

Did Merger Announcement (with State Bank of Indore) Create Any Abnormal Return for the Shareholders of State Bank of India?

Dr. Priyanka Ghosh

Assistant Professor

Aditya Group of Institutions

Bangalore-64

Abstract: In this research paper the researcher tried to find out whether the merger announcement with State Bank of Indore had created any abnormal return for the shareholders of State Bank of India on the event day as well as during the specified pre and post announcement periods. The researcher had considered three models (OLS Market Model, Mean Adjusted Return Model and Market Adjusted Model) of Event Study to calculate the abnormal return. The researcher had contemplated 21 days (including the event day) as Event Window to examine the hypothesizes. The research resulted that though this merger event had created a positive abnormal return during pre and post-announcement periods but it failed to create any positive return on the event day for the shareholders of the acquirer bank.

Keywords: Merger, Acquisitions, Event Window, Abnormal Return, S&P BSE,

INTRODUCTION:

Now a day most of the companies are accepting merger and acquisition as an easy way to grow strategically as well as financially. Merger and acquisition not only has important effect on financial performances of the company, it also has its important role on share prices of the acquirer company. In this research paper the researcher had tried to find out the effect of merger announcements (with State Bank of Indore) on share prices of State Bank of India.

STATE BANK OF INDIA: A BRIEF HISTORY:

The ancestor of the State Bank of India had started its journey in 19th Century as Bank of Calcutta which renamed as Bank of Bengal, was entrenched on 2nd June, 1806. As an exclusive institution, it was the first joint-stock Bank of British India, which was subsidized by the Govt. of Bengal. After the formation of Bank of Bengal, the Bank of Bombay (15th April, 1840) and the Bank of Madras (1st July, 1843) had been enacted. Before the amalgamation of these three banks on 27th January, 1921 as the Imperial Bank of India, these banks were endured at the apex of modern banking in India. The evolution of these banks was shaped by the ideas which were extracted from identical developments in Europe and England. The evolution also influenced by the changing trends in both local trading environment and the relations of the Indian economy with the European economy and global economic groundwork. As per the provisions of the State Bank of India Act, 1955, the Reserve Bank of India (the Central Bank of India) had acquired the controlling power of the Imperial Bank of India. On 1st July, 1955, the Imperial Bank of India renamed as the State Bank of India. In 1959, as per the Govt. passed the State Bank of India (Subsidiary) Act, 1955, eight state banks associate of State Bank had been established. But the consolidation process of these associates had already been started when the State Bank of Saurashtra merged with State Bank of India. The State Bank of India is providing various financial services like Pension Fund Schemes, General Insurance Schemes, Custodial Services* (Joint Venture with Societe Generale of France), Private Equity, Mobile Banking, Point of Sale, Merchant Banking, Advisory Services etc. Presently the bank has adopted the new technology and inventive business ideas to expand its rural branch network. The bank proposes to cover 100,000 villages in the coming 2 years. At present, the State Bank of India has more than 22,500 branches. The bank has presently 58,000 ATM's in whole India. The bank is also concentrating on its whole banking facilities to provide a wide range of products and services to India's growing large and medium companies. Present day the bank is one of the largest facilitator of infrastructure debt as well as the biggest coordinator of external commercial borrowings in the

* The Custodial services of State Bank of India encompasses the Settlements, Clearing, and Depository participant services, Cash Management and Foreign Exchange services, Fund Accounting services, Performance Measurement, Registrar and Transfer agency services amongst other corporates.

country. It is the only Indian bank which is listed in the Fortune[†] 500 company list[‡]. Apart from the banking services, it is also involved in various non-profit activities which are known as Community Banking Services. All the branches of the State Bank of India are involved in this activity which helps India economy to grow rapidly. In 2011, the Govt. of India has given the approval for acquisition of the State Bank of India Commercial and International Bank (SBICI Bank) to the State Bank of India. The Govt. of India had issued the 'Acquisition of SBICI Bank Order 2011' vide order dated 29th July, 2011. Recently, the bank has entered into the home loan market of UK. They have started their business with 'mortgages for landlords' which is well-known as 'buy-to-let mortgages'. The loan amount for this purpose has started from £50,000 to £1.5 million and the loan to value ratio is up to 60%. During April, 2014, the State Bank of India has launched three exclusive digital banking services for the ease of their customers. These facilities are (i) TAB banking at the customer door step for opening Savings bank account, (ii) TAB banking at the customer door step for Home Loan applicants, and (iii) e-KYC through which the customers can submit the required documents online. On April 1, 2017, the State Bank of India had merged with its five associate banks. These five associate banks are State Bank of Bikaner and Jaipur, State Bank of Mysore, State Bank of Travancore, State Bank of Hyderabad and State Bank of Patiala. After this merger the market share of State Bank of India will increase 17% to 23%.

MERGER OF STATE BANK OF INDORE WITH STATE BANK OF INDIA ON 10TH AUGUST, 2010:

The State Bank of Indore was an Indian Government undertaking bank and the largest subsidiary of the State Bank of India. It was established in 1920 under a special covenant from Maharaja Tukoji Rao Holkar III (who was the ruler from 1903 to 1927), the former princely State of Indore as Bank of Indore. From the 1960 it became the largest subsidiary of the State Bank of India and named as the State Bank of Indore. During 1962 the bank had acquired the Bank of Dewas which was founded in 1936. Again in 1965, the State Bank of Indore had acquired Dewas Senior Bank which was established in 1936. The Ministry of Finance had approved this merger on 23rd March, 2011, which had done in 'Public Interest'. The Ministry of State Finance had passed a separate bill for the subsidiary banks of the State Bank of India in 2010. The merger deal helped the State Bank of India to increase its customer base especially in Madhya Pradesh and Chhattisgarh. It also helped the State Bank to access the huge branch network of 14,000 of the State Bank of India in whole India as well as in abroad. In the financial year 2012-13, the advances of the State Bank of India had grown by 21% which was increased the financial performances of the acquirer bank.

[†] Fortune is an American business magazine. The publisher of this magazine is Time Inc. This magazine was founded by Henry Luce in 1929. It is well-known as the Fortune 500, which ranked companies based on their revenues as the information has published annually since 1955.

[‡] 'Eight Indian companies in Fortune 500 list' (7th July, 2014), The Economics Times.

OBJECTIVES:

- To find out whether the announcement of Merger and Acquisition creates any Abnormal Return during the selected Event Window in case of selected acquirer bank under Mean-Adjusted Return Model, OLS Market Model and Market-Adjusted Return Model.

HYPOTHESIZES:

1. H_0 = The Period prior to the Announcement of the Merger and Acquisition Shows a Positive Abnormal Stock Return under the three selected models of the Event Study i.e.

$$H_0 : \overline{AR}_{T-10toT-1} \neq 0$$

$$H_1 : \overline{AR}_{T-10toT-1} = 0$$

Where $\overline{AR}_{T-10toT-1}$ is the average daily Abnormal Return of the selected stocks for the 10 days before the event.

2. H_0 = The Announcement Day of the Event of Merger and Acquisition will not Engender Positive Abnormal Returns at the Announcement Day under the three selected models of the Event Study.

$$H_0 : AR_{T0} \neq 0$$

$$H_1 : AR_{T0} = 0$$

Where AR_{T0} is the Return on the particular selected Stocks on the Announcement Day of Merger and Acquisition.

3. H_0 = The Announcement Event of Merger and Acquisition will not Engender Positive Abnormal Returns during the Subsequent few Days under the three selected models of the Event Study.

$$H_0 : \overline{AR}_{T+1toT+10} \neq 0$$

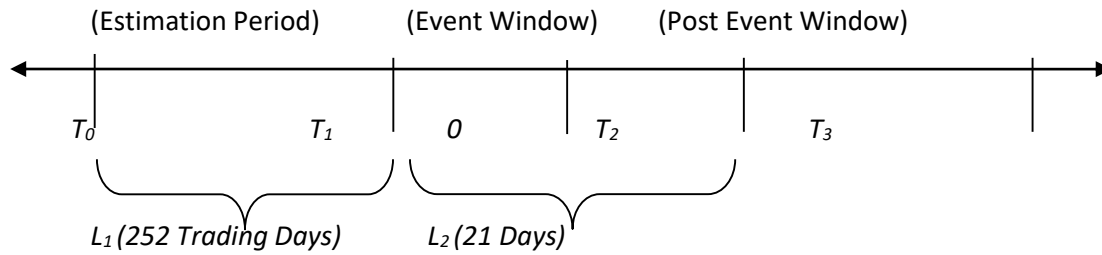
$$H_1 : \overline{AR}_{T+1toT+10} = 0$$

Where $\overline{AR}_{T+1toT+10}$ is the average daily Abnormal Return of the selected stocks during subsequent 10 days.

RESEARCH METHODOLOGY:

In this research three models of Event Study had been considered to find out the Abnormal Return and Cumulative Abnormal Return of stock of State Bank of India during the Event Period. The Merger announcement date had been considered as an Event Date. The Mean-Adjusted Model, OLS Market Model and Market-Adjusted Model had been considered to analyse the Abnormal

Return of stocks of the selected acquirer bank. To calculate Abnormal Return an Event Window of 21 days (including the Event Date) had been contemplated.



In case of Mean-Adjusted Return Model the Estimation Period of 252 trading days had been considered. The simple average return of selected security had been calculated based on the returns on stock during the estimation period. In this model the Abnormal Return has been calculated by subtracting simple average return of a stock from the normal return of that specific stock during the Event Period.

In OLS Market Model before calculating the Abnormal Return, the Expected Return of a specific stock has calculated during the specific Event Period. To calculate Expected Return, the Intercept or α and Slope or β had been calculated based on the normal return of specific stock along with the normal return on market index. In this research as a market index S&P BSE has been considered. In this model the Abnormal Return of the stock has been calculated by subtracting the Expected Return from the normal return of that specific stock during the Event Window. After calculating the Abnormal Return of the stock, the Cumulative Abnormal Return had also been calculated.

In Market-Adjusted Model, the Return on Market Index had been considered as a proxy of Expected Return. And, in this model the Abnormal Return had been calculated by deducting the Market Return from the Return of the specific stock during the Event Period.

Data Collections:

The required data to conduct the 'Event Study' has been collected from the website of the 'BSE-Sensex'. Some information's related to the share price of the acquirer bank has also been collected from various financial websites. To calculate intercept (α) and slope (β), 252 trading days have been considered. And, to calculate Abnormal Returns and Cumulative Abnormal Returns an Event Window of 21 trading days (10 days before and after the announcement day and also included the Event Day) have been considered. Apart from the above sources the other secondary information's have been collected from the various financial sources, the websites of the acquirer banks and also from the leading business newspapers.

RESEARCH RESULTS:**Table 1: AR and CAR in case of Merger of State Bank of Indore with State Bank of India as on 10th August, 2010:**

Event Window	OLS Market Model		Mean-Adjusted Return Model		Market-Adjusted Return Model	
	AR	CAR	AR	CAR	AR	CAR
-10	0.650%	0.650%	0.906%	0.906%	0.766%	0.766%
-9	2.189%	2.840%	1.293%	2.200%	2.137%	2.904%
-8	-0.19%	2.647%	-0.08%	2.116%	-0.098%	2.806%
-7	1.981%	4.628%	1.058%	3.174%	1.925%	4.731%
-6	1.631%	6.259%	2.908%	6.082%	1.896%	6.626%
-5	0.571%	6.830%	0.671%	6.753%	0.664%	7.291%
-4	-1.05%	5.777%	-0.50%	6.246%	-0.895%	6.396%
-3	2.224%	8.001%	1.819%	8.065%	2.243%	8.639%
-2	-0.87%	7.129%	-1.17%	6.890%	-0.837%	7.802%
-1	0.133%	7.262%	0.941%	7.831%	0.329%	8.132%
0	-0.29%	6.965%	-0.84%	6.984%	-0.299%	7.833%
1	-0.16%	6.800%	-1.24%	5.739%	-0.244%	7.589%
2	6.843%	13.643%	6.750%	12.489%	6.908%	14.497%
3	1.684%	15.328%	2.170%	14.659%	1.834%	16.331%
4	-0.33%	14.992%	-1.20%	13.457%	-0.383%	15.948%
5	-0.12%	14.869%	-0.25%	13.203%	-0.064%	15.884%
6	-1.52%	13.341%	-0.29%	12.909%	-1.269%	14.615%
7	-1.65%	11.684%	-0.50%	12.403%	-1.410%	13.205%
8	-0.51%	11.174%	-0.96%	11.438%	-0.498%	12.707%
9	1.290%	12.464%	1.220%	12.658%	1.358%	14.065%
10	1.423%	13.887%	0.684%	13.342%	1.394%	15.459%

1. H_0 = The Period prior to the Announcement of the Merger and Acquisition Shows a Positive Abnormal Stock Return under the three selected models of the Event Study.

Table2: Simple Average Abnormal Return of State Bank of India in pre-announcement period under Three selected models of Event Study:

Models	OLS Market Model	Mean-Adjusted Return Model	Market-Adjusted Return Model
Mean Value of Abnormal Return in pre-announcement period	0.0073	0.0078	0.0087

The above-stated table is showing the stature of the average value of the Abnormal Return under Three selected models of Event Study during the pre-announcement period. As per the table it is clear that the average value of the Abnormal Return during the pre-announcement period under these three models had shown a positive value. Hence, in this case the null hypothesis has been accepted as the average value of the Abnormal Return was positive under all three models during the pre-announcement period and the alternate hypothesis has been rejected.

- H_0 = The Announcement Day of the Event of Merger and Acquisition will not Engender Positive Abnormal Returns at the Announcement Day under the three selected models of the Event Study.**

Table3: Abnormal Return of State Bank of India on the Event Date under Three selected models of Event Study:

Models	OLS Market Model	Mean-Adjusted Return Model	Market-Adjusted Return Model
Abnormal Return on the Event Day	-0.297%	-0.847%	-0.299%

The above table is showing the position of Abnormal Return on the announcement day of the Merger of State Bank of Indore with State Bank of India. The Abnormal Return was negative on the Event Day under all these three models. Hence, again the null hypothesis has been accepted as the Abnormal Return was negative on the Event Day under all three models and the alternate hypothesis has been rejected.

- H_0 = The Announcement Event of Merger and Acquisition will not Engender Positive Abnormal Returns during the Subsequent few Days under the three selected models of the Event Study.**

Table 4: Average Abnormal Return of State Bank of India in the post-announcement period under Three selected models of Event Study:

Models	OLS Market Model	Mean-Adjusted Return Model	Market-Adjusted Return Model
Mean Value of Abnormal Return in post-announcement period	0.0069	0.0064	0.0076

The above-stated table is showing the stature of the mean value of the Abnormal Return under three models during post-announcement period of the Event Window. The mean values of the Abnormal Returns were positive under all these three models. Hence, the null hypothesis has been rejected as the mean value of the Abnormal Return was positive during the post-announcement period and the alternate hypothesis has been accepted.

CONCLUSIONS:

In this research paper the researcher had tried to find out whether the merger event of State Bank of Indore with State Bank of India had created any abnormal return for the shareholders of the acquirer bank or not on the event day. During the research the researcher had found that this merger event did not create any abnormal return for the shareholders on the event day. Though this merger event had created positive abnormal returns during both pre and post-merger announcement periods. And, under Market-Adjusted Model this event had created maximum cumulative abnormal return of 15.50% on 10th day after the merger announcement. So, it can be concluded that though this event had created positive abnormal return during pre and post-announcement periods but it failed to create any abnormal return on the event day.

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