Journal: Primax International Journal of Commerce and Management Research
ISSN: Print ISSN : 2321-3604 Online ISSN: 2321-3612 & Open Access
DOI: 10.17605/OSF.IO/FX9AU
PRIMAX IJCMR VOLUME NO.8, ISSUE NO. 2, JULY- SEPTEMBER 2020
Research Article

Reaction of Stock Market to Bank Merger and Acquisition Announcements in India

Dr.K.Karthikeyan*
Associate Professor of Commerce, Vivekananda College, Thiruvedakam, Madurai, Tamil Nadu, India.
V.Hema*
Guest Lecturer, Government Arts and Science College, Theni, Tamil Nadu, India.

*Corresponding authors | Received: 17/09/2020 | Accepted: 22/09/2020 | Published: 30/09/2020 |

Abstract :*The present study has intended to measure stock market relation and reaction to merger and acquisition announcements in banking sector of India. Stock market becomes instrumental and influential in all corporate events. The information contents of such market in the announcements have enforced significant impact on the shares of companies. Investors in stock market have achieved handsome return all around the globe during the past three decades as per the corporate events. The study has initiated to measure the stock market reaction to merger and acquisition announcement in the banking sector in India. Further, the study has intended to predict the strategies found in merger and acquisition announcement so as to outperform the stock market. The study is constructed with the sample of 10 banking merger in India and the banks should be listed in National Stock Exchange of India. Findings have indicated that investors achieve better gain from merger and acquisition announcement. Shareholders earned low level of return during the event window of 21 days prior to and 21 days after the merger and acquisition announcement. However, the merger and acquisition ensure returns in both pre and post merger period. During the 43-day window period, investors have earned only 2.92 percent of stock value. Investors can attain substantial ACAR of 4.18% if the shares of the acquiring bank are purchased five days prior to the announcement day.*
Key Words: Banks, Abnormal Returns, Cumulative Abnormal Returns, Merger and Acquisition, Pre and Post Announcement.

Introduction & Background of the Study

Competitive advantage has become keywords for corporate firms around the world due to the globalization of economic affairs. Mergers and acquisitions in the banking sector have been on the rise globally and in India in recent times. Against this backdrop of emerging global and Indian trends in the banking sector, this study focuses on India and illustrates key issues related to merger and acquisition in the banking sector. It also seeks to explain the motives behind some of the mergers and acquisitions that took place in post-liberal India. The only way to gain a competitive advantage domestically and internationally is through mergers and acquisitions, and full-fledged companies are looking forward to strategic acquisitions in India and abroad. The main objective is achieve economies of scale, combat unhealthy competition in this sector, and emerge as a competitive force to be reckoned with in the international economy. It is to Coordinate the Indian banking sector through mergers and acquisitions on business thinking and business strategies, a necessary prerequisite.

At present, the banking industry is one of the fastest growing industries in India. It has evolved from a slow-moving business to a dynamic one. The sector's growth rate is significant, so it has become a preferred banking target for international investors. The last two decades have seen a paradigm shift in the Indian banking industry. The banking sector in

India is growing at an astonishing rate. A relatively new dimension in the Indian banking sector is being accelerated through mergers and acquisitions. This will help banks achieve world-class status and provide greater value to shareholders. Mergers and acquisitions have become very fashionable for bank growth in recent decades. Additionally, shareholders can benefit from the merger, where it increases market share, provides an economy of scope and scale, reduces capital spending, and mitigates unnecessary business spending, while others provide assistance. Merger and acquisitions are an important entry point for foreign direct investment and generally motivate other foreign direct investment decisions, in addition to making better use of a company's assets, strategically enhancing its competitive advantages, and diversifying hazard.

Banks are planning to increase its performance by amalgamating various banks both in domestic and overseas destinations. Banks with better operational capabilities may seek to develop their operations globally to better utilize institutional-specific assets such as better products, expertise, management skills, marketing channels, quantitative or purposeful economies, and better corporate governance or incentives. Higher performance can be recognized through numerous synergies derived from organizational performance, scale economies, as well as acquaintance and technology sharing. Existing evidence indicates that wealth creation is temporary after mergers and acquisitions. Following the announcement of the merger and the acquisition, the stock's abnormal performance changes shortly thereafter. Stock market reactions to such announcements help predict price movement. The effect of such announcement seems to be a good sign of future success. The event study method evaluates a number of specific defined factors, such as how much abnormal return generates in response to specific factors. This system is based on the basic idea that stock prices represent the discounted value of the future profits of companies. Therefore, merger and acquisition can be considered as a measure of the discounted additional benefits that shareholders expect to receive as a result of the merger actions.

Problem Statement

There are several factors that affect the movement of stock prices and therefore its reflection into stock returns. One of them is the behavior of the movement of the share price expressed by the results of mergers and acquisitions. In this study, the results are tested to see if the announcement has any influence on bank income. Overall, the market should welcome more merger than the previous year. This should be associated with higher returns after the results are announced. The high returns after the announcement cannot be said to be due to merger decisions. To determine the impact of results on return, the impact of other factors on return must be separated. In response, the impact of other factors is taken from the index, which is nothing more than market performance in terms of return. The merger announcement is unique and specific to a bank.

In this way, the study has set up its focus on the bank merger announcement in India. Government of India has consolidated 10 public sector banks into 4 banks. The announcement of such mega merger was initiated by Hon’ble Union Finance Minister Nirmala Sitharaman in 30th August 2019. The merger would assist to manage the capital more effectively; the amalgamation of the public sector banks is relied on bad debts intensity and regional factors. The noteworthy is the fact that the government had injected capital worth more than Rs.55,000 crores into public sector banks. The government moves to reduce the number of public sector banks from the existing level of 21 to 12, it is an initiative to consolidate 3-4 global sized banks.

Table-1: List of Bank Merger

S. No	Acquirer Banks	Banks to be Merged
1.	Punjab National Bank	Oriental Bank of Commerce and United Bank of India
2.	Indian Bank	Allahabad Bank
3.	Canara Bank	Syndicate Bank
4.	Union Bank of India	Andhra Bank and Corporation Bank

(Source: Primary Data)

However, the public sector banks will be merged into four banks with effect from 1st April 2020. Customers including deposit holders of merging banks will be treated as customers of the banks, in which these banks have been merged. Thus, an investigation has been launched to find out whether the announcement of the bank merger has any influence on the performance of the shares. To scrutinize the impact of merger announcements on the market, the impact of other factors is eliminated, so the term is limited to 44 days and earnings are calculated for 43 days. In this study, merger announcement is considered an event. The study was initiated to measure the merchant notice buyer and the share price of the affiliated bank. This study aims to use event study methodology to examine whether there is information or information within the public domain. In addition, it has planned to compare stock prices before the merger was announced and after the stock prices were announced. Examine the daily closing price of shares of all stocks it is before and after the announcement of the merger, and read the price of the shares of the merged company after the merger and acquisition.

Research Objectives

The study has been commenced with the following objectives:

1. To examine the behavior of stock returns around bank merger and acquisition announcements in India.
2. To predict any strategies found in bank merger and acquisition announcements could be used to outperform the market.

In this perspective, stock returns movement has been measured both in the pre merger and post merger period.

Literature Review

Rosen (2006) investigated to check whether there is any relation between the merger announcement date and the market reaction.

Narayan (2011) has conducted a comprehensive study on mergers and acquisitions in Indian Scenario. It analyzed the trend for both pre liberalisation era as well as post liberalisation era in Indian scenario. The study also covers impact of merger and acquisition on shareholder's wealth, tax implications and due diligence practices in merger and acquisition exercises.

Dilshad (2012) measured the efficiency of market with respect to announcements of mergers and acquisitions using an event study methodology. The study analyzed the effects of banks mergers and their announcements on the prices of stocks. Evidence here supports that significant cumulative abnormal returns were short lived for the acquirers.

Timcy et al., (2015) have revealed that there is an impact on the shareholder's wealth and change in the daily stock returns due to the announcement of merger dates using the event study technique.

Jaffe et al. (2015) have revealed that merger on a whole is a strategy for value creation and a way of intensifying competition.

Lebedev et al., (2015) revealed that there existed a positive relation between the announcement dates of the merger and its changes on the stock price performance of the firms merged.

Srivastava (2016) has concluded that though merger gives rise to synergy power to both the companies, however, it appears that it has lots of negative impact on the acquiring firm.

Yen & Andre (2019) have revealed that that better governance quality of targets nation compared with that of acquirers nation is not valued by the market investors but significantly lead to the better long-term operating performance.

Research Methodology

The study has considered the merger of ten commercial banks into four banks. The announcement was made in 30th August of 2019 by Hon'ble Finance Minister of India. The study has also paid an effort to calculate stock returns that are based on sample 10 banks, which is listed in the National Stock Exchange. The data consists of daily returns for the 10 banks over the 31-day window period. The study has used three basic time series data for analysis. It consists of date of merger and acquisition announcement for the entire sample period, daily closing prices of stock for the period [-21, to +21] in relation to each merger and acquisition announcement, and corresponding period value of the NSE Nifty Index in the [-21, to +21] time window for each merger and acquisition announcement day of every stock. Information regarding the announcement of merger and acquisition has been collected from the respective company's website, Business Line and Economic Times newspapers. Daily stock prices are collected from the NSE websites along with the Nifty values for such period.

The sample selection is based on two active factors that is, availability of merger and acquisition announcement for the sample period, and frequent and active stock trading of the bank in the stock exchange. The study collected 10 bank samples and 21 days prior to and after merger and acquisition announcements. The results reveal daily abnormal return gets a pick 21 days before the merger and acquisition announcement, and 21 days after the merger and acquisition announcements. So as to measure the impact of merger and acquisition announcement on stock returns of acquiring banks, the study covers two constructs, that is, Market-Adjusted Abnormal Returns (MARs) and Cumulative Abnormal Returns (CARs) during pre-announcement and post announcement period. MARs point out the relative daily percentage of stock price change in the merged banks compared to the change in average market price. The study has used Nifty index as the proxy of market return. AAR is calculated as follows:

$MAR_{it} = R_{it} - R_{mt}$

Where,

MAR_{it}- The market-adjusted abnormal return for stock i over time period t.

R_{it} - The time t returns on stock i, calculated as $(P_{it} - P_{it-1})/P_{it-1}$.

P_{it} - The market closing price of stock i on day t.

P_{it-1} - The market closing price of stock i on day t-1.

R_{mt} - The time t return on the Nifty index calculated as $(N_t - N_{t-1})/N_{t-1}$.

N_{it} - The market return on day t.

N_{t-1} - The market return on day t-1.

However, the daily market-adjusted abnormal return (MAR) reveals the change in individual bank stock's price because of the merger and acquisition announcements. As the percentage change in Nifty index is subtracted, the residue provides the chaotic portion of the value change, which is particular to that individual stock significant from its merger and acquisition announcement. MAR is calculated over a period starting from –21 days to +21 days relative to the merger and acquisition announcement day (0 day). The next portion is cumulative abnormal returns (CAR), which measures the security's total return over a time period starting from the pre-announcement of merger and acquisition to the post-merger and acquisition announcement including the announcement day. This study covers 31-day window period starting from -21 day to +21 day relating to the merger and acquisition announcement day (0 day). CAR has been computed in the following way.

$$CAR_t = \sum_{t=1}^{t=j} MAR_t$$

Where,

CAR_t is cumulative abnormal return,

MAR_t is market-adjusted abnormal return,

j indicates the day -21 through days +21.

Eventually, this study has employed parametric test to determine the statistical implication of daily market adjusted average abnormal return of merger and acquisition disbursing stocks over the window period. The t-statistics are computed by using cross-sectional method by employing the standard deviation of abnormal returns of the portfolio of 10 banks involved in merger and acquisition activities. Moreover, the statistical significance of the cumulative abnormal returns is examined with the help of t-test. Therefore, event study methodology is used to assess the stock return behavior with respect to bank merger and acquisition announcements.

Results and Discussions

Stock Return Behavior as to Merger Announcements

The study has paid an effort to assess the stock return behavior as to merger and acquisition announcement. Stock price behavior of the acquiring bank before and after merger announcement has been measured. The results such as MARs, CARs and t-values are presented in table-2.

Table - 2: Stock Returns in Pre and Post Merger

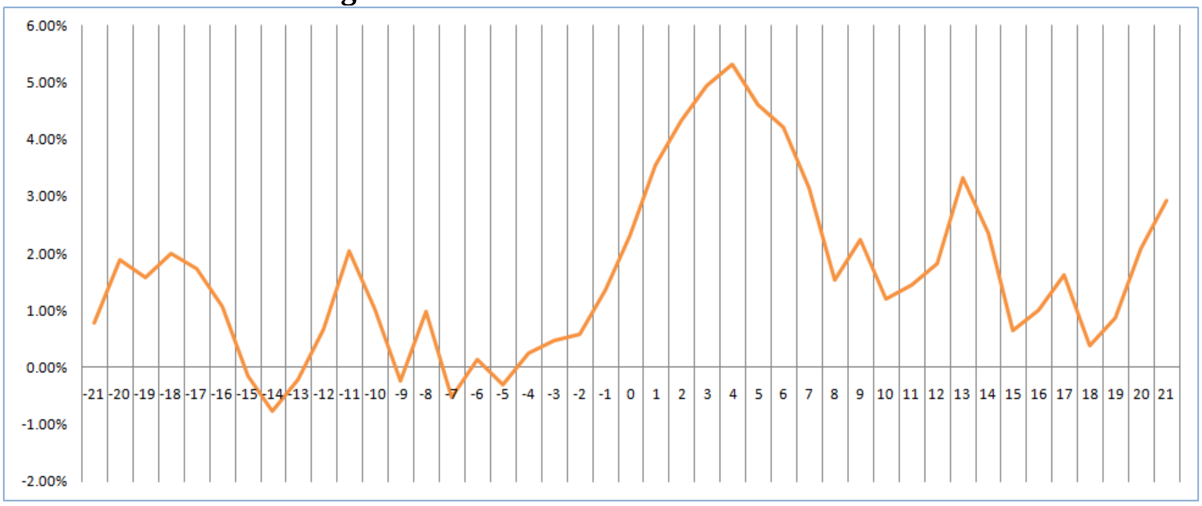
Pre-Merger and Event Day					Post Merger				
S. No	Event Window	MARs	CARs	t-stat	S. No	Event Window	MARs	CARs	t-stat
1	-21	0.77%	0.77%	2.17	23	+1	1.23%	3.54%	1.17
2	-20	1.12%	1.89%	3.23	24	+2	0.79%	4.33%	2.57
3	-19	-0.32%	1.57%	3.57	25	+3	0.62%	4.95%	1.51
4	-18	0.42%	1.99%	2.47	26	+4	0.37%	5.32%	0.54
5	-17	-0.25%	1.74%	3.85	27	+5	-0.71%	4.61%	2.74
6	-16	-0.67%	1.07%	2.37	28	+6	-0.39%	4.22%	1.59
7	-15	-1.22%	-0.15%	-2.47	29	+7	-1.06%	3.16%	0.34
8	-14	-0.62%	-0.77%	-1.52	30	+8	-1.63%	1.53%	2.78
9	-13	0.56%	-0.21%	-2.74	31	+9	0.71%	2.24%	1.54
10	-12	0.89%	0.68%	1.28	32	+10	-1.03%	1.21%	3.21
11	-11	1.36%	2.04%	1.68	33	+11	0.24%	1.45%	2.68
12	-10	-1.01%	1.03%	2.23	34	+12	0.37%	1.82%	1.54
13	-9	-1.26%	-0.23%	-1.20	35	+13	1.51%	3.33%	0.58
14	-8	1.22%	0.99%	1.25	36	+14	-0.98%	2.35%	1.54
15	-7	-1.52%	-0.53%	-0.87	37	+15	-1.71%	0.64%	1.23
16	-6	0.66%	0.13%	2.44	38	+16	0.37%	1.01%	1.44
17	-5	-0.44%	-0.31%	-1.07	39	+17	0.62%	1.63%	2.41
18	-4	0.56%	0.25%	1.75	40	+18	-1.24%	0.39%	2.16
19	-3	0.21%	0.46%	1.62	41	+19	0.48%	0.87%	2.72
20	-2	0.12%	0.58%	1.45	42	+20	1.22%	2.09%	3.28
21	-1	0.78%	1.36%	1.32	43	+21	0.83%	2.92%	0.55
22	0	0.95%	2.31%	2.26					

Table-2 reveals that the average daily market adjusted abnormal returns on the day of the merger and acquisition announcement was only 0.95 per cent, which is not statistically significant. It can be confirmed from the analysis that the information content of the bank's merger and acquisition announcement is often leaked to the market a few days before the bank's announcement. Therefore, this trend demonstrates that the merger and acquisition announcement usually does not bring useful information to market participants on the day of the event. On the event day, it is offered low return on such day. Moreover, it can be confirmed that the market adjusted abnormal return for -11th and -8th days are 1.36% and 1.22% respectively. It is obvious that the market is operating before the actual announcement of the merger and acquisition. The market for merger and acquisition announcement on the day of the event coincides with the informative content of the merger and acquisition announcements. If the alleged merger and acquisition announcement exceeds the participant's expectations, the market reaction to that particular project follows an improvement.

Prior to merger and acquisition announcement, highest MAR found in day -11, and then the percentage return on all other days is less than that on the day -11. Hence, it is clear from above table, the stock market reacts a few days before the announcement of merger and acquisition is made. The day following the merger and acquisition announcement, the market generated a return of 1.23%, 0.79%, and 0.62% in the subsequent day to the event day. However, it generated considerable positive income to the market participants. During the post announcement periods, all MARs are insignificant except those on day +7, and +12. It can be evident that stock market is always influenced by both flow of information and investment. During the 43-day window period, the market gets affected by several macro-economic information and money supply forces from the domestic and foreign institutional investment. Hence, the merger and acquisition announcement event is supported by several adverse effects which are not incorporated under this study. It is very hard to make superior return by taking this announcement information. By taking CAR for that 43-day window period, considerable return found in the day -5 prior to the merger and acquisition announcement.

In the post announcement period, the investors may harvest their funds in the stock market during the first 5 days after the announcement of merger and acquisition. Although the result tends to suggest that investors may have positively reacted to the merger and acquisition announcement, the evidence seemed to gain some value from the merger and acquisition announcements. This study shows that investors earn more value in the post announcement period that the return gained in the pre-announcement period. The pattern on cumulative abnormal return is presented in figure-1.

Figure - 1: Cumulative Abnormal Returns



Strategies to Outperform Market

Cumulative abnormal returns over various event windows are calculated so as to predict the important periods for making investment decisions based on the merger and acquisition announcements. Average cumulative abnormal returns are calculated to find the strategies to make investment decisions. Accordingly, the results are presented in table-3.

Table - 3: CAR and t-values

Event Window	Days	ACARs	t-statistic
(–21, -2)	20 days	0.65%	1.68
(–5, 0)	6 days	0.78%	0.95
(–1, 0)	2 days	1.84%	2.58
(0, 0)	1 day	2.31%	1.42
(0, +1)	2 days	2.93%	1.27
(0, +5)	6 days	4.18%	2.91
(+21, +2)	20 days	2.51%	3.86
(–1, +1)	3 days	2.40%	1.57
(–2, +2)	5 days	2.04%	0.81
(–5, +5)	11 days	2.07%	3.03
(–10, +10)	21 days	1.96%	2.76
(–15, +15)	31 days	1.69%	0.89
(–21, +21)	43 days	1.63%	1.68

Source: Compiled data

Table-3 reveals the cumulative returns in different event windows. During the pre-announcement event windows (–21, –2) and (–5, 0), the average cumulative abnormal returns are 0.65% and 0.78% respectively; these values are quite impressive. Furthermore, the ACAR values are found as 1.84%, 2.31% and 2.93% for the event window (–1, 0), (0, 0), and (0, +1) respectively. The ACAR is maximum (4.18%) and significant for window (0, +5), making it the most important event window. Furthermore, the ACAR values of 0.92%, 0.89%, 0.87%, 1.07%, 0.84% and 0.53% for the event window (+15, +2), (–2, +2), (–5, +5), (–10, +10), and (–15, +15), respectively, signify that the short-term impact of merger and acquisition announcements is remarkable for the investors. The results across the different windows are significant at 5 per cent. However, the positive ARs do not sustain as indicated by the negative ACAR during the post-event window (+2, +20). The results indicate that the earlier the investor trades, the more he gains. Therefore, the ACAR values of 0.86% on five days before the announcement, 0.64% on one day before the announcement, 0.85% on the announcement day, 1.12% on one day after the announcement, and 1.25% on five days after the announcement. It indicates that an investor can gain a substantial ACAR of 1.25% if the shares of the acquiring company are purchased five day prior to the announcement day. The event windows such as (–5, 0), (–1, 0), (0, 0), (0, +1), (0, +5) are the ideal for investment. An investor can easily outperform the stock market during these event window periods.

Conclusion

The main purpose of mergers and acquisitions in the banking sector is to succeed competition and protect existing markets in the country. Merger and acquisitions in general have their pros and cons. But the connections are good for the growth and development of the country only when they do not lead to competitive issues. Merger enhances the competitive advantage of the industry to compete in the global market, but links reduce the industry because the number of companies is reduced. Merger assists banks to strengthen their financial base, to access tax breaks and access cash resources directly. If banks have priority to reduce capacity in the domestic market, further consolidation in the domestic market is needed. The findings underscore the market value of stock returns once the merger is announced. It is not true that link announcements provide a profitable guide on when to invest or improve the return ratio of a portfolio. The study has examined the abnormal returns from the announcement of merger and acquisition during the pre and post-announcement period. The merger and acquisition peak yield tranche saw the largest negative abnormal returns in the lead-up to the announcement. Investors experienced few abnormal returns on the day of the merger and acquisition announcement. In the post-announcement period, investors saw little return on their investment. The move of merger and acquisition is disposable income for shareholders, but it also reduces the investment resources of companies. The study designates that investors will not benefit from the merger and acquisition announcement. During the 43-day window period, investors have earned only 2.92 percent of stock value. Investors can attain substantial ACAR of 4.18% if the shares of the acquiring bank are purchased five day prior to the announcement day.

References

1. Rosen, R.J. (2006). Merger momentum and investor sentiment: the stock market reaction to merger announcements. The Journal of Business, 79(2), 987-1017.
2. Narayan, K.R. (2011). Mergers, acquisitions and corporate restructuring: strategies and practices. International Book House, New Delhi, 48-56.
3. Dilshad, M.N. (2013). Profitability analysis of mergers and acquisitions: an event study approach. Business and Economic Research, 3(1), 32-45.
4. Jaffe, J., Jindra, J., Pedersen, D. & Voetmann, T. (2015). Returns to acquirers of public and subsidiary targets. Journal of Corporate Finance, 31(1), 246-270. https://doi.org/10.1016/j.jcorpfin.2015.02.005
5. Lebedev, S., Peng, M.W., Xie, E. & Stevens, C.E. (2015). Mergers and acquisitions in and out of emerging economies. Journal of World Business, 50(4), 651-662.
6. Timcy, S., Neena, S. & Kaushik, K.P. (2015). Impact of merger and acquisition announcement on shareholders' wealth an empirical study using event study methodology. Delhi Business Review 16(2), 88-97.
7. Srivastava, A. (2016). Opportunities and threats of mega merger: A case study of Sun Pharmaceuticals and Ranbaxy Laboratories. International Journal of Commerce and Management Research, 2(8), 112-115.
8. Yen, T. & Andre, P. (2019). Market reaction to the effect of corporate social responsibility on mergers and acquisitions: evidence on emerging markets. The Quarterly Review of Economics and Finance, 71, 114-131.