | -        | -        | -    | 0    | -0.00512 | -0.01168 | -0.35516 | No   |
| -29  | 0.004468 | 0.004468 | 0.310112 | No   | 1    | 0.058559 | 0.053443 | 4.064499 | Yes  |
| -28  | 0.044068 | 0.048536 | 3.058671 | Yes  | 2    | -0.00573 | 0.052831 | -0.39763 | No   |
| -27  | -0.00794 | 0.036124 | -0.5514  | No   | 3    | 0.001735 | -0.00399 | 0.120398 | No   |
| -26  | -0.007   | -0.01495 | -0.48595 | No   | 4    | 0.002299 | 0.004034 | 0.159563 | No   |
| -25  | -0.02362 | -0.03063 | -1.63976 | No   | 5    | 0.000691 | 0.00299  | 0.047948 | No   |
| -24  | 0.03084  | 0.007215 | 2.140538 | Yes  | 6    | -0.0132  | -0.01251 | -0.91602 | No   |
| -23  | -0.0006  | 0.03024  | -0.0416  | No   | 7    | 0.001725 | -0.01147 | 0.119755 | No   |
| -22  | 0.024946 | 0.024347 | 1.731474 | No   | 8    | -0.00429 | -0.00256 | -0.29772 | No   |
| -21  | 0.004831 | 0.029777 | 0.335313 | No   | 9    | -0.00652 | -0.01081 | -0.45278 | No   |
| -20  | -0.00495 | -0.00012 | -0.34339 | No   | 10   | -0.00564 | -0.01216 | -0.39117 | No   |
| -19  | -0.01844 | -0.02339 | -1.27998 | No   | 11   | 0.002893 | -0.00274 | 0.200779 | No   |
| -18  | -0.02176 | -0.0402  | -1.51014 | No   | 12   | -0.00447 | -0.00158 | -0.31054 | No   |
| -17  | 5.4E-05  | -0.0217  | 0.003751 | No   | 13   | 0.027795 | 0.02332  | 1.929169 | No   |
| -16  | 0.000653 | 0.000707 | 0.045316 | No   | 14   | -0.00623 | 0.021566 | -0.43234 | No   |
| -15  | -0.02331 | -0.02266 | -1.61817 | No   | 15   | 0.001053 | -0.00518 | 0.073093 | No   |
| -14  | -0.00633 | -0.02965 | -0.43964 | No   | 16   | -0.01354 | -0.01248 | -0.93945 | No   |
| -13  | -0.00389 | -0.01022 | -0.26967 | No   | 17   | 0.002236 | -0.0113  | 0.155186 | No   |
| -12  | -0.00148 | -0.00536 | -0.10266 | No   | 18   | -0.00809 | -0.00586 | -0.56176 | No   |
| -11  | -0.01247 | -0.01395 | -0.86562 | No   | 19   | -0.00162 | -0.00971 | -0.11237 | No   |
| -10  | 0.014272 | 0.001801 | 0.990611 | No   | 20   | -0.00265 | -0.00427 | -0.18391 | No   |
| -9   | 0.015934 | 0.030206 | 1.105961 | No   | 21   | 0.000777 | -0.00187 | 0.053925 | No   |
| -8   | -0.01121 | 0.004722 | -0.77822 | No   | 22   | -0.01101 | -0.01023 | -0.76393 | No   |
| -7   | -0.00483 | -0.01604 | -0.3352  | No   | 23   | 0.002243 | -0.00876 | 0.155697 | No   |
| -6   | 0.005228 | 0.000398 | 0.362839 | No   | 24   | -0.00234 | -9.9E-05 | -0.16258 | No   |
| -5   | -0.00748 | -0.00225 | -0.51925 | No   | 25   | 0.001114 | -0.00123 | 0.077306 | No   |
| -4   | -0.00692 | -0.0144  | -0.48015 | No   | 26   | -0.00423 | -0.00312 | -0.29382 | No   |
| -3   | 0.013962 | 0.007045 | 0.969103 | No   | 27   | 0.012639 | 0.008406 | 0.877234 | No   |
| -2   | -0.01378 | 0.00018  | -0.95661 | No   | 28   | -0.00346 | 0.009181 | -0.24002 | No   |
| -1   | -0.00656 | -0.02035 | -0.45559 | No   | 29   | 0.007704 | 0.004246 | 0.534715 | No   |
|      |          |          |          |      | 30   | -0.00189 | 0.005812 | -0.13133 | No   |

\*at 5% level of significance

**Table 3: SBI Investors' return on 15<sup>th</sup> February 2017**

| Date | AR       | CAR      | t Value  | Sign* | Date | AR       | CAR      | t Value  | Sign* |
|------|----------|----------|----------|-------|------|----------|----------|----------|-------|
| -30  | 0        | 0        | 0        | -     | -6   | 0.004893 | -0.00511 | 0.505154 | NO    |
| -29  | -0.0081  | -0.0081  | -0.83647 | NO    | -5   | -0.00251 | 0.00238  | -0.25944 | NO    |
| -28  | -0.00148 | -0.00959 | -0.15325 | NO    | -4   | -0.007   | -0.00952 | -0.72299 | NO    |
| -27  | 0.005563 | 0.004078 | 0.574331 | NO    | -3   | 0.000856 | -0.00615 | 0.088423 | NO    |

| Date | AR       | CAR      | t Value  | Sign* | Date | AR       | CAR      | t Value  | Sign* |
|------|----------|----------|----------|-------|------|----------|----------|----------|-------|
| -26  | 0.003738 | 0.0093   | 0.385902 | NO    | -2   | -0.01738 | -0.01652 | -1.79398 | NO    |
| -25  | -0.00387 | -0.00013 | -0.39917 | NO    | -1   | -0.00062 | -0.018   | -0.06411 | NO    |
| -24  | 0.003411 | -0.00046 | 0.352162 | NO    | 0    | 0.004235 | 0.003614 | 0.437217 | NO    |
| -23  | -0.00596 | -0.00255 | -0.61587 | NO    | 1    | -0.00384 | 0.000394 | -0.39651 | NO    |
| -22  | -0.00039 | -0.00636 | -0.04049 | NO    | 2    | -0.01183 | -0.01567 | -1.22167 | NO    |
| -21  | 0.015736 | 0.015344 | 1.624741 | NO    | 3    | -0.00632 | -0.01815 | -0.65216 | NO    |
| -20  | 0.00221  | 0.017946 | 0.228198 | NO    | 4    | 3.2E-05  | -0.00628 | 0.0033   | NO    |
| -19  | 0.00135  | 0.00356  | 0.139402 | NO    | 5    | 0.0046   | 0.004632 | 0.474924 | NO    |
| -18  | -0.00018 | 0.001172 | -0.01844 | NO    | 6    | -0.00602 | -0.00142 | -0.62159 | NO    |
| -17  | -0.01607 | -0.01624 | -1.65882 | NO    | 7    | -0.00167 | -0.00769 | -0.1724  | NO    |
| -16  | 0.00617  | -0.0099  | 0.637027 | NO    | 8    | 0.01     | 0.00833  | 1.032524 | NO    |
| -15  | -0.00907 | -0.0029  | -0.93614 | NO    | 9    | -0.02505 | -0.01505 | -2.5866  | YES   |
| -14  | 0.003138 | -0.00593 | 0.324026 | NO    | 10   | 0.002526 | -0.02253 | 0.260779 | NO    |
| -13  | 0.020842 | 0.02398  | 2.151894 | YES   | 11   | 0.016363 | 0.018889 | 1.689514 | NO    |
| -12  | -0.01249 | 0.008355 | -1.28923 | NO    | 12   | -0.01402 | 0.002345 | -1.44735 | NO    |
| -11  | -0.00073 | -0.01322 | -0.07563 | NO    | 13   | 0.007166 | -0.00685 | 0.739919 | NO    |
| -10  | 0.01831  | 0.017578 | 1.890506 | NO    | 14   | 0.016446 | 0.023612 | 1.698042 | NO    |
| -9   | 0.003899 | 0.022209 | 0.402546 | NO    | 15   | -0.00429 | 0.012159 | -0.44261 | NO    |
| -8   | 0.013649 | 0.017547 | 1.409226 | NO    | 16   | 0.009724 | 0.005437 | 1.003982 | NO    |
| -7   | -0.01    | 0.003645 | -1.03292 | NO    | 17   | -0.00831 | 0.00141  | -0.85838 | NO    |
|      |          |          |          |       | 18   | 0.002505 | -0.00581 | 0.258678 | NO    |

\*at 5% level of significance

**Table 4 SBT Investors' return on 15<sup>th</sup> February 2017**

| Date | AR       | CAR      | t value  | Sign* | Date | AR       | CAR      | t value  | Sign* |
|------|----------|----------|----------|-------|------|----------|----------|----------|-------|
| -30  | -        | -        | -        | -     | -6   | -0.00552 | -0.00718 | -0.53125 | No    |
| -29  | -0.00762 | -0.00762 | -0.73375 | No    | -5   | 0.003006 | -0.00251 | 0.28933  | No    |
| -28  | -0.00869 | -0.01632 | -0.83671 | No    | -4   | -0.00542 | -0.00241 | -0.52154 | No    |
| -27  | 0.015475 | 0.00678  | 1.489218 | No    | -3   | 0.003454 | -0.00196 | 0.332439 | No    |
| -26  | -0.00793 | 0.00754  | -0.76362 | No    | -2   | -0.02096 | -0.01751 | -2.01751 | Yes   |
| -25  | -0.00523 | -0.01316 | -0.50309 | No    | -1   | 0.001602 | -0.01936 | 0.154173 | No    |
| -24  | 0.007233 | 0.002005 | 0.696084 | No    | 0    | -0.00015 | 0.001452 | -0.01448 | No    |
| -23  | -0.00751 | -0.00028 | -0.72294 | No    | 1    | 0.031896 | 0.031746 | 3.069517 | Yes   |
| -22  | -0.00232 | -0.00984 | -0.22364 | No    | 2    | -0.0162  | 0.015697 | -1.55887 | No    |
| -21  | 0.009369 | 0.007045 | 0.901616 | No    | 3    | -0.0058  | -0.022   | -0.55826 | No    |
| -20  | 0.005367 | 0.014736 | 0.516462 | No    | 4    | -0.00378 | -0.00958 | -0.36365 | No    |
| -19  | 0.001379 | 0.006746 | 0.132706 | No    | 5    | -0.00506 | -0.00884 | -0.48662 | No    |
| -18  | -0.00422 | -0.00284 | -0.40576 | No    | 6    | -0.00216 | -0.00722 | -0.20811 | No    |
| -17  | -0.01532 | -0.01954 | -1.47477 | No    | 7    | 0.006502 | 0.00434  | 0.625746 | No    |
| -16  | 0.015203 | -0.00012 | 1.463069 | No    | 8    | 0.00534  | 0.011842 | 0.513906 | No    |
| -15  | -0.02059 | -0.00539 | -1.98132 | Yes   | 9    | 0.000148 | 0.005488 | 0.014237 | No    |
| -14  | -0.00649 | -0.02708 | -0.62503 | No    | 10   | -0.01093 | -0.01078 | -1.0519  | No    |
| -13  | 0.015689 | 0.009194 | 1.509833 | No    | 11   | -0.005   | -0.01593 | -0.48104 | No    |
| -12  | -0.00605 | 0.009644 | -0.58176 | No    | 12   | 0.015225 | 0.010227 | 1.465224 | No    |
| -11  | -0.00513 | -0.01118 | -0.49371 | No    | 13   | -0.00457 | 0.010659 | -0.43945 | No    |
| -10  | 0.020197 | 0.015067 | 1.943659 | No    | 14   | 0.006627 | 0.002061 | 0.637752 | No    |
| -9   | 0.007678 | 0.027875 | 0.738877 | No    | 15   | 0.010439 | 0.017066 | 1.004596 | No    |
| -8   | 0.002531 | 0.010209 | 0.243608 | No    | 16   | -0.0023  | 0.008142 | -0.22104 | No    |
| -7   | -0.00166 | 0.000873 | -0.1596  | No    | 17   | -0.00741 | -0.00971 | -0.71322 | No    |
|      |          |          |          |       | 18   | 0.009038 | 0.001627 | 0.869803 | No    |

\*at 5% level of significance

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