



## WEALTH CREATION IN THE LARGEST BANKING MERGERS- AN EMPIRICAL ANALYSIS



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### ABSTRACT

This research paper based on a sample of largest banking mergers analyzes the impact of merger announcement on the wealth of bidding and target firms. The study also examines the concept of market efficiency in the context of M&A activity. We test the efficient capital market hypothesis which states that share prices react instantaneously when new information arrives in the market. The sample acquirer and target firms were selected on the basis of the value of the deal. The study was based on 32 acquirer and 9 target banks. The methodology was based on CAR analysis with market model method. The acquirer banks had statistically significant superior profitability indicators in comparison to the target banks. The study finds that acquisition/merger announcement creates value for the target banks while the returns of the bidding banks gets eroded. The CAR was positive for target banks with statistical significance at all levels in different time window period of analysis. Acquirer banks had negative announcement returns. The CAR for acquirer banks was negative for all the time window period. The negative CAR for the acquirer banks was statistically significant for the longer time window periods. The results may indicate that the merger terms were unduly favorable to the target banks in comparison to the acquirer banks. Investors are skeptical about the future benefits from the deal for the acquirer banks. The study documents the erosion of wealth for the acquirer firms on account of M&A announcement.

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**Keywords:** Merger, Acquirer, Target, Wealth creation, Market model, CAR

Received: 19 January 2016/ Revised: 23 February 2016/ Accepted: 5 March 2016/ Published: 26 March 2016

### Contribution/ Originality

The study documents the stock market reaction to merger announcement of the largest global bank mergers. The results suggest that M&A announcement is value creating activity for target banks while the wealth of the bidding or acquirer banks gets eroded. The study empirically tests the significance of market efficiency.

### 1. INTRODUCTION

The process of deregulation and technological changes have contributed towards consolidation in the banking industry globally. As a result of consolidation banks were able to provide a broader range of banking services across different spectrum in different geographical regions. The major gains of consolidation in banking industry can be

attributed to economies in scale and scope. Ideally M&A activity results in increase of market power, reduction in expenses and earnings volatility.

Consolidation had a significant impact on the landscape of the financial sector in general. The major critical factors which facilitated consolidation are trends in Information Technology, deregulation of financial sector, globalization of financial markets, increasing shareholder activism for performance and financial distress. Over the past twenty years, many governments across the world have removed legal and regulatory barriers to financial industry consolidation. During the 1980s and 1990s, strategic collaborations and alliances were established between insurance and investment firms. The concept of “one-stop shopping” became a trend in the financial sector on account of the phenomena of consolidation. During the period 1990-2001 , it was estimated that over 10,000 financial firms were acquired in the industrialized nations.<sup>1</sup> During the time period 1980-2003, the number of US banks decreased from about 16,000 to 8000. During that period, the share of industry assets held by the ten largest commercial banking organizations ranked by assets rose from 22% to 46%, and the share of industry deposits owned by the largest ten banking institutions increased from 19 % to 41%.

In the year 1998, four big mergers took place in the US banking industry. These were the mergers of Citicorp/Travelers, BankAmerica/NationsBank, Bank One/First Chicago, and Northwest/Wells Fargo. During the period 1999-2002, the largest European banking groups (BNP Paribas in France, IntesaBsci in Italy, Banco Santander Central Hispano, Banco Bilbao Vizcaya Argentaria in Spain, and NatWest/Royal Bank of Scotland in the United Kingdom) were formed as a result of mega deals.

Mergers and Acquisitions, organic expansion and collaborations with local banks are some of the important strategies employed by multinational banks. The decade of 1990s witnessed waves of consolidation in the banking sector. The year 1997 witnessed the mega merger between the Swiss banks UBS and SBC. In the year 1998, Citibank and Travelers Group merged to form the world’s largest financial Group-Citigroup. The technique of bancassurance has led to inter industry consolidation whereby insurance companies were able to expand their widespread network of points of sales, such as bank branches. Bancassurance involves insurance companies buying small banks or being bought by large commercial banks for achieving synergy in distribution process. The buyout of investment banks by commercial banks was basically to expand the services offered by the commercial banking institutions. International diversification basically results when foreign banks acquire domestic banks so that these banks could circumvent regulatory barriers which exist in domestic markets. Value creation in bank mergers result on account of reduction in costs or increase in revenues. Elimination of redundant managerial positions, closure of overlapping bank branches and consolidation of back office functions can result in cost reductions due to mergers. The scope for cost reduction is high when the merging banks have geographical overlap. Cross selling of banking services results in revenue enhancement. First Union’ acquired First Fidelity Bancorp to expand its brokerage and mutual fund services to First Fidelity’s customers. One of the motivational drivers for acquisition is to raise fees and lower interest rates on deposit accounts ([Houston et al., 2001](#)). M&A within the European financial sector has changed the European banking landscape in the past decade. The number of European banks decreased from 12,670 in 1985 to 8295 in 1999 ([European Central Bank Report, 2000](#)). This trend is mostly driven by M&As among European banks. The European (EU-15) market concentration measured by the market share of the top five banks in terms of total assets grew by 12 per cent over the last ten years as of the year 1999. Statistics reveal that the number of banks per 1000 individuals in Europe is almost twice as large (0.49) as in the US (0.27) indicating many more concentration potential through M&A transaction in the near term future ([Berger et al., 1999; ECBR, 2000](#)).

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<sup>1</sup> <http://www.federalreserve.gov/pubs/feds/2002/200247/200247pap.pdf>.

There are basically two major approaches to explain the impact of mergers and acquisitions on corporate performance. The event study methodology documents the abnormal returns(CAR) to the shareholders in the period surrounding the announcement of an event like merger or acquisition. The accounting studies compares the financial performance based on financial statements during the pre and post-merger period. The important aspect to examine in any M&A activity is that whether the deal leads into value creation for the merging firms. The merger can be termed successful only if it creates value for the merged entity in the long run. In other words, the merger must increase the total current wealth of the acquiring company's shareholders. The efficient market hypothesis states that investors of the merging firms incorporate the future expected benefit from the merger which would be immediately reflected in the stock price at the time of the announcement of the acquisition.

## **2. OBJECTIVE**

The objective of this paper is to analyze the impact of merger announcement on stock wealth of the merging banks. The study documents the market reaction to the merger announcement for the largest bank mergers. The research focuses on understanding if the mergers are value creating activities for the merged firms surrounding the period of announcement.

We test the efficient capital market hypothesis that share prices reflect all new information. The value of expected benefits from a merger would be reflected in share prices when the merger is first anticipated. Generally, stock prices would be expected to provide unbiased signals for efficient resource allocation. In short, the study examines the effect of mergers on the wealth of the shareholders of the acquirer and target firms involved in acquisition activity and also on market efficiency

## **3. REVIEW OF LITERATURE**

There are basically two methods to evaluate merger gains. The first approach based on accounting data compares the performance of merged banks in the pre and post-merger period to determine whether consolidation results in gains. Through this approach the performance changes attributable to a deal can be directly estimated. In the second perspective, the announcement impact of the merger on the stock prices of the acquirer and target bank is examined. These stock market studies focus on market expectation and do not examine the actual gains resulting from consolidation. [Cornett and Tehranian \(1992\)](#) and [Spindt and Tarhan \(1993\)](#) finds that post-merger operating performance improves after merger while studies by [Piloff \(1996\)](#); [Berger and Humphrey \(1992\)](#) and [Berger \(1997\)](#) suggest that mergers do not lead into improvement in post-merger performance. The stock market studies include studies by [Houston and Ryngaert \(1994\)](#) and [DeLong \(1998\)](#). [Cornett and Tehranian \(1992\)](#) compare the pre-merger and post-merger performance of thirty large holding company mergers during the period 1982-1987. These studies find that cash flow returns relative to a control group improve as a result of merger. The study also documents significant positive abnormal returns associated with merger announcements. Cornett also documents a high degree of correlation in terms of market reaction and improvement in post-merger return on assets (ROA). [Linder and Crane \(1992\)](#) find that interstate bank mergers have not led to improved operating income relative to local bank mergers. [Spindt and Tarhan \(1993\)](#) find that mergers gains result due to economies of scale. Studies of [Piloff \(1996\)](#); [Berger et al. \(1999\)](#) suggest that operating performance of merged banks do not show significant improvement compared to peer group.. [Houston and Ryngaert \(1994\)](#) suggest that returns of the acquired bank do not increase after mergers. [Houston and Ryngaert \(1997\)](#) suggest that the returns to bidders are significantly greater in cash financed bank mergers than stock financed mergers.

Studies by Hannan and Wolken (1989) and Piloff (1996) analyzes the abnormal returns of a sample of 48 bank mergers during the period 1982-1991. The study finds that the merger performance gains are attributed to the high

total target and acquirer expenses. The study provides direct evidence that the market expectations are not related to subsequent merger related gains on account of the fact that correlations of abnormal returns with performance measures are insignificant.

[DeLong \(1998\)](#) suggest that focusing mergers with geographic or product focus increase value while diversifying mergers destroy value. [Houston et al. \(2001\)](#) reports that merger activity leads to positive revaluations of the combined value of the acquirer and target banks based on a study of bank mergers during the period 1985-1996. These revaluations are attributed to cost savings rather than revenue enhancements.

The paper by [Amihud et al. \(2002\)](#) studies the impact of cross border bank mergers on the risk and abnormal returns of the bidding banks. The results of this study reveals that on average, neither systematic risk nor total risk falls in comparison to domestic banks in the local market. The abnormal returns to bidding banks were found to be negative in this study.

[DeLong \(1998\)](#) tests different aspects of focus and diversification based on a sample of 54 bank mergers during the period 1991-1995. The study finds that value creation results in mergers which focus on geography and earning streams. Mergers focusing on earning streams will result in increase of long term performance. [Beitel et al. \(2004\)](#) investigate the drivers of excess returns to the targets, the acquirers and the combined merger entity based on European banking mergers during the period 1985-2000. This study based on sample of 98 companies suggest that the stock market reaction to M&A announcements of European bidding banks can be at least partly forecasted. The results suggest that stock markets react favorably towards focused transactions and against diversification. Three studies by [Tourani and Van Beek \(1999\)](#); [Cybo-Ottone and Murgia \(2000\)](#) and [Beitel et al. \(2004\)](#) use the event study methodology to analyze the announcement effects of European bank M&A activity. The studies by [Beitel et al. \(2004\)](#) and [Cybo-Ottone and Murgia \(2000\)](#) observes that the acquirer and target firms document significant CAR in all the event study time windows analyzed. [Isa and Yap \(2004\)](#) analyzes the market reaction to merger announcement using a sample of Malaysian bank mergers during the period 1999-2004. The study suggest that market react favorably to merger announcement. [Karceski et al. \(2005\)](#) estimate the abnormal returns of merger announcement for public sector Norwegian banks. The results suggest that the borrowers of target banks lose approximately 0.8% in equity value, while borrowers of acquiring banks earn positive abnormal returns. [Tetsuya \(2005\)](#) analyzes the announcement effect of Japanese bank mergers on the market value of financially distressed borrowers.. The study by [Al-Khasawneh and Essaddam \(2012\)](#) finds that mergers combining low efficiency acquirers and targets create significant market returns on merger announcement , while mergers combining the least efficient acquirers with moderately efficient targets diminish the bidder's wealth more than any other type of merger. This study also points out that the bidding firms generally lose approximately 2.5% of their wealth and target banks gain 15.5% in market returns on account of merger announcement. The study by [Crouzille et al. \(2008\)](#) empirically assess the stock market reaction to the announcement of bank M&As in eight East Asian countries over the 1997–2003 period. The study find that the market reacted unfavorably to M&As during the crisis period (1997–2000) and also in the less mature banking systems (Indonesia, Malaysia, the Philippines, South Korea and Thailand).

The study by [Piskula \(2011\)](#) explores the linkage between governance structures at banks and the propensity of banks to acquire which results in negative reactions from equity shareholders. The results suggest that the weaker corporate governance is associated with inferior stock market reactions upon announcement of acquisition.

#### 4. METHODOLOGY

The study examined the stock market reaction to merger announcement. The stock market performance of the acquirer and target banks during the time window of merger announcement was examined. Methodology for stock market event study: market model methodology was used to estimate the abnormal stock returns. Residual analysis

examines if the returns to the bank's common stock is greater or less than that predicted by general market relationships with respect to risk and return. The choice of reference period for calculation of parameters in estimating excess returns is a problematic area in event study methodology. If the reference period chosen is too far from the event date, then it is possible that the risk characteristics of the sample firms would have changed. A reference period of shorter duration may not represent a valid benchmark. In this study, the market model was used to estimate the expected rate of return for a stock.

Regression methodology is used to estimate the model parameters in which the daily stock returns were regressed on the market index over the estimation period. The clean period of -100 to -250 days (0 day being the merger announcement day) was selected to estimate the model parameters ( $\alpha$  and  $\beta$ ). The market model is given by  $R_t = \alpha + \beta R_{mt} + \epsilon_t$  where  $R_{mt}$  is the return on market index for day  $t$ ,  $\beta$  measures the sensitivity of the bank to market – this is a measure of risk and  $\epsilon_t$  is a statistical error term where  $\sum \epsilon_t = 0$ . The forecasted return for the bank in the merger event period is the return according to market model on that particular day. Market model method is a popular choice since it takes into account the risk associated with both the market and mean returns.

Daily stock return data is used to estimate the excess stockholder returns. These excess returns are a measure of the stockholder's return from the new information, which becomes available to market. The daily excess return for the security is estimated by

$$XR_t = R_t - E(R_t)$$

Where

$t$  day relative to an event

$XR_t$  excess return on the security for day  $t$

$R_t$  actual return on the security for day  $t$

$E(R_t)$  predicted or expected rate of return on the security for day  $t$ .

The average abnormal returns (AAR) for each relative day  $t$  are calculated across the securities in the first stage. Daily average cumulative abnormal returns (CAR) are sums of the average abnormal returns over event time. CAR is defined as the sum of previous daily average residuals for each trading day. The  $t$  statistics are then calculated.

The time window period consists of range of days in which the announcement effect is analyzed. The day in which the merger announcement is made is designated as 0. The merger announcement refers to the appearance of the news in the popular press. The stock trading days prior to the merger announcement are numbered event days -1, -2 and so on. The event days following the merger are numbered +1, +2 and so on.

The maximum time window involved in the study is -60 days to +60 days for the acquirer banks and -60 to +60 for target banks. The other shorter time windows were also applied for the acquirer and target banks. For merger announcements which occur before the stock market closes, the proper event date is  $t = -1$ . For events which are announced after the market closes the proper event day is  $t = 0$ .

The acquirer banks have an average beta of 1.02. The target banks had an average beta of 1.36 which reflects the higher risk of the target banks.

#### 4.1. Sample Selection

The study involved the largest mergers that took place in the banking industry. The Cumulative abnormal return analysis was based on 32 acquirer firms and 9 target firms. The list of acquirer and target banks are given in the appendix.

## 5. ANALYSIS AND RESULTS

The study analyzed the distinctive characteristics of both the acquirer and target banks involved in the merger process.

**Table-1.** Comparison of Acquirer and target in the year before merger/acquisition

Average Values	Acquirer	Target	
Ratios	(-1)	(-1)	t-test
Net Profit Margin (%)	19.83	-1.78	3.63***
ROE (%)	15.64	-46.59	2.76***
ROA (%)	1.23	-1.56	2.57***
ROCE (%)	13.19	-35.42	2.52***
Efficiency Ratio(Non-interest expense /Net operating income )	1.12	1.40	(-0.24)
Interest Expense Ratio(Interest expense /Total operating income )	1.58	0.45	2.34***
Total Risk based Capital (%)	11.44	10.76	0.87
Tier 1 Core Capital ratio (%)	7.97	6.83	0.919
Gross NPL Ratio	0.90		
Other Income to Total income	0.29	-0.11	0.62
Liquidity assets to total assets	0.10	0.18	(-1.32)*
Non-Interest Income/Non-Interest Expense	1.81	1.40	0.67
Net Interest Expense/ Earning Assets	0.03	0.02	0.66
Asset Utilization = Total Operating Income/Total Income	1.31	1.47	-0.76
Total Advance to Total Deposit Ratio	0.48	0.75	-0.81
Liquidity Assets to Total Deposits	0.16	0.12	0.316

Source: Authors calculation

The above table compares the various performance measures of the acquirer and target banks based on the average values. The acquirer banks had statistically significant superior profitability measures compared to the target banks. However, the interest expense ratio was lower for the target banks compared to the acquirer banks. There were no statistically significant differences in the capital adequacy ratios between the acquirer and target firms.

**Table-2.** Comparison of performance of Acquirer in the year before and after merger/acquisition.

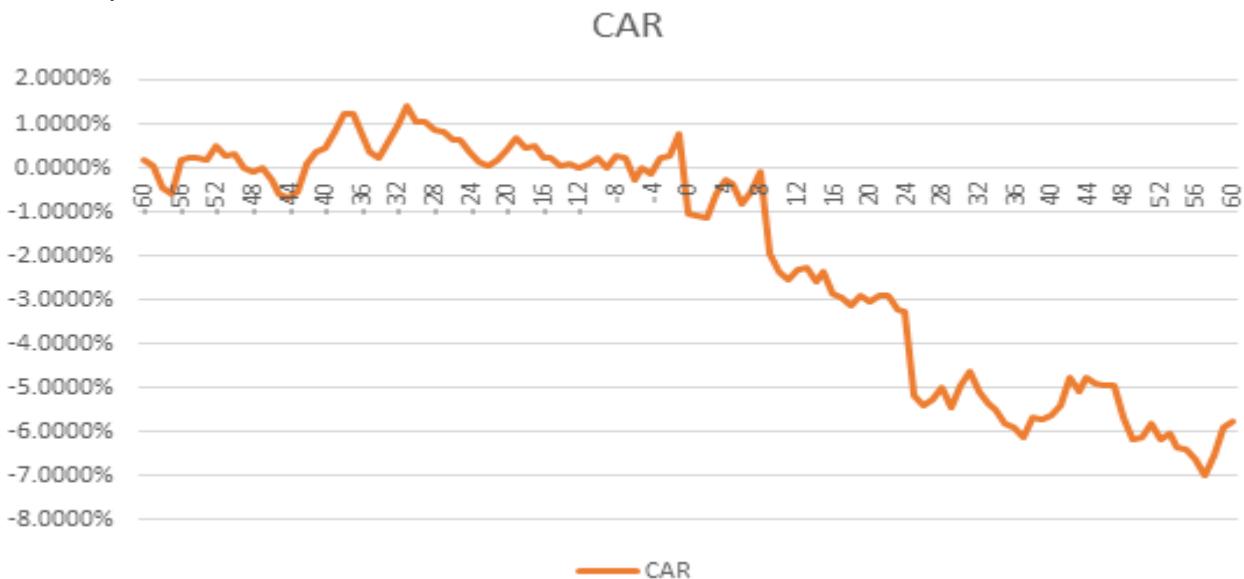
Average	Before Merger	After Merger	t-test
Net Profit Margin (%)	19.83	5.87	2.33***
ROE (%)	15.64	6.42	2.60***
ROA (%)	1.23	0.76	1.70**
ROCE (%)	13.19	9.55	1.375*
Efficiency Ratio(Non-interest expense /Net operating income )	1.12	2.93	(-1.68)**
Interest Expense Ratio(Interest expense /Total operating income )	1.58	2.74	(-1.74)**
Total Risk based Capital (%)	11.44	12.32	10.695***
Tier 1 Core Capital ratio (%)	7.97	8.55	(-7.34)***
Gross NPL Ratio	0.90	0.80	0.081
Other Income to Total income	0.29	-0.15	0.914
Liquidity assets to total assets	0.10	0.09	0.35
Non-Interest Income/Non Interest Expense	1.81	2.01	-0.485
Net Interest Expense/ Earning Assets	0.03	0.02	1.05
Asset Utilization = Total Operating Income/Total Income	1.31	1.35	-0.29
Total Advance to Total Deposit Ratio	0.48	0.74	-0.873
Liquidity Assets to Total Deposits	0.16	0.18	-0.187
Liquidity Assets to Demand Deposits	7.84	0.03	311.3***

Source: Authors calculation

The profitability position of the acquirer bank has declined in the post-acquisition period compared to that of the pre-acquisition period. It can be observed that the net profit margin, return on equity, return on assets and return on

capital employed had declined in the post-acquisition period compared to the pre-acquisition period. The capital adequacy ratios have shown improvement in the post-acquisition period compared to the pre-acquisition period.

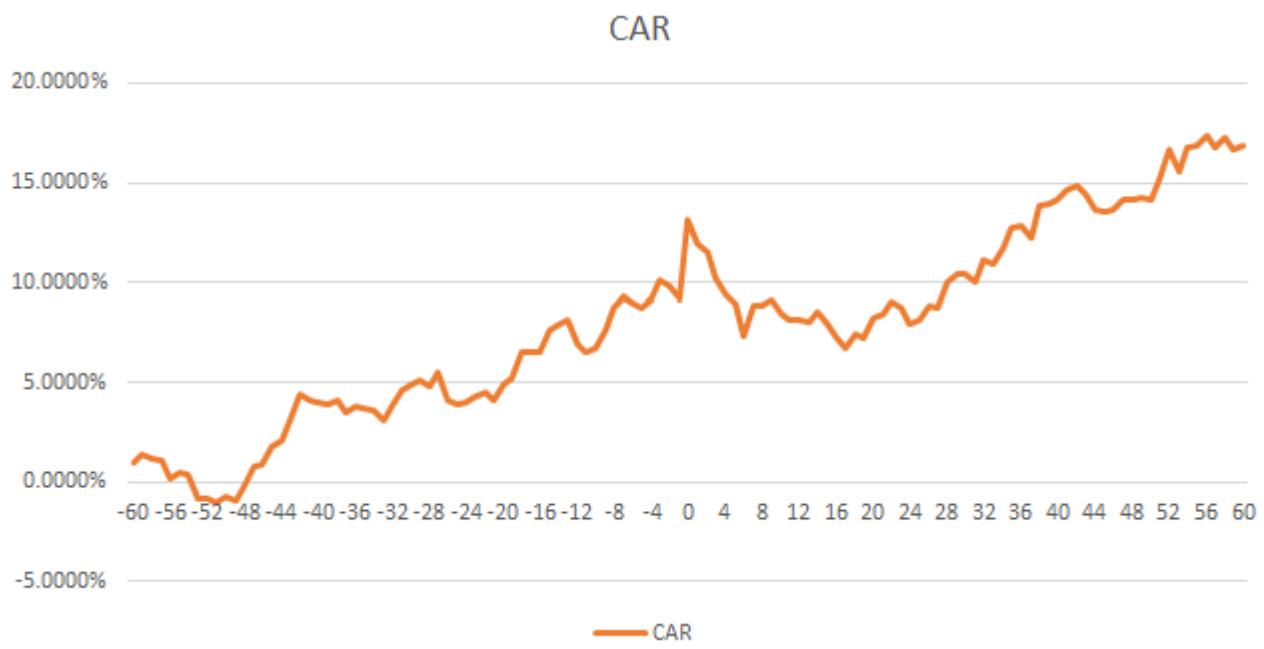
#### CAR Analysis



**Fig-1.** CAR analysis for Acquirer firms

Source: Authors calculation

The cumulative excess returns for the acquirer firms is showing a downward fall in the post-acquisition period. The analysis was based on the time window of -60 to + 60 days of the acquisition announcement. The CAR for acquirer was fluctuating in the pre-merger period but had positive abnormal returns. The CAR drastically fell in the post-merger period of 60 days resulting in a drop of 7 per cent return approximately by +57 day of announcement and then moving up slightly and finally resulting in a CAR value of -5.88 per cent by day 60.



**Fig-2.** CAR analysis for target banks

Source: Authors calculation

The target firms had documented CAR of 16.85% during the time window of -60 to +60 days. It is observed that the CAR though fluctuating had shown a positive trend in returns during the time period of analysis. The CAR was

approximately 9 per cent in the day before merger announcement. The CAR rose to 13 per cent on the day of acquisition or merger announcement.

**Table-3.**Summary of average daily returns and CARs: Acquirer and Target banks

	<b>Acquirer</b>		<b>Target</b>	
Event	Average Excess Returns	CAR	Average Excess Returns	CAR
-20	0.22%	0.22%	0.74%	0.74%
-19	0.46%	0.46%	0.30%	1.04%
-18	0.24%	0.24%	1.33%	2.38%
-17	0.29%	0.29%	0.04%	2.42%
-16	0.03%	0.03%	-0.06%	2.36%
-15	0.03%	0.03%	1.12%	3.48%
-14	-0.18%	-0.18%	0.32%	3.79%
-13	-0.09%	-0.09%	0.14%	3.94%
-12	-0.19%	-0.19%	-1.19%	2.75%
-11	-0.12%	-0.12%	-0.37%	2.38%
-10	0.03%	0.03%	0.17%	2.55%
-9	-0.18%	-0.18%	0.95%	3.50%
-8	0.08%	0.08%	1.07%	4.57%
-7	0.03%	0.03%	0.57%	5.14%
-6	-0.50%	-0.50%	-0.33%	4.81%
-5	-0.19%	-0.19%	-0.26%	4.55%
-4	-0.32%	-0.32%	0.51%	5.07%
-3	0.03%	0.03%	0.91%	5.98%
-2	0.08%	0.08%	-0.31%	5.67%
-1	0.58%	0.58%	-0.62%	5.05%
0	-1.24%	-1.24%	3.97%	9.03%
1	-1.31%	-1.31%	-1.24%	7.79%
2	-1.34%	-1.34%	-0.42%	7.37%
3	-0.81%	-0.81%	-1.26%	6.11%
4	-0.48%	-0.48%	-0.81%	5.30%
5	-0.55%	-0.55%	-0.55%	4.75%
6	-1.01%	-1.01%	-1.55%	3.19%
7	-0.73%	-0.73%	1.54%	4.73%
8	-0.29%	-0.29%	0.00%	4.73%
9	-2.15%	-2.15%	0.30%	5.03%
10	-2.56%	-2.56%	-0.74%	4.29%
11	-2.75%	-2.75%	-0.35%	3.94%
12	-2.53%	-2.53%	-0.01%	3.93%
13	-2.49%	-2.49%	-0.03%	3.90%
14	-2.77%	-2.77%	0.51%	4.41%
15	-2.57%	-2.57%	-0.63%	3.78%
16	-3.05%	-3.05%	-0.65%	3.13%
17	-3.17%	-3.17%	-0.61%	2.52%
18	-3.33%	-3.33%	0.77%	3.29%
19	-3.13%	-3.13%	-0.26%	3.02%
20	-3.22%	-3.22%	1.01%	4.03%

**Source:** Authors calculation

The above table gives the average daily excess returns of the sample acquirer and target firms during the time window -20 to +20 days. The CAR values for the average excess daily returns are also given. The CAR for the acquirer banks during the time window -20 to + 20 days was -3.22% while the CAR for the target banks during the above time window was 4.03%. The average excess returns for the acquirer banks for the period -3 ,-2 , -1 and the day of announcement was .03%, .08% , 0.58% and -1.24% respectively .Thus the stock market reaction was negative

for the acquirer firm for the acquisition announcement. The study documents average excess negative return of 1.24% for the acquirer banks on the day of acquisition announcement. At the same time the target banks had an average excess return of 3.97% on the day of announcement. The average excess return for target bank on -3, -2 and day before acquisition announcement was 0.91%, -0.31% and 0.62%. Thus it can be stated that the merger announcement created wealth for target bank shareholders. The merger announcement was value decreasing activity for acquirer firms. The acquirer bank average excess stock returns were negative on all the days of the time window +1 to + 20 days of the acquisition period. The average excess returns were positive in many of the days before the acquisition announcement for the target banks.

**Table-4.**Summary statistics of daily returns of banks involved in acquisition activity.

	<b>Acquirer banks</b>			<b>Target banks</b>			
	Cumulative Market Model Adjusted Excess Returns						
Through		CAR	t Statistics	Through		CAR	t Statistics
-60	60	-5.74%	-8.05***	-60	60	16.85%	18.06***
-30	30	-6.36%	-10.58***	-30	30	5.89%	12.23***
-20	20	-3.20%	-5.08***	-20	20	4.03%	16.06***
-10	10	-2.43%	-2.89***	-10	10	1.90%	8.69***
-5	5	-0.05%	-0.047	-5	5	-0.06%	2.91**
-3	3	-0.48%	-0.85	-3	3	1.04%	3.18**
-1	1	-1.39%	-1.19	-1	1	2.12%	1.38*
Number of banks in sample			32		9		

\*\*\*, \*\*, \* represent statistical significance at 1%, 5% and 10% level of significance.

The average CAR analysis reveals that merger announcement is a value-creating activity for target banks. The average CAR for the target banks was 16.85% with a t statistic value of 18.06 at all levels of significance for the 121-day surrounding the merger announcement (-60 to +60). Similarly, the CAR value for target banks during the time window -30 through +30 was 5.89%. The CAR value for target banks during the time window -20 through +20 was 4.03%. The three-day average CAR for the target banks was 2.12%. The cumulative excess average returns for target bank was statistically significant at levels of significance for the time windows -60 through +60 days, -30 through +30 days, -20 through +20 days, -10 to +10 days. The CAR was statistically significant for target banks at 5% and 1% level of significance during the shorter time window period of -5 to +5, -3 to +3 and -1 to +1 days surrounding the merger announcement. The study reports negative announcement returns for the acquirer banks. The CAR for acquirer banks was negative for all the time window period. The negative CAR for the acquirer banks was statistically significant for the longer time window periods. The study suggest that merger announcement leads to increase in value for target banks. Merger announcement decreases the wealth of bidder banks.

A comparison of the acquirer and target returns reveals that target returns were very much higher compared to acquirer returns. The CAR for the different time windows was higher for the target firms compared to acquirer firms. The negative CAR value for the acquirer banks in the time windows -10 to +10, -5 to +5 were also statistically significant.

### 5.1. Cross Sectional Regression Analysis

The determinants of acquiring firms' shareholder value involved in M&A are examined through cross sectional regression analysis. The three-day excess cumulative abnormal returns are cross sectionally regressed upon variables of profitability, earnings ability, capital adequacy ratios.

## 6. REGRESSION RESULTS

The Tier 1 capital adequacy ratio were found to be statistically significant at 5% and 10% level of significance. Higher the capital adequacy position of the firm, higher would be abnormal returns.

Regression Model Summary

Model	R	R Square	AdjR Square		Standard Error	
1	0.966	0.932	0.887		0.022	
ANOVA	F=20.6	Sig 0.018				
Coefficients	BETA	t	Sig			
TIER 1	0.724	3.26	0.047			

## 7. CONCLUSION

This study examines the acquisition announcement impact on the wealth of the shareholders of both the acquirer and target banks surrounding the period of announcement. The sample was selected based on the largest mergers in banking industry on the basis of value of the deal. The sample consisted of 32 acquirer banks and 9 target banks which were involved in merger activity for the past few decades. The study finds that acquisition/merger announcement creates value for the target banks while the wealth of the acquirer banks gets eroded. The methodology was based on CAR analysis with market model method. The CAR for the target banks were positive with statistical significance in all time periods of analysis.

## 8. IMPLICATIONS

The average CAR analysis reveals that merger announcement is a value-creating activity for target banks. The results may indicate that the terms of the merger are unduly favorable to the target banks at the expense of the acquirer banks. Investors are skeptical about the futuristic benefits from mergers for the acquirer banks. This is evident from the wealth erosion due to stock market performance of target banks.

**Funding:** This study received no specific financial support.

**Competing Interests:** The authors declare that they have no competing interests.

**Contributors/Acknowledgement:** All authors contributed equally to the conception and design of the study.

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**Appendix****List of Acquirer Banks**

No	Acquirer bank	Target Bank	Date of Acquisition Announcement
1	Travelers Group	Salomon Brothers	24 <sup>th</sup> September 1997
2	Travelers Group	Citicorp	6 <sup>th</sup> April 1998
3	Citigroup	Associates First Capital	6 <sup>th</sup> September 2000
4	Chase Manhattan Corporation	JP Morgan & Co	13 <sup>th</sup> September 2000
5	AXA group	AXA financial	3 <sup>rd</sup> January 2001
6	HSBC Holding	Credit Commercial De France	2 <sup>nd</sup> April 2001
7	Citigroup	Banacci	17 <sup>th</sup> May 2001
8	HSBC Holdings PLC	Household International Inc	14 <sup>th</sup> November 2002
9	Manulife financial Corp	John Han Cock Financial Services	29 <sup>th</sup> September 2003
10	Bank of America Corp	FleetBoston Financial Corp	27 <sup>th</sup> October 2003
11	JPMorgan Chase & Co	Bank One Corporation	14 <sup>th</sup> January 2004
12	Regional Financial Corp	Union Planters	23 <sup>rd</sup> January 2004
13	SunTrust	National Commercial Financial	10 <sup>th</sup> May 2004
14	Mitsubishi Tokyo	UFJ Holdings	16 <sup>th</sup> July 2004
15	Bank Of America	MBNA Corporation	30 <sup>th</sup> June 2005
16	Capital One Financial Corporation	North Fork Bank	12 <sup>th</sup> March 2006
17	Regions Financial Corp.	AmSouth Bancorp	25 <sup>th</sup> May 2006
18	Bank Of New York	Mellon Financial Corporation	4 <sup>th</sup> December 2006
19	State Street Corp	Investors Financial Services	5 <sup>th</sup> February 2007
20	Banco Biblao Vizacaya	Compass Bancshares	16 <sup>th</sup> February 2007
21	Bank of America	LaSalle Bank	23 <sup>rd</sup> April 2007
22	RBS	ABN-AMRO	25 <sup>th</sup> April 2007
23	TD Bank North	Commerce Bancorp	2 <sup>nd</sup> October 2007
24	Citigroup (along with HSBC)	Kelda Group PLC	26 <sup>th</sup> November 2007
25	HSBC (along with Citigroup)	Kelda Group PLC	26 <sup>th</sup> November 2007
26	Bank of America	Countrywide	11 <sup>th</sup> January 2008
27	West Pac Banking Corp	St George Bank	13 <sup>th</sup> May 2008
28	Bank of America	Merrill Lynch	14 <sup>th</sup> September 2008
29	Wells Fargo	Wachovia	3 <sup>rd</sup> October 2008
30	MetLife	Alico	8 <sup>th</sup> March 2010
31	Barclays	Amalgamated Bank of South Africa	9 <sup>th</sup> May 2005
32	Berkshire Hathaway	Heinz Company	14 <sup>th</sup> February 2013

**List of Target Banks**

No	Acquirer bank	Target Bank	Date of Acquisition Announcement
1	Travelers Group	Citicorp	6 <sup>th</sup> April 1998
2	Nations Bank	BankAmerica	13 <sup>th</sup> April 1998
3	Chase Manhattan Corporation	JP Morgan & Co	13 <sup>th</sup> September 2000
4	Firststar	US Bancorp	4 <sup>th</sup> October 2000
5	Manulife financial Corp	John Han Cock Financial Services	29 <sup>th</sup> September 2003
6	Mitsubishi Tokyo	UFJ Holdings	16 <sup>th</sup> July 2004
7	Banco Coltau Holding Financeira	UnoBanco holding SA	11 <sup>th</sup> March 2008
8	MetLife	Alico	8 <sup>th</sup> March 2010
9	Investor group	Ping An Insurance Group	5 <sup>th</sup> December 2012

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