Impact of the Acquisition Announcement by State Bank of India of its Associates on Shareholders' Wealth: An Event Study

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Abstract

Mergers and acquisitions have always been a strategic move among banks in India and across the world for growth. State Bank of India (SBI), being the largest bank of India has undertaken a number of acquisitions from time to time. The long proposed idea of acquisition of the five associate banks of State Bank of India (SBI), namely State Bank of Travancore, State Bank of Bikaner and Jaipur, State Bank of Mysore, State Bank of Hyderabad and State Bank of Patiala, was announced on 17 May,2016 and steps to initiate the process have been kick started. This study analyzes the impact on the shareholders' wealth creation by calculating the abnormal return on the shares of SBI using a 27 day [-13, 0, +13] day and 7 [-3, 0, +3] event period. The result shows that there has not been any significant impact of the announcement on the shareholders' abnormal return, showing that the market price movements are not only affected by the current information, but also relates to several past information and future expectations of the shareholders. However, a fall in Cumulative Abnormal Return (CAR) has been noted which might be because of the fear of the failure of the acquisition in the minds of the shareholders.

Introduction

Mergers and acquisitions have always been a strategic move among banks in India and across the world for growth. One of the major reasons leading to M&A is to increase the size of the bank in terms of assets, geographical diversification, customer base, products, etc. which in turn would help in reaping the benefits of economies of scale. Despite having a strong RBI policy and banking regulations, a number of steps still need to be taken to improve financial inclusion in India. No bank in India features among the top 50 banks of the world in terms of size so far.

The Indian banking industry has been undergoing the process of consolidation since 1961. However, the thrust in the merger and acquisition activity was felt with the Narasimham Committee (1991) emphasizing on the consolidation of the Indian commercial banks to make its size comparable with those of globally active banks. Deregulation of financial market, globalization of market, liberalization policies, economic reforms, BASEL-II implementation, increased competition from foreign competitors, cross border expansion, etc. have been some of the major contributors towards the growth of merger and acquisition activities in the banking sector in India.

In the financial budget announced for the FY 2015-16, the government provided a clear direction for bank mergers and opened path for the long thought over acquisition of the associate banks of SBI by State Bank of India (SBI). A proposal seeking an ‘in principle’ approval to start negotiations with the five associate banks, State Bank of Travancore, State Bank Bikaner and Jaipur, State Bank of Mysore, State Bank of Hyderabad and State Bank of Patiala, was announced on 17 May and steps to initiate the process have been kick started by State Bank of India. The proposal would be sent to the Central government and the entire process of acquisition is expected to be completed by the end of the current financial year.

State Bank of India is the largest bank in India and a fortune 500 company with a distribution network totalling 13,542 branches and 20,084 ATMs and having assets worth Rs.12,000 bn on March 2011. It has a strong international presence with 158 offices across 32 countries which contribute about 16% of its revenue. The acquisition would end up the combined entity holding of one-fourth share of the deposit and loan market, as the market share of SBI would increase from 17 per cent to 22.523 percent. The branch network of SBI is supposed to increase from 15,000 to more than 21,000.

Wealth creation means the value of the company as perceived by the shareholders or investors. Efficient market hypothesis assumes investors are enlightened enough and well informed about the activities and incidences which go on in the market and hence the impact of any information or announcement is automatically reflected immediately in the share prices. Considering the recent step taken by the State Bank of India to acquire its five associates to materialise its long thought over plan of acquisition, the present study would examine the impact of such announcement on the share prices and wealth creation of the shareholders.

Literature Review

Ekta, March 2012, made a study on the impact of merger announcement of the State Bank of India, State Bank of Saurashtra and State Bank of Indore on August 13, 2008 and August 27, 2010 respectively and finds that there have been significant abnormal returns around the event date of the acquisition announcement for the State Bank of Saurashtra. However, the abnormal return has been much lesser during the acquisition of State Bank of Indore.

Smita Meena, Pushpender Kumar made a study on the Mergers and Acquisitions (M&A’s) made in Indian banking sector and compares pre and post merger financial performance of merged banks with the help of financial parameters like, Net Profit margin, operating Profit margin, Return on Capital Employed, Return on Equity, earnings per share, capital adequacy ratio, dividend per share, etc. Though he concludes that mergers have so far been successful in Indian banking system to some extent, he also suggests that acquisition of distressed banks by successful banks leads to adverse effect on the asset quality of stronger banks.

Singla, Saini and Sharma, 2012, studied the impact of cross border mergers announcement on the acquiring companies shareholders’ wealth using a 29 day event window on a sample of

15 firms in India that have experienced cross-border mergers and acquisitions from 2005 to 2008, and concluded that the shareholders of acquirer firms have witnessed a meagre positive cumulative average abnormal return during the post-merger announcement period.

Agrawal, Krishnakuma, 2015, made a study on the stock market reactions of acquisition announcements on the rivals of the target firm in Indian market and made a five day and three day event study to arrive at a conclusion that on an overall basis the stock prices of listed rivals of targets do not show any significant upward or downward movement at the time of acquisition announcements.

Methodology

An event window of 27 days consisting of the date of announcement, 13 days pre and 13 days post announcement date has been selected. This would help us analyze the impact of the decision by SBI to acquire its subsidiaries on the share prices during the study period. We have also used a short event window consisting of 7 days (-3,0,+3), i.e. 3 days of immediately preceding the merger announcement date, the date of merger announcement and 3 days post announcement, to remove the effect of any other announcements or news from SBI which might have come thereafter.

Thus, our analysis is based on the following hypothesis:

While using 27 days event window, we have used the hypothesis *Ho (1)*:

Null hypothesis:

Ho (1): There is no significant impact on acquiring companies' shareholder wealth due to the announcement of merger/acquisition activity,

Alternate hypothesis:

H_1 (1): There is significant impact on acquiring companies' shareholder wealth due to the announcement of merger/acquisition activity

While using 7 days event window, we used the null hypothesis Ho (2):

Ho (2): There is no significant impact on acquiring companies' shareholder wealth due to the announcement of merger/acquisition activity

Alternate hypothesis:

H_1 (2): There is significant impact on acquiring companies' shareholder wealth due to the announcement of merger/acquisition activity

The expected return on the stock for each day was calculated using the CAPM model using the following formula:

$E(R_t) = R_f + \beta(R_m-R_f)$

Where $E(R_t)$ is the expected return on the stock on day t
R_f = Return on risk free security for day t
R_m = Market Return for day t
β = Stock beta which measures the volatility of stock return with market return

The risk free return has been taken as the rate of return on 10-Year India Government Bond. NIFTY50 was used as the index to measure market return and the return for 180 days was selected prior to the announcement date to calculate stock beta.

Further, the abnormal return is calculated using the formula:

$AR_t = R_t – E(R_t)$,
Where *t* = particular day relative to the event,
R_t is the actual return of the stock for the day t,
AR_t = Abnormal return of the security for day t

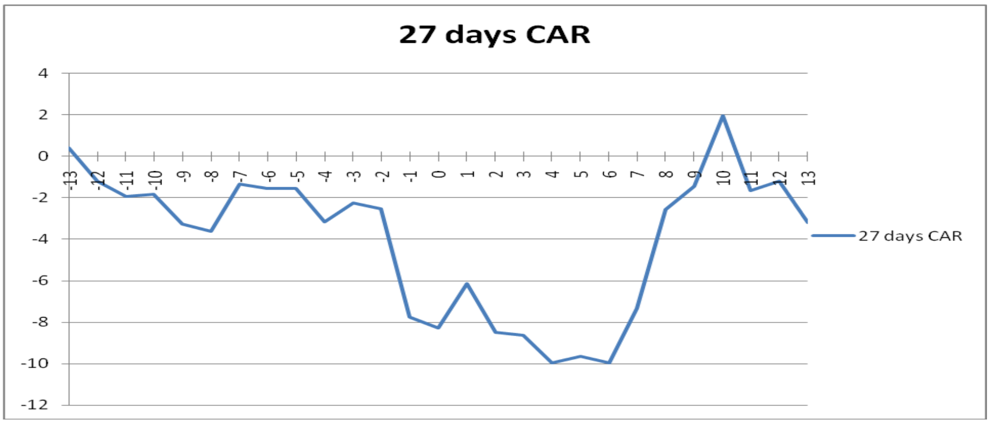
The abnormal return on the share price of SBI in this duration was studied and then t- test has been applied to test the significance of abnormal return using 27 days and 7 days event window. The cumulative abnormal return on the stocks has also been calculated during the event window.

Analysis and Findings

Test Result of 7 days event window [-3, 0, +3]

The cumulative abnormal return for 27 [+13, 0, -13] days event window have been graphically shown below:

Fig 1.1



Note: 17 May, is the date of announcement of the acquisition decision and is represented as 0.

The 27 day Cumulative abnormal return shows that though there has been an increase in the CAR immediately succeeding the date of announcement, however, the CAR kept falling from the second day post declaration of the acquisition news. This shows that there has not been much positive impact of the acquisition announcement on the shareholders' return. It should also be noted that the CAR has been increasing again since the 7^{th} day post announcement of the acquisition deal, which might be due to the declaration of quarterly result and dividend payment by SBI on 27th May and prior expectation of the shareholder relating to that.

We further applied an *f-test* at 95% level of significance on the abnormal return calculated for the preceding 13 days and post 13 days of the announcement to check if the returns have equal or unequal variances. For this, we have propounded the following hypothesis:

Null hypothesis:
H_0 (3): The abnormal returns during post and pre-merger announcement dates have unequal variances.

Alternate hypothesis:
H_1 (3): The abnormal returns during post and pre-merger announcement dates have equal variances

Table 1.2

F-Test Two-Sample for Variances [26 days, i.e (-13,+13)days]		
	Variable 1	*Variable 2*
Mean	-0.597170029	0.39230597
Variance	3.080616976	5.84001687
Observations	13	13
df	12	12
F	0.527501383	
P(F<=f) one-tail	0.140926511	
F Critical one-tail	0.372212531	

The result of the test showed that the *p-value* was more than 0.05 leading to the acceptance of null hypothesis. Thus, the abnormal returns across the pre and post-merger announcement dates have unequal variances.

Subsequently, we have applied the t-test to check if there had been any significant difference in the abnormal returns on the SBI stock during these two periods.

For this, we have taken the following hypothesis:

Null hypothesis:
Ho (1): There is no significant impact on acquiring companies' shareholder wealth due to the announcement of acquisition,

Alternative hypothesis:
H1 (1): *There is significant impact on acquiring companies' shareholder wealth due to the announcement of acquisition,*

The result of the t-test is shown below:

Table 1.3

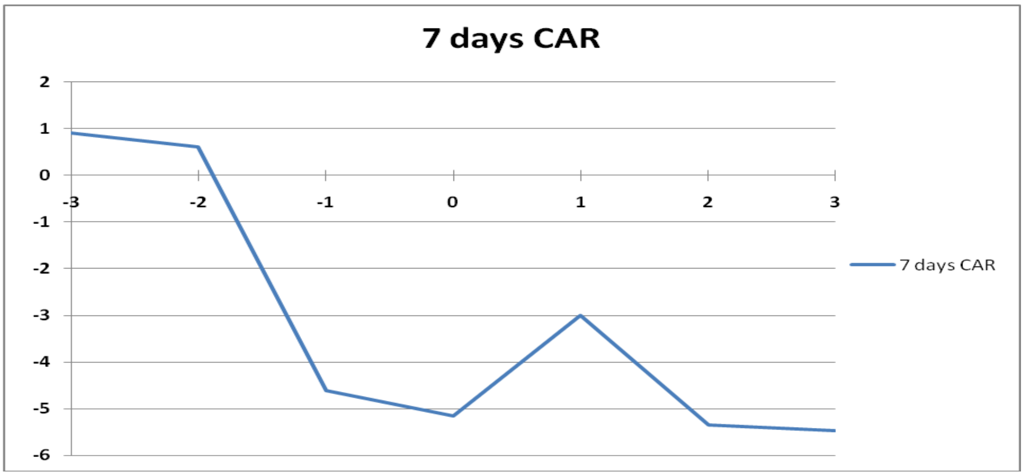
t-Test: Two-Sample Assuming Unequal Variances		
	Variable 1	*Variable 2*
Mean	-0.597170029	0.39230597
Variance	3.080616976	5.84001687
Observations	13	13
Hypothesized Mean Difference	0	
df	22	
t Stat	-1.194480557	
P(T<=t) two-tail	0.245009782	
t Critical two-tail	2.073873058	

In the above analysis, the *p-value*, being more than 0.05, leads to acceptance of null hypothesis and rejection of alternative hypothesis leading to the conclusion that there is no significant abnormal return on SBI stocks over the 13 days pre and post announcement of the acquisition of the associate banks of SBI.

Test Result of 7 days event window [-3, 0, +3]

Cumulative Abnormal Return has been calculated and shown graphically as below:

Fig 2.1



Note: Here, 17th May 2016 is the announcement date and is represented as 0.

There is a fall in 7 day Cumulative Abnormal Return post acquisition announcement showing again that the shareholders' do not have a very positive outlook towards the acquisition.

We further applied an f-test on the abnormal return at 95% level of significance on the preceding 3 days and post 3 days of announcement to check if the returns have equal or unequal variances. For this, we have propounded the following hypothesis:

Null hypothesis:
H_0 (4) – The abnormal returns during post and pre-merger announcement dates have unequal variances.

Alternative hypothesis

H_1 (4) - The abnormal returns during post and pre-merger announcement dates have equal variances

Table 1.2 shows the result of the *f-test*

Table 1.2
F-Test Two-Sample for Variances [6 days, i.e. (-3,+3) days]

	Variable 1	*Variable 2*
Mean	-1.537043458	-0.1075183
Variance	10.58231456	5.09745295
Observations	3	3
df	2	2
F	2.076000437	
P(F<=f) one-tail	0.325097483	
F Critical one-tail	19	

The results of the test shows that the *p-value* was more than 0.05 leading to the acceptance of null hypothesis and rejection of alternate hypothesis. Thus, the abnormal returns across the pre and post-merger announcement have unequal variances.

Subsequently, we have applied the t-test to check if there had been any significant difference in the abnormal returns on the SBI stock during these two periods of pre-announcement and post announcement acquisition information.

For this, we have taken the following hypothesis:

H_o *(2): There is no significant impact on acquiring companies' shareholders' wealth due to the acquisition announcement,*

H_1 (2): *There is significant impact on acquiring companies' shareholders' wealth due to the acquisition announcement,*

The result of the t-test is shown below:

Table 1.3

t-Test: Two-Sample Assuming Unequal Variances		
	Variable 1	*Variable 2*
Mean	-1.537043458	-0.1075183
Variance	10.58231456	5.09745295
Observations	3	3
Hypothesized Mean Difference	0	
df	4	
t Stat	-0.62529164	
P(T<=t) two-tail	0.558033942	
t Critical two-tail	2.776445105	

In the above analysis too, the *p-value*, being more than 0.05, leads to the rejection of null hypothesis and acceptance of alternate hypothesis, thus leading to the conclusion that there is no significant abnormal return on SBI stocks over the 3 days pre and post announcement of the acquisition of the associate banks of SBI.

Interpretation

Both the study of the 27 [-13,0,+13] days event window and 7 [-3,0,+3] days event window shows that there had been no significant impact on the abnormal returns to the shareholders. While the share price and the cumulative abnormal return increased immediately the very next day of announcement, it kept on decreasing subsequently. Thus, there do not seem to be a positive impact of the acquisition decision in the minds of the investors and hence there is no immediate wealth creation of the shareholders as reflected from the abnormal returns on stocks of SBI.

The reason behind this might be the fear of the failure of the acquisition in the minds of the shareholders possibly due to the expected managerial difficulties post acquisition, the possibility of workers' union problem and resistance from them due to the fear of job loss in them. The difference in the pension calculation, which is 50% of the last drawn salary in associates for upto scale 3 employees, which is just 40% in SBI, might lead to dissatisfaction among the employees. Further, even the gratuity is based on the number of years of service in the associate banks while there is a cap on gratuity in SBI. Thus gratuity and pension bill problem is also a fear among the investors which makes them feel that the acquisition might not work.

Some of the other problems apparent in the acquisition process which have created doubts in minds of the shareholders regarding its success might be difficulties in managing the far off branches of the associates from the corporate centre of SBI, obvious questions of managing duplication of operations post acquisition, HR challenges, etc. which together have posed a number of doubts in the minds of the shareholders.

Discussion and Scope for Further Studies

Among the banks which are proposed to be acquired, all banks, except State bank of Patiala reported a net loss in the FY 2015-16. While State Bank of Bikaner and Jaipur showed a fair increase in profit by 9.49%, State Bank of Travancore too witnessed a growth in net profit, though with a small percentage of 0.66. State bank of Hyderabad and State Bank of Mysore, though reported a net profit for the year, but there had been a reduction in the net profit compared to the previous year by 19.15% and 12.46% respectively. The details of the net profit position of the associate banks proposed to be acquired have been tabulated below:

Table 3.1

PERFORMANCE OF ASSOCIATE BANKS

Name	FY 15 net profit (₹cr)	FY 16 net profit (₹cr)	% change (y-o-y)
State Bank of Bikaner & Jaipur	777	851	+9.49
State Bank of Hyderabad	1,317	1,065	-19.15
State Bank of Mysore	409	358	-12.46
State Bank of Patiala	362	-972	-
State Bank of Travancore	336	338	+0.66

Soures: SBI, associate banks

Thus, there are a lot of things to be taken care of which would ultimately decide whether there would be long term wealth creation post acquisition or not. Redundancies needs to be taken care of, provident fund liabilities leading to increased employee cost needs to be set off with the economies of scale and increase in operational efficiencies, and many other factors needs to be analyzed in details before forming an opinion on the failure or success of such acquisition decision. This study only analyzes a part of this acquisition decision and deals with the stock market reaction to this information and return to shareholders. Further study is required in details to analyze the factors that need to be considered to make the acquisition decision successful.

Conclusion

There has been no significant impact in the shareholders' wealth post announcement of the acquisition decision of its associates and steps initiated by SBI in this respect. In the short term event study window of 7 days, the result showed that while the share price and the cumulative abnormal return increased immediately the very next day of announcement, it kept on decreasing in subsequent days. The 27 days event window shows a broader aspect and there is a price increase and increase in abnormal returns thereby increasing the return to shareholders from the 7th day after the day of the acquisition announcement. This increase may be partly due to the declaration of quarterly result and dividend by SBI. Hence, the acquisition announcement has not lead to any significant impact on the wealth creation or gaining abnormal returns for the shareholders of State Bank of India, showing that the market price movements are not only affected by the current information, but also relates to several past information and future expectations of the shareholders.

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