A new Approach to Event Study Methodology to Evaluate and Measure the Impact of M&A Activity of Indian Banks on the wealth status of shareholders

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ABSTRACT

The event study methodology is extensively used to evaluate the impact of Merger & Acquisition activity on the wealth status of shareholders. This method, as shown in this paper, suffers from serious conceptual deficiencies. Consequently and more importantly it is likely to lead the researchers to arrive at erroneous inferences and conclusions defeating the very purpose of any research investigation.

In this paper, an attempt is made to develop a new approach to event study methodology which would be free from the conceptual deficiencies of the traditional method. With the help of a case study of merger & acquisition activity in the Indian banking industry during the last decade, it is pointed out that the conclusions under the traditional method and the new method could be totally different and even dichotomous.

Key words: _Mergers & Acquisitions; New Econometric Approach to Event-Study Methodology; Shareholder Wealth Status._

INTRODUCTION

Event-Study methodology has been extensively employed to capture the impact of M&A activity of corporations on the wealth status of shareholders. While the approach has remained in vogue in many of the M&A research studies attributable to its simplistic approach, we point out in our paper that the existing methodology suffers from severe limitations. Our paper thus aims to present a new approach to event studies which attempts to remove the deficiencies existing in the traditional approach. The new approach to event-studies has been applied on the Mergers & Acquisitions undertaken by Indian Banks in the last decade. Using the new approach to event-studies, the paper seeks to capture the impact of M&A activity of Indian Banks on shareholder wealth status. The objectives of the paper are;

a) To identify the deficiencies existing in the traditional Event-Study methodology;

b) To develop a New Approach to Event-Study Methodology capable of removing the deficiencies present in the traditional method;

c) To apply the New Approach to Event-Study on capturing the impact M&A activity of Indian Banks on shareholder wealth status to show how the inferences based on conceptually deficient traditional method could be possibly erroneous in comparison with those based on conceptually sound new methodology.

EXISTING APPROACH TO EVENT-STUDY METHOD:

One method extensively used in the analysis of the effect of merger is popularly known as event-study methodology (Brown & Warner, 1985). It involves the following steps:-

1) Regressing the relationship between the rate of earnings of the market index and the rate of earnings on the stocks of the acquiring (acquired) firm considering a clean period of say 60 to 90 days. A clean period is one with minimum of statistical noise and free from abnormal events causing fluctuations in the market and individual stock price data.

The typical simple regression function used for the purpose would be as follows:

$$E(R_{it}) = \alpha_j + \beta_j (R_{mt}) \tag{1}$$

where;

$E(R_{jt})$ = Expected return from security j at time t

α_j = Intercept of the equation for security j

β_j = Slope of the equation for security j

R_{mt} = Return on the market index for the actual day in the event period

2) Again, a period spreading approximately say 30 days prior to and 30 days after the day of the announcement of the merger is chosen. The rationale behind choosing a shorter event-window is to capture all the information content on stock prices surrounding the announcement period (Schoenberg, 2006). On the basis of the rate of earnings on the stock market index the above derived regression function is used to predict the expected returns for the stocks of the acquiring (acquired) firm.

3) Further, the actual rate of earnings for the stocks of the acquiring firm based on actual stock price data is calculated,

Daily return say for security j is computed in the following manner;

$$R_{jt} = \frac{Pjt - Pj(t-1)}{Pj(t-1)} \times 100 \tag{2}$$

where;

R_{jt} = Return from security j at time t expressed as a percentage

P_1 = Price of security j on day 1
P_2 = Price of security j on day 2

4) The predicted rate of return and the actual rate of return on stocks of acquiring firms are compared and "abnormal" rates of return are calculated to arrive at Average Abnormal returns for N firms on day t.

$$AR_{jt} = R_{jt} - E(R_{it}) \tag{3}$$

where;
AR_{jt} = Abnormal Return for security j at time t
R_{it} = Actual return on security j at time t
$E(R_{it})$ = Expected return on security j at time t

$$AAR_t = \frac{\sum_{j=1}^{N} AR_{jt}}{N} \tag{4}$$

where;

AAR_t = Average Abnormal Returns for N firms on day t

N = Number of sample firms

The average abnormal returns for N firms are cumulated over time to arrive at Cumulative Average Abnormal Returns (CAAR).

$$CAAR = \sum_{t=-20}^{T=+20} AAR_t \tag{5}$$

where;

CAAR = Cumulative Average Abnormal Returns
AAR_t = Average Abnormal Returns over time.

The sign of the CAAR is indicative of shareholder wealth impact. A positive CAAR implies that acquisition has impacted favorably while negative CAAR is implicit of unfavorable impact on shareholders' wealth. It is essential to test for the significance of CAAR so obtained.

5) CAAR is graphed to depict and evaluate the effect of merger on rate of earnings from shares of acquiring (acquired) corporation(s). Further, CAAR value is tested for its statistical significance using the t-statistic. The null hypothesis to be tested is

that the mean CAAR is '0'. Symbolically it may be stated as;

$$t = \frac{CAAR(t,T)}{[\sigma^2(t,T)]^{1/2}}$$

(Kothari & Warner, 2007)　　　　　　(6)

where,

CAAR is as given in Eq. (7) &

$$\sigma^2(t,T) = L\,\sigma^2(AAR_t)$$

$$L = T - t + 1$$

(t, T) = time period at the starting and ending of the event window

σ^2 = Variance of Average Abnormal Returns on day t (AAR$_t$)

LIMITATIONS OF THE EXISTING APPROACH OF EVENT-STUDY METHOD:

It is interesting to observe that the rate of return resulting from price fluctuations of individual securities can behave differently from the original movement of prices of the market.

We wish to point out that in spite of its extensive usage, the above method suffers from several severe implausibilities:-

1)A series of market price of shares (or market index), change in the price of shares (or market index) representing earnings on shares (or market index) and the rate of earnings on shares (or market index) are three different concepts. The time related behavior of these concepts, as shown in the following table and graphs, can be totally different and opposed to each other:-

Table 1 : Movement of Earnings and Rate of Earnings

Days	Share Prices ($)	Earnings due to price change ($)	Rate of earnings
0	500	-	
1	600	100	20.00%
2	680	80	13.33%
3	740	60	8.82%
4	780	40	5.41%
5	800	20	2.56%

Movement of Share Prices

Movement of Earnings
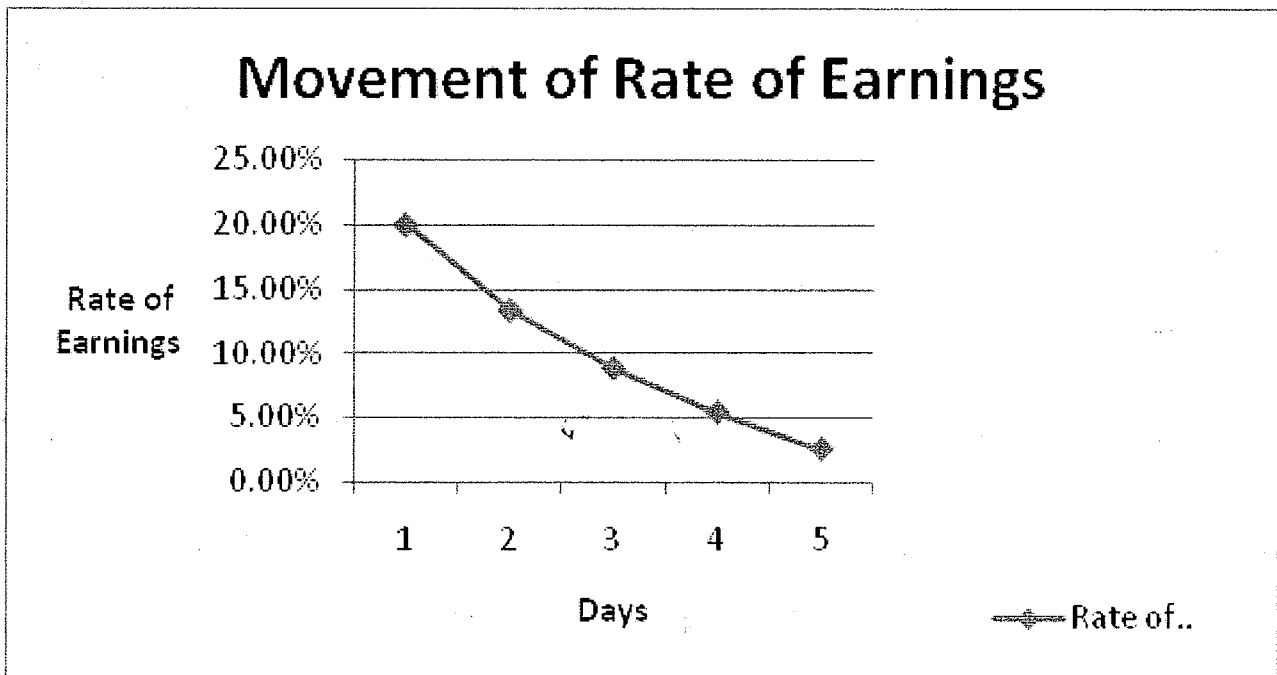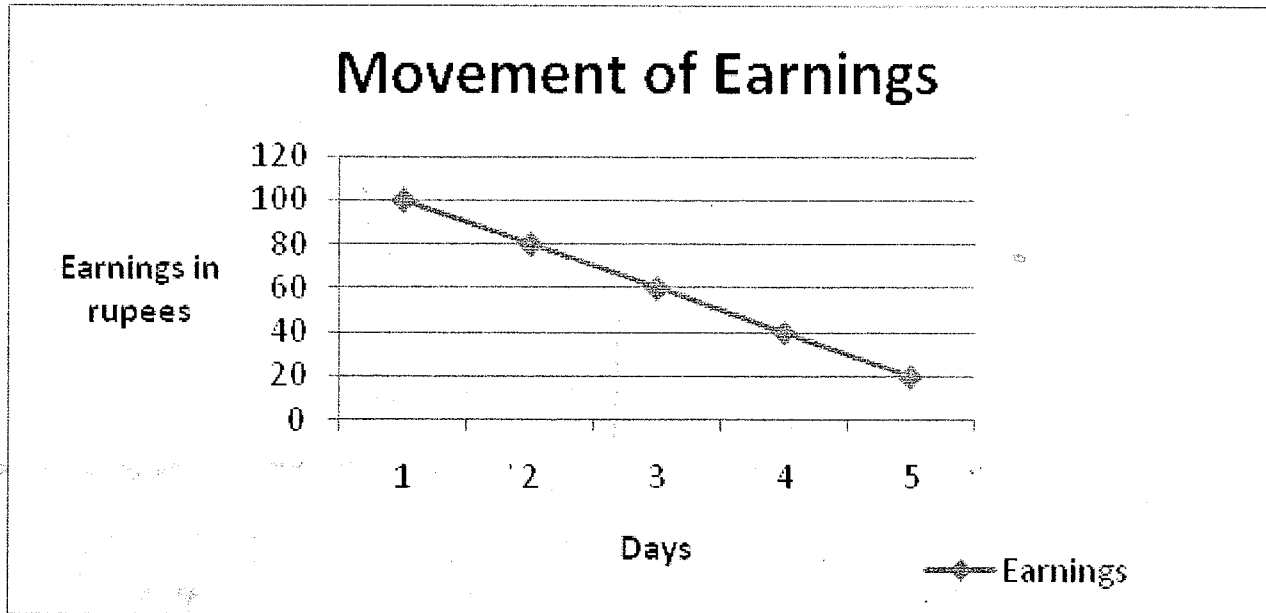

Movement of Rate of Earnings
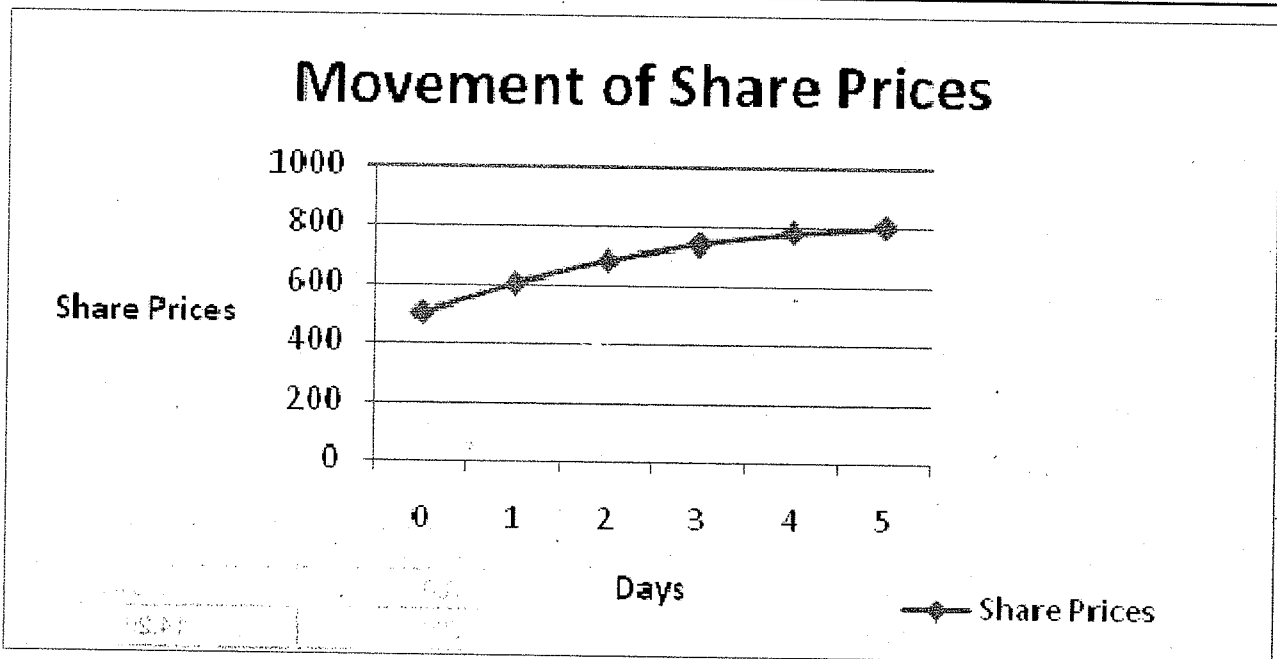
Table 2: Movement of Rate of Earnings on Index and Rate of Earnings on Share Prices

Day	Market Index	Rate of earnings on Index	Share Price	Rate of earnings on Share Price
0	10000	-	500	-
1	10100	1.00%	550	10.00%
2	10250	1.49%	600	9.09%
3	10450	1.95%	650	8.33%
4	10700	2.39%	700	7.69%
5	11000	2.80%	800	14.29%

It may be observed that while the share prices **increase** over time, the earnings on share prices and the rate of earnings on share prices continuously **decrease** over time. This represents a totally opposed behavior of different concepts.

1) It follows from the above that the statistical relationship between market index and share price need not be reflected and represented by the relationship between earnings on market index and share prices as depicted in the following table and graphs.

It is observed that the relationship between the market index and share price is "proportional" with coefficient of correlation= 0.99 as opposed to the relationship between rate of earnings on index and rate of earnings on share price which is "inverse" with coefficient of correlation = -0.99!!

The above discussions based on hypothetical data illustrate that even a totally dichotomous relationship is possible when we regress the relationship between the rate of earnings on market index and the rate of earnings on share prices of an individual firm as against the direct relationship between the market index and share price of an individual firm. Now, let us consider practical stock market data wherein we observe that a plausible direct relationship observed between market index and share price virtually disappears when we base our regressions on the rate of earnings on market index and rates of earnings on share prices of individual firms. Here, we have regressed the stock market data of the following two banks for a period of 200 days prior to merger

Movement of Share Price against Market Index
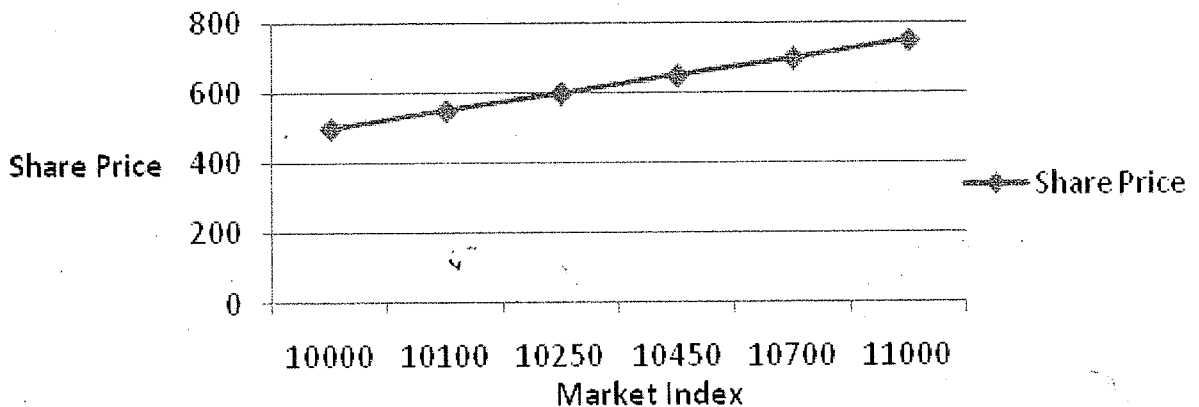
Movement of Rate of Earnings on Share Price against Rate of Earnings on Market Index
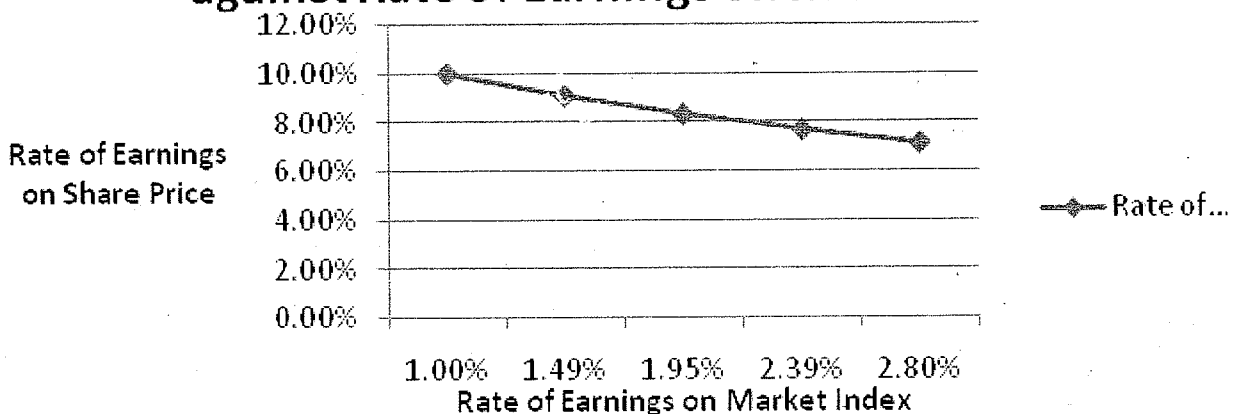
As already pointed out, it is obvious from the table that the plausible direct relationship between market index and share price is lost when we base the regression on "rates of return". This is primarily because the "return function" is the first derivative of the "price function" and again the "return function" is further modified to arrive at the "rate of return function" (by dividing the return by the share prices of previous day). Because the above stated values are different concepts, the original relationship observed between primary functions based on prices is lost in case of derivatives of the original functions representing rates of return. Probably, when we are regressing the relationship between "rates of return", we are looking for a relationship that may not exist!

Hence we propose a Modified Event-Study approach to calculate the Abnormal Returns on the basis of which the success or failure of a merger can be evaluated.

MODIFIED EVENT-STUDY APPROACH:

The steps underlying the Modified Event-Study approach are as follows:

1) A regression analysis is performed between the between the Market Index and the Share Price of the acquiring (acquired) firm over a clean period of say 200 days. Like the traditional approach, a clean period is one with minimum of statistical noise and free from abnormal events causing fluctuations in the market and individual stock price data.

Using the Ordinary Least Squares (OLS) Market Model, we make use of the following simple regression equation for computing the Expected Share Price over the event window period, given as;

$$E(P_{jt}) = a_j + bj(I_t) \qquad (7)$$

where;

$E(P_{jt})$ = Expected Price of security j at time t

a_j = intercept of the equation for security j

b_j = slope of the equation for security j

I_t = Market Index of share prices

2) Next, we measure the Abnormal Returns over the event-window comprising of say, 20 days before and after the merger or acquisition announcement date. The announcement day is designated as day '0'. Abnormal Returns are represented as;

$$AB(R_{jt}) = A(P_{jt}) - E(P_{jt}) \qquad (8)$$

Where;

$AB(R_{jt})$ = Abnormal Return for security j at time t

$A(P_{jt})$ = Actual Price of security j at time t

$E(P_{jt})$ = Expected Price of security j at time t

3) Once the Abnormal Returns are computed for all the firms across the event-window period, the Aggregate Average Abnormal Returns weighted by total number of common shares outstanding for each sample firm (AAAR) are computed. It may be represented using the equation given below;

$$AAAR = \frac{\sum_{j=1}^{J} \sum_{t=t_{min}}^{T_{max}} AB(Rjt)wj}{n} \qquad (9)$$

Table 3 : R^2 Value of Regression Functions

Banking Organization	Direct Regression between Market Index and Share Price	Regression between Rate of Return on Market Index and Rate of Return on Share Prices
Bank of Baroda	0.7026	0.0912
ICICI Bank	0.9537	0.3642

where;

AAAR = Aggregate Average Abnormal Return weighted by the total number of common shares outstanding for each sample firm

$AB(R_{jt})$ = Abnormal Return for security j at time t

w_j = Quantity of security j outstanding

n = number of days outstanding in the event window

4) The last step entails determining whether the mean AAAR is statistically significant and different from '0'. This can be found out using _student t-statistic_ as given below (Rad & Corhay, 2000)

$$t = \frac{\sqrt{T-(t-1)} * \text{AAAR}}{(\hat{s})} \qquad (10)$$

where;

T = ending time of the event window
t = starting time of the event window
$\hat{s}$ = Estimated Standard deviation computed over the clean period as;

$$\hat{s} = \sqrt{\frac{\sum\limits_{t=-240}^{T=-41}(AAAR - \overline{AAAR})^2}{200-1}}$$

$$\text{and, } \overline{\text{AAAR}} = \frac{\sum\limits_{t=-240}^{T=-41} AAAR}{200}$$

Under the modified event-study when we calculate aggregate abnormal return for a clean period with respect to any company, we find it would approach zero according to the basic theory underlying least-squares method of estimating regression function.

When we use the same regression function to calculate expected return for another period where something abnormal like merger has taken place, we expect the aggregate return to be a non-zero value. If it is a positive value, it implies that the merger has a positive impact; if it is a negative value it implies that the merger has a negative impact.

The aggregate return whether it is positive or negative must be statistically significant. Hence, we calculate error value of the aggregate value and estimate or determine the feasibility of aggregate rate of return being a zero value. If the aggregate rate of return turns out to be a statistically significant non-zero value, we would say that the merger event had an impact on the share prices (which may be positive or negative).

Here, we are using the basic rationale underlying least-square approach according to which the aggregate error value surrounding a regression function must approach zero under normal circumstances. It would be a non-zero value when abnormal return like merger had its impact.

APPLICATION OF THE NEW APPROACH TO EVENT-STUDY METHODOLOGY ON M&A ACTIVITY OF INDIAN BANKS

MOTIVATION FOR BANK MERGERS:

a)**Economies of Scale and Scope:** The main motive behind the wave of bank mergers in 1990s is primarily due to economies of scale resulting from horizontal and vertical combination of banks specializing and rendering different but related services. If the merging firms are to benefit from each others' knowledge of specialized functions then economies of scope can be realized. These benefits could be particularly realized when the merging firms are inefficient prior to merger (Hughes, Lang, & Moon, 1999).

In a study it was found that improvement of management efficiency could be achieved through economies of scope which results when critical size is achieved (Copeland, Weston, & Shastri, 2003). Many academic studies have provided that realization of operating efficiencies and cutting costs are among the primary motivations for consolidation in the Banking industry.

It was noted that the wave of bank consolidations witnessed in developed regions comprising the North America, European and Japan regions were attributable to factors such as globalization of financial services, growing financial deregulation

and technological advancements that took place in the recent past (Bae & Aldrich)

b) Increased Market Power: Bank acquisitions result in accessing the vast market already captured by banks being acquired with no loss of time and effort (Hughes, Lang, & Moon, 1999).

Review of Previous Studies (using Event-Studies approach):

This paper seeks to evaluate the performance of acquisitions undertaken by Indian Banks on shareholders using the Modified Event-Study econometric approach. Given that this work is a seminal attempt towards drawing inferences on shareholders' wealth impact using a new econometric approach; presented below is a review of select studies on gauging the impact of Mergers & Acquisitions on shareholder wealth using the conventional Event-Study methodology.

In a study that sought to add to the understanding of European banking M&A, using the standard event-study methodology that consisted of a sample of 89 acquiring and 89 target firms from 1987-1999, the authors found positive returns accruing to target banks while the returns to acquiring banks varied across deals. The deals were found to be value accretive for bank-to-bank deals than cross-product deals[1]. Further, it was found that merger deals were more value enhancing than acquisition deals (Ismail & Davidson, 2005).

In a study undertaken to analyze the effects of mergers or acquisition announcements on shareholders of individual banks and bank holding companies, the authors found an upward shift in abnormal returns for targets during the period between announcement and consumption of events while for the acquirers returns were slightly negative during the acquisition announcement period, but the cumulative average abnormal returns (CAAR) for the period following the acquisitions were found to be positive. The study used the standard even-study approach on a sample that consisted of 26 successfully acquired and acquiring banking firms for the period 1979-1985 (Neely, 1987).

In a study that sought to analyze value gains to acquirers in the European bank M&A wave of 1996-2004, it was found that European acquirers earned positive and statistically significant abnormal returns around the tie of deal announcement. The results were more robust for domestic transactions than for cross-border transactions. The study employed the event-study approach using the Fama-French three-factor model (Lensink & Maslennikova, 2008).

In a study that sought to identify the difference in trends in banking mergers between January 1994 and October 19995 from previous trends using a sample that consisted of 30 acquisitions carried out during the aforesaid period, it was found that effects were negative for shareholders of acquiring banks around the announcement period. Within the sample it was found that for medium-to-small acquisitions under $ US 1 billion led to negative insignificant abnormal returns, but for large acquisitions over $ US 1 billion caused significant negative abnormal returns. Shareholders of target banks in both the cases earned significant positive abnormal returns (Chavaltanpipat, Kholdy, & Sohrabian, 1999).

With the objective of studying the wealth effects of US takeovers from 1980-1990 based on a sample of 107 bank takeovers, it was found that in general, bank takeovers led to wealth creation. In fact, the CAAR's of acquiring banks in most of the cases were found to be statistically significant. This observation seems to be consistent with the economic belief that better efficiency can be achieved by economies of scale and diversification (Zhang, 1995).

In a study involving wealth effects of inter-state bank mergers that consisted of a sample of 21 mergers to both the acquired and acquiring firms' shareholders, it was found that shareholders of acquired banks eared large statistically significant abnormal returns while shareholders of acquiring banks earned insignificant abnormal returns around the announcement of the merger. Acquiring banks involved in large acquisitions significantly outperformed those involved in minor acquisitions and banks with small acquisitions earned negative abnormal returns (Trifts & Scanlon, 1987). The study employed the event-study methodology using the market model.

The basic limitations of all the above studies (though they try to evaluate the impact of mergers and takeovers in the banking industry) are that....

a) The event-study methodology employed suffers from the theoretical limitations already pointed out in the previous sections. An attempt to inter-relate rate of earnings on market index to rate of earnings on share price would be a futile exercise as such a regression function would result in very poor R^2 values.

b) Further, computations of CAARs on the basis of predicted expected returns based on such a poor regression function are questionable.

c) Any averaging of CAARs based on such poor calculations would definitely lead to highly objectionable and unreliable findings and inferences.

d) In most of the cases such average CARs suffer from statistical invalidity.

It is because of these reasons, the inferences based on the above studies become questionable. In this paper, we make an attempt to develop a technique which is theoretically sound, bases the study on the concepts which are truly interrelated like the market index and share prices resulting in very high R^2 values and compute the parameters like Aggregate Average Abnormal Return (AAAR) that are totally free from the deficiencies suffered by average CAR computed under traditional method. Inferences based on such a technique can only help us to evaluate the impact of mergers and takeovers on the wealth status of shareholders in the banking industry.

We have surveyed almost 15 major M&A events in the banking industry during the last decade. Interestingly, our observations based on the application of new technique are as follows:-

1) As we see from Appendix 1, the regression models used under the new method enjoy better R^2 values than the old method. The M&A event referred to as number 1 in the Appendix 1 has 0.39 as the R^2 value under the old method; however, under the new method it turned out to be as high as 0.89.

In the case of second M&A event, the R^2 value was just 0.09 while it turned out to be 0.70 under the new method. The third M&A event had 0.52 under the old method and 0.97 under the new method. This trend continues in almost all the remaining cases except cases numbered 5 & 12. Even in cases numbered 5 & 12, the R^2 value shoots up from 0.10 to 0.31 and from 0.02 to 0.32 respectively.

2) From the Appendix 1, we observe that the F-statistic representing the ratio of explained variance divided by the unexplained variance significantly improves under the new method. In case of 1st event of M&A it moves from 128 to 1622; in case of 2nd M&A it moves from 19.86 to 467; in the third case it moves from 221 to 8416 and so on.

3) The t-statistic which was totally insignificant under the old procedure turns out to be significant under the new approach (see Appendix IV).

4) Most interestingly, the inference based on the traditional procedure (Appendix III) suggests that the aggregate impact of M&A on the wealth status of industry remains neutral. On the contrary, the new procedure (Appendix IV) suggests that the aggregate impact on the wealth status of shareholders in the industry turns out to be significantly positive.

5) The new approach also measures the individual and aggregate impact of merger & acquisition activity in terms of the value of wealth created in terms of rupees. From Appendix IV, it may be noted that the AAAR values observed over the event window period (-20, +20) leads to the inference that the merger activity pursued in the Indian acquiring banks contributed positively to the shareholder wealth resulting in an overall gain of 196.65 billion rupees. Even when we consider other varying event windows, we observe that the overall gain remains substantially positive and statistically significant.

It may be further observed from Appendix VI that out of 15 events of Merger & Acquisition activity, 11 events resulted in positive contribution to the wealth status of shareholders and the economy in general though in just four cases, (cases 2, 5, 7 & 8) the impact turned out to be negative. Again, it also appears that longer event windows like (-20, +20) provide a better picture of the impact than shorter

event windows which probably might represent the immediate impulsive impact.

In contradiction to the results under the new and modified event study approach, we observe that according to the traditional approach (Appendix III) the inferences erroneously appear as neutral because of poor t values.

CONCLUSION:

Summing the above discussion, we make the following observations:

a) We derive a new technique which is theoretically sound to replace the traditional technique with its inherent implusibilities.

b) The inferences based on unsound traditional technique could be erroneous and hence defeat the very purpose of any research activity.

c) Incidentally & interestingly, we also observe that M&A activity in Indian banking industry has made positive contribution to the wealth of shareholders and in turn for the whole economy. More interestingly, this is in contradiction to what was observed by researchers in case of merger studies pertaining to the banking industry in other parts of the world. This is probably due to theoretical deficiencies of the traditional event study technique and it suggests that the results might have to be re-examined in the light of the modified technique proposed by us.

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APPENDIX I

Comparison of Regression Parameters between the Event-Study and Modified Event-Study approaches

Regression Parameters	R^2		F-Statistic	
Acquiring Banks in M&A event	Old Method	New Method	Old Method	New Method
1	0.39359097	0.891249517	128.51229	1622.681577
2	0.09118678	0.70263217	19.8665484	467.8420324
3	0.52793382	0.976271669	221.432713	8146.455504
4	0.6510201	0.848624916	369.367918	1110.009184
5	0.10747122	0.309794856	23.8415871	88.87123208
6	0.34566472	0.839256845	104.597162	1033.778734
7	0.36762033	0.802077716	115.103046	802.3926608
8	0.49730397	0.942618004	195.876199	3252.559628
9	0.36418114	0.953709563	113.40945	4079.341313
10	0.13558154	0.586587063	31.0557293	280.9400198
11	0.31865538	0.51812359	92.6018381	212.8937394
12	0.02086643	0.318662322	4.21960073	92.60480062
13	0.57456294	0.768830134	267.403738	658.5130193
14	0.55159738	0.894784563	243.567445	1683.853131
15	0.44231648	0.792675229	157.040079	1201.177324

Appendix II: *t-statistic* computations

Event Windows			
	1	AAAR	196,645,441,931.60
	2	Estimated SD	1.30807E+11
	3	Time	41
	Using Equation (10)		
(-20,+20)	**t statistic**		9.6256*
	1	AAAR	189,469,321,530.81
	2	Estimated SD	1.30807E+11
	3	Time	21
	Using Equation (10)		
(-10,+10)	**t statistic**		6.6377*
	1	AAAR	236,504,965,238.68
	2	Estimated SD	1.30807E+11
	3	Time	11
	Using Equation (10)		
(-5, +5)	**t statistic**		5.9966*
	1	AAAR	186,227,197,010.10
	2	Estimated SD	1.30807E+11
	3	Time	11
	Using Equation (10)		
(0, +10)	**t statistic**		4.7218*
	1	AAAR	222,818,139,491.54
	2	Estimated SD	1.30807E+11
	3	Time	6
	Using Equation (10)		
(0, +5)	**t statistic**		4.1725*

Appendix III
Observed results under the Traditional event study approach
Cumulative Average Abnormal Returns (CAAR) & their corresponding t-values

Event-Window	Cumulative Average Abnormal Returns (CAAR)	t-stat
(-20, +20)	0.063866	1.3367
(-10, +10)	0.05649	1.6521
(-5, +5)	0.027416	1.1078
(0, +10)	-0.01002	-0.5804
(0, +5)	-0.01061	-0.4048

Appendix IV
Observed results under Modified event study approach
(*All the values are statistically significant at 5%)
Observed results under the Traditional event study approach
Aggregate Average Abnormal Returns (AAAR) & their corresponding t-values

Event-Window	Aggregate Average Abnormal Returns (AAAR in rupees)	t-stat
(-20, +20)	196,645,441,931.60	9.6256*
(-10, +10)	189,469,321,530.81	6.6377*
(-5, +5)	236,504,965,238.68	5.9966*
(0, +10)	186,227,197,010.10	4.7218*
(0, +5)	222,818,139,491.54	4.1725*

Appendix V

List of Mergers & Acquistions in the Indian Banking industry			
M&A Event	Acquiring Bank	Target firm	Announcement date
1	Bank of India	Bank Swadesi TBK PT	22/06/2007
2	Bank of Baroda	Benares State Bank	24/01/2002
3	HDFC Bank	Centurion Bank of Punjab	25/02/2008
4	ICICI Bank	Bank of Rajasthan	18/05/2010
5	ICICI Bank	ICICI	25/10/2001
6	ICICI Bank	Pipal Research	1/9/2004
7	ICICI Bank	Account Solutions Group LLC	7/10/2004
8	ICICI Bank	Radian Research Inc	8/6/2007
9	ICICI Bank	Invetitsionno Kerditny Bank	19/05/2005
10	IDBI Bank	Tata Home Finance	30/05/2003
11	IDBI Bank	IDBI	20/01/2005
12	Kotak Mahindra Bank	Kotak Mahindra Capital	16/03/2006
13	State Bank of India	State Bank of Saurashtra	14/08/2008
14	State Bank of India	Global Trade Finance	24/01/2008
15	State Bank of India	Bank Indomonex PT	7/11/2005

Appendix VI
Aggregate Average Abnormal Returns (AAAR) in rupees of Indian acquiring banks individually and collectively across different event-window periods

Acquiring Bank	Event Windows				
	(-20. +20)	(-10, +10)	(-5, +5)	(0, +10)	(0, +5)
Bank of India	5570605260	2844616845	4638280720	6246596058	7968075377
Bank of Baroda	(2138669446)	(2586235367)	(2703748017)	(2316934681)	(2621598213)
HDFC Bank	23200986349	17798145474	14585819162	8002023689	2859929728
ICICI Bank	4790519849	8254698380	8801114884	(517430153)	(1033234223)
ICICI Bank	(7636707127)	(6915740306)	(6543434487)	(5029668459)	(5174457275)
ICICI Bank	4179322048	2514205733	2842138504	(2966334835)	(773709189)
ICICI Bank	(493169830)	323074642	(1869443411)	(1636275740)	(2806809155)
ICICI Bank	(37305467765)	(37264189866)	(35457800880)	(24963399037)	(26715174211)
ICICI Bank	19763762435	18888628476	22475914481	16967804568	21730544248
IDBI Bank	4979893161	6170036464	7616578135	8467559929	9355319020
IDBI Bank	7443899238	10000787625	13064161123	9831512881	12326107227
Kotak Mahindra Bank	39912412854	39350739078	36771335306	46536231470	41916461082
State Bank of India	33122275689	12076863502	10404988922	(3472304063)	5547227876
State Bank of India	98241896783	116576699889	169218540552	142848182367	176208103495
State Bank of India	3013882433	1436990960	(7339479755)	(11770366983)	(15968646295)
Total	**1.96645E+11**	**1.89469E+11**	**2.36505E+11**	**1.86227E+11**	**2.22818E+11**