

# An Analysis of pre and post-merger of Indian banks: An Event Analysis Approach

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ABSTRACT - This research paper analyzes the impacts of merger and Acquisitions on stock price behavior of banking sector in India by utilizing event study examination over a period from 1st Jan 2004 to 7th March 2019. It included both Public and Private sector banks. The t-test is being connected to decide the significance of the cumulative average abnormal return. It was discovered that CAAR is statistically significant on a large portion of the days in the event window period which gives a sign of the way that the declaration of the merger is having an effect on the wealth of the shareholders. Secondary data as accessible from the BSE website, the annual report of the particular banks and other web-based data sources were utilized to make determinations in regards to the impact of the corporate event. Event study has been led to measure the stock market response to merger declaration. An event window of - 10 to +10 and an estimation window of 250 days have been utilized. The result of analysis demonstrates that the share price performance of the bank has improved essentially in the post-merger period.

Keyword: Event study, Stock returns, Mergers, and Acquisition

### I. INTRODUCTION

In recent times the banking sector has been experiencing a lot of changes as far as guidelines and impacts of globalization. The principal goal of these changes was to improve the productivity of the Indian banks and to advance an expanded and competitive financial system. These Changes have influenced this part both structurally and strategically. The goal of M & A is riches expansion regarding cooperative energy, vital goals, capital market desire, economies of scale, broadening, decreased profit unpredictability, expanded in the household market and client mindfulness. The objectives of M & A is economies of scale, wealth maximization in terms of synergy, diversification, capital market expectation, imperatives reduced earnings volatility, increased in the domestic market and customer awareness.

The Government of India has adopted the route of mergers among others with a view to rebuilding the banking system. Numerous small and weak banks have been merged with other banks mainly have to protect the interests of depositors. The economic recovery gained strength on the bank of a variety of monetary policy initiatives taken by the RBL

### The merger of Banks in India

Mergers and acquisitions in the Indian banking sector have started through the recommendations of that Narasimham Committee on Banking Sector Reform was discovered in December 1997. This Committee's terms of reference incorporate; review of progress in reforms within the banking sector, to make banking system study and universally competitive reforms should be changed with regards to circumstances, surrounding careful proposal

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concerning banking strategy for each measurement like legislative, technology and institution.

The Committee presented it give an account of twenty-three Apr 1998 with the resulting recommendations:

- 1) Use of mergers to make the measurements and quality of tasks for each bank.
- 2) A counseled merger of bigger Indian banks to shape them sufficiently enough to look in international trade.
- 3) Speed up mechanization in PSB.
- 4) Strengthen lawful structure for credit recovery
- 5) There should o be two to three banks with an international orientation, eight to ten national banks and a curiously large pool of neighborhood banks so framework will cowl remote regions as well.

### II. LITERATURE REVIEW

Egl Duksait and Rima Tamosiunien (2009) Portrayed the most well-known thought processes in an organization's choice to take an interest in mergers and acquisitions exchanges. The reason is development, synergy, access to impalpable assets, diversification, horizontal and vertical integration, etc. emerges from the essential organization's rationale to develop. The vast majority of the inspirations for mergers and acquisitions highlight fill in as methods for reshaping upper hand inside their particular businesses. In any case, it might be that a portion of the thought processes recognized influence a few businesses more than others, and in that sense, they can be relied upon to be related with a more noteworthy force of mergers and acquisitions in specific sectors rather than others.

Jianyu Ma et al (2009) examined to shareholders of bidder companies around the day of M&A declaration for ten rising Asian markets are China, India, Hong Kong, Indonesia, Malaysia, the Philippines, Singapore, South Korea, Taiwan, and Thailand. Utilizing an example of 1,477 M&A bargains in the ten rising Asian markets, It was discovered that the securities exchanges have expected positive cumulative abnormal returns in three distinctive event windows those are of a two-day (0, 1) window, a three-day (-1, +1) window and a five-day (-2, +2) window. Valuation impacts of data spillage about M&A bargains are factually huge. The discoveries propose that as investors receive the money related rewards related to M&A bargains, outside development through M&A movement might be profoundly prescribed to supervisors.

Julie Lei Zhu (2011) built up another measure for shareholder esteem creation to evaluate the productivity of gaining firms in using capital before mergers and acquisitions (M&As) and connections this measure to acquirers' post-acquisition performance. His measure, built before the M&A exchange, (a) predicts both the working and long-run abnormal stock performance of merged firms after the acquisitions and (b) support portfolios dependent on the measure create considerable abnormal returns. Generally speaking, the outcomes demonstrated that investors don't completely perceive how productive acquirers have been in using capital before M&A and that fusing the new esteem creation measure into the choice procedure of huge scale M&As can help secure shareholder wealth.

Dr. P. Natarajan and k. Kalaichelvan (2011) utilized the share price data and financial statements of eight select public and private segment banks, amid the period somewhere in the range of 1995 and 2004, this investigation inspected M&A as a business technique and to distinguish the overall significance of mergers on business performance and increased Shareholders identify. The investigation demonstrated that in a banking environment set apart by continuous mergers, such exchanges directly or indirectly impacts the shareholder's notions and increment market share. Mergers upgrades performance and wealth for both the businesses and shareholders.

Mehroz Nida Dilshad (2012) estimated the proficiency of the market regarding declarations of mergers and acquisitions utilizing an event study methodology. The examination investigated the impacts of banks mergers and their declarations on the prices of stocks, in Europe. Proof here backings that huge cumulative abnormal returns were brief for the acquirers. Toward the finish of the event window, the cumulative abnormal returns were 0. Proof of abundance returns after the merger declaration was likewise seen alongside the spillage of data that brought about the ascent of stock costs a few days before the declaration of merger or obtaining. In the meantime, the consequences of combined anomalous returns demonstrated that target banks earned abnormal returns for the merger declaration day.

John J.Binder's paper (1998) where he legitimizes the reasons why the event study methodology has turned into the standard technique for estimating security value response to a declaration or, for the most part, an event. Event studies about are utilized to test the null hypothesis that the market effectively joins data, while under the kept up hypothesis of market productivity, they empower the examination of the effect of some event on the abundance of the association's security holders. Once more, the Market model is utilized. A valuable note is that, if there is an incredible change in the beta coefficient in view of the event, AAR will be determined from a period after that event. Checking others, he calls attention to that when a vast example of irrelevant securities is utilized or the event dates are not bunched in schedule time, the Market show estimation of the AAR is commonly unprejudiced. At long last, he legitimizes that non- normality of individual irregular return and having or not cross-sectional information don't influence the model's performance.

### EVENT STUDY ANALYSIS

Various academic investigations are accessible on merger announcements and their effect on the market valuation of equity or investor's wealth however there is not really any archived proof for Indian banks. In this investigation, we have analyzed the wealth impacts of chosen banks mergers amid the period 1999-2006. Just those cases couldn't be dissected when the target banks and furthermore the bidder banks are unlisted, thus stock price information was not accessible. The occasion contemplate system utilized in our examination is very straight forward and regular (Mackinlay, 1997). To guarantee that any data spillage is being caught, the recognized merger time frame incorporates four days prior and four days after the occasion. The explanation behind considering such a window is, that our goal is to assess the effect of the merger on shareholders" riches around the day of the official declaration. A comparable window period has been received by Chong et. al. (2006). Day by day adjusted closing prices of stocks and the market index (Sensex) are gotten from CMIE Prowess.

### III. OBJECTIVES OF THE STUDY

The examination means to distinguish the effect of merger and securing bargain between Indian banks where the target bank is commonly constrained by Indian national bank, RBI into merger bargain. Subsequently, the effect was dissected on the acquirer and the target organization stock cost in three stages - Pre M&A on the M&A declaration date, post-M&A.

The research problem manages the investigation of a declaration of a merger of the distressed bank with a sound public sector bank on their stock. The bank, both target and the acquiring a bank that would be contemplated for their merger and acquisition details, announcement date and deal details has been given provided below.

Table 1: List of Banks mergers in India

Acquirer	equirer Target Announcement Date		Deal Details			
Company	Company					
State Bank of	State Bank of	22-Mar-10	Share Exchange Ratio of 34 equity shares of the face value of Rs. 10 each (of SBI)			
India	Indore					
ICICI Bank	Bank of	18-May-10	In the ratio equity shares of Rs.10/- each fully paid of ICICI Bank Ltd. for every 118, Equity			
Ltd	Rajasthan Ltd	-	Shares of Rs.10/- each fully paid up held in Bank of Rajasthan Ltd			



IDBI Bank Ltd	IDBI Homefinance Ltd	22-Jul-10	Board of Directors of the Bank at its meeting held on July 22, 2010, have given in-principle approval, to the proposal for merger of IDBI Homefinance Ltd
Indian Bank	And fund Management Ltd	2-Feb-12	February 02, 2012 regarding the approval accorded by the Board of Directors of the Bank for a Scheme of Amalgamation of M/s. and fund Management Limited
HDFC Bank Ltd	JM Financial stock soars	23-Apr-14	JM Financial stock soars on the buzz of the merger with HDFC Bank
IDFC Bank Ltd.	Capital First Securities Ltd Capital First Home Finance Pvt Ltd Capital First Ltd.	13-Jan-18	equity shares of IDFC Bank Limited to the eligible equity shareholders of Capital First Limited pursuant to the Composite Scheme of Amalgamation of Capital First equity shares of IDFC Bank Limited to the eligible equity shareholders of Capital First Limited pursuant to the Composite Scheme of Amalgamation of Capital First, Capital First Home Finance Limited and Capital First Securities Limited with IDFC Bank Limited equity shares of IDFC Bank Limited to the eligible equity shareholders of Capital First Limited pursuant to the Composite Scheme of Amalgamation of Capital First, Capital First Home Finance Limited and Capital First Securities Limited with IDFC Bank Limited
Kotak Mahindra Bank	ING Vysya Bank Ltd	20-Nov-14	725 equity shares of Rs. 5/- each of Kotak Mahindra Bank Ltd. for every 1000 equity share of Rs.10/- each held in ING Vysya Bank Ltd.

### IV. RESEARCH METHODS

An event study approach with an event window of - 10 to +10 and an estimated time of 250 days preceding the day of the event window is utilized to quantify the effect of merger declaration on stock prices. The primary date of media declaration is taken as event day 'zero'. To ascertain the Abnormal Return (AR), single factor advertise show has been utilized. Information for investigation daily stock price and market index were gathered from the official site of Bombay Stock Exchange from 1st Jan 2014 to 7th March 2019 BSE banking sector index 'S&P BSE BANKEX' is utilized as the market index while computing expected return as the researcher of the view that sectoral index would be the best Table 2

catch of instability of stock price of organizations having a place with a specific industry. The research report has utilized 7 mergers and acquisition deals in the banking sector those are 3 Public sector banks and 3 private sector banks.

## V. DATA ANALYSIS & INTERPRETATION

State Bank of India (SBI)

State Bank of India (SBI) was set up in 1955 and it is the biggest public sector bank in India. The bank has assumed a vital role in building up the sorted out financial banking sector in India by offering a wide scope of services to people just as organizations.

Event	Close Price	S&P	Ri	Rm	E (r)	AR E	CAR	t-test
-10	2631.65	11942.51	-0.00668	-0.00013	-0.00013	-0.00655	-0.00655	-0.60971
-9	2603.6	11829.08	-0.01066	-0.0095	-0.00979	-0.00087	-0.00742	-0.08058
-8	2784	12027.83	0.069289	0.016802	0.017344	0.051945	0.044525	4.832696
-7	2849.4	12196.08	0.023491	0.013988	0.014441	0.009051	0.053576	0.842029
-6	2820.25	12132.09	-0.01023	-0.00525	-0.00541	-0.00482	0.048752	-0.4488
-5	2818.15	12247.28	-0.00074	0.009495	0.009804	-0.01055	0.038204	-0.98139
-4	2814.9	12388.98	-0.00115	0.01157	0.011945	-0.0131	0.025105	-1.21862
-3	2805.7	12627.25	-0.00327	0.019232	0.019851	-0.02312	0.001985	-2.15094
-2	2783.65	12527.49	-0.00786	-0.0079	-0.00814	0.000285	0.00227	0.026533
-1	2822.6	12597.94	0.013992	0.005624	0.00581	0.008183	0.010453	0.761258
0	2846.95	12537.5	0.008627	-0.0048	-0.00494	0.01357	0.024022	1.262439
1	2823.7	12415.64	-0.00817	-0.00972	-0.01002	0.001855	0.025877	0.17255
0	2865.1	12474.68	0.014662	0.004755	0.004914	0.009748	0.035625	0.906871
1	2803.1	12216.07	-0.02164	-0.02073	-0.02138	-0.00026	0.035368	-0.02392
2	2801.3	12224.6	-0.00064	0.000698	0.000728	-0.00137	0.033998	-0.12746
3	2764.85	12190.64	-0.01301	-0.00278	-0.00286	-0.01015	0.023845	-0.94457
4	2776.8	12351.08	0.004322	0.013161	0.013587	-0.00926	0.01458	-0.86194
5	2758.1	12448.52	-0.00673	0.007889	0.008148	-0.01488	-0.0003	-1.38453
6	2773.5	12471.47	0.005584	0.001844	0.00191	0.003674	0.003372	0.341801
7	2858.75	12728.73	0.030737	0.020628	0.021291	0.009446	0.012818	0.878808
8	2835.55	12688.48	-0.00812	-0.00316	-0.00326	-0.00486	0.007958	-0.45216
9	2894.2	12706.21	0.020684	0.001397	0.001449	0.019235	0.027193	1.789487
10	2982.5	12984.19	0.030509	0.021877	0.022581	0.007929	0.035121	0.737638

The abnormal and cumulative return has (0.009748) and (0.035625) and t-test (0.906871) indicates there is a significant difference and also the relationship between merger news and stock prices movement.

Industrial Credit and Investment Corporation of India (ICICI) was built up in 1955 as the public limited organization under Indian Company Act, for creating medium and small businesses of a private segment.

### **Industrial Credit and Investment Corporation of India** (ICICI)

Table 3

Event	Close Price	S&P	Ri	Rm	E (r)	AR	CAR	t-test
-10	950.5	11155.07	0.005927	0.005474	0.006393	-0.00047	-0.00047	-0.04583
-9	937.9	11081.8	-0.01326	-0.00657	-0.00898	-0.00428	-0.00475	-0.42036
-8	915.3	10910.4	-0.0241	-0.01547	-0.02033	-0.00376	-0.00851	-0.36961
-7	903.7	10872.07	-0.01267	-0.00351	-0.00508	-0.0076	-0.01611	-0.74608
-6	902.7	10859.67	-0.00111	-0.00114	-0.00205	0.000942	-0.01516	0.092537
-5	876.45	10505.86	-0.02908	-0.03258	-0.04217	0.013095	-0.00207	1.286091
-4	921.35	10921.21	0.051229	0.039535	0.049864	0.001365	-0.0007	0.134051
-3	915.95	10884.17	-0.00586	-0.00339	-0.00492	-0.00094	-0.00164	-0.09225
-2	914.8	10987.67	-0.00126	0.009509	0.011543	-0.0128	-0.01444	-1.257
-1	925.3	11049.56	0.011478	0.005633	0.006596	0.004882	-0.00956	0.479494
0	911.75	10845.52	-0.01464	-0.01847	-0.02416	0.009517	-4.4E-05	0.934668
1	902.4	10791.35	-0.01026	-0.00499	-0.00697	-0.00329	-0.00333	-0.32285
0	889.35	10768.44	-0.01446	-0.00212	-0.0033	-0.01116	-0.01449	-1.09593
1	825	10354.33	-0.07236	-0.03846	-0.04967	-0.02268	-0.03717	-2.22774
2	833.35	10451.14	0.010121	0.00935	0.01134	-0.00122	-0.03839	-0.11967
3	834.8	10393.54	0.00174	-0.00551	-0.00763	0.009367	-0.02902	0.919968
4	832	10336.77	-0.00335	-0.00546	-0.00756	0.00421	-0.02481	0.413486
5	809.4	10065.89	-0.02716	-0.02621	-0.03404	0.006875	-0.01794	0.675217
6	847.6	10249.68	0.047195	0.018259	0.02271	0.024485	0.006547	2.404783
7	856.6	10511.4	0.010618	0.025534	0.031996	-0.02138	-0.01483	-2.09955
8	863.75	10576.77	0.008347	0.006219	0.007344	0.001003	-0.01383	0.098505
9	867.05	10656.56	0.003821	0.007544	0.009035	-0.00521	-0.01904	-0.51212
10	838.35	10394.48	-0.0331	-0.02459	-0.03198	-0.00112	-0.02016	-0.10998

The abnormal and cumulative return has (0.009517) and (-0.000043) and t-test (0.934668) indicates there is a significant

### **Industrial Development Bank of India (IDBI)**

Industrial Development Bank of India (IDBI) set up under the Industrial Development Bank of India Act, 1964, is the vital **Table 4** 

difference and there is an impact of merger news and stock prices movement.

financial foundation for giving credit and different facilities for creating enterprises and helping improvement establishments.

Event	Close Price	S&P	Ri	Rm	E (r)	AR	CAR	t-test
-10	98	13026.54	-0.02147	-0.00829	-0.01021	-0.01125	-0.01125	-0.87816
-9	98.05	13036.14	0.00051	0.000737	-0.00039	0.000899	-0.01036	0.070169
-8	100.95	13307.99	0.029577	0.020854	0.021493	0.008084	-0.00227	0.630734
-7	99.4	13193.05	-0.01535	-0.00864	-0.01059	-0.00477	-0.00704	-0.37206
-6	98.3	13325.37	-0.01107	0.01003	0.009719	-0.02079	-0.02783	-1.62179
-5	97.8	13293.56	-0.00509	-0.00239	-0.00379	-0.0013	-0.02912	-0.10136



-4	97.3	13340.14	-0.00511	0.003504	0.002621	-0.00773	-0.03686	-0.60339
-3	95.55	13217.36	-0.01799	-0.0092	-0.0112	-0.00678	-0.04364	-0.52927
-2	94.85	13180.61	-0.00733	-0.00278	-0.00422	-0.00311	-0.04675	-0.24272
-1	92.1	12870.61	-0.02899	-0.02352	-0.02677	-0.00222	-0.04897	-0.17312
0	92.85	12947.29	0.008143	0.005958	0.00529	0.002853	-0.04612	0.222639
1	94.25	12994.34	0.015078	0.003634	0.002762	0.012316	-0.0338	0.960954
2	96.05	13163.28	0.019098	0.013001	0.012951	0.006147	-0.02765	0.479607
3	96.8	13177.11	0.007808	0.001051	-4.8E-05	0.007856	-0.0198	0.612992
4	98.2	13255.89	0.014463	0.005979	0.005313	0.00915	-0.01065	0.713955
5	103.65	13397.49	0.055499	0.010682	0.010429	0.04507	0.034422	3.516615
6	106.8	13347.59	0.030391	-0.00372	-0.00524	0.035633	0.070055	2.780273
7	104.7	13186.94	-0.01966	-0.01204	-0.01428	-0.00538	0.064675	-0.41977
8	106.2	13310.99	0.014327	0.009407	0.009042	0.005285	0.06996	0.412344
9	106.4	13254.84	0.001883	-0.00422	-0.00578	0.007663	0.077622	0.597871
10	106.65	13233.44	0.00235	-0.00161	-0.00295	0.005297	0.082919	0.413267

The abnormal and cumulative return has (-0.00785) and (-0.03243) and t-test (-0.46564) indicates there is a not

### **Indian Bank**

Indian Bank is a public sector bank possessed by the state of India that was established in the year 1907. It fundamentally

Table 5

significant difference and also there is no impact of merger news and stock prices movement. offers a large group of services and products like consumer and corporate banking, finance and insurance, venture and trader banking, mortgage loans, private value and banking, investment funds and credit cards

Event	Close Price	S&P	Ri	Rm	E (r)	AR	CAR	t-test
-10	200	10350.35	199	10349.35	196.1284	2.871 <mark>5</mark> 72	2.871572	0.463412
-9	203.6	10542.14	202.6	10541.14	198.466	4.133951	7.005523	0.667134
-8	209.5	10912.15	208.5	10911.15	202.9759	5.524105	12.52963	0.891476
-7	208.6	10935.12	207.6	10934.12	203.2559	4.344 <mark>137</mark>	16.87377	0.701054
-6	217.6	11286.43	216.6	11285.43	207.5378	9.062215	25.93598	1.462454
-5	217.65	11323.72	216.65	11322.72	207.9923	8.657708	34.59369	1.397175
-4	218	11282.33	217	11281.33	207.4878	9.512188	44.10588	1.53507
-3	213.45	10969.09	212.45	10968.09	203.6699	8.780095	52.88597	1.416926
-2	221.3	11390.7	220.3	11389.7	208.8087	11.49133	64.3773	1.854462
-1	226.8	11427.87	225.8	11426.87	209.2617	16.53828	80.91558	2.668936
0	230	11480.38	229 CSe	11479.38	209.9017	19.09827	100.0138	3.082065
1	234.55	11643.84	233.55	11642.84	211.8941	21.65594	121.6698	3.494821
2	233.95	11798.19	232.95	11797.19	213.7753	19.17466	140.8444	3.094393
3	233	11864.62	232	11863.62	214.585	17.41498	158.2594	2.810417
4	241.4	11849.22	240.4	11848.22	214.3973	26.00268	184.2621	4.196294
5	240.5	12068.58	239.5	12067.58	217.071	22.42902	206.6911	3.61958
6	240.95	11986.92	239.95	11985.92	216.0757	23.87433	230.5655	3.852823
7	241.25	12029.51	240.25	12028.51	216.5948	23.65523	254.2207	3.817464
8	245.3	12127.07	244.3	12126.07	217.7839	26.51612	280.7368	4.279153
9	251.6	12558.11	250.6	12557.11	223.0376	27.56242	308.2992	4.448003
10	247.75	12559.43	246.75	12558.43	223.0537	23.69633	331.9956	3.824096

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The abnormal and cumulative return has (19.09827) and (100.0138) and t-test (3.082065) indicates there is a significant difference and also there is an impact of merger news and stock prices movement.

**Housing Development Finance Corporation (HDFC)** 

HDFC Bank was established in August 1994 for the sake of 'Housing Development Finance Corporation Limited'. This portion raises deposits from clients and makes loans

and furnishes different services with the assistance of

specialist product gatherings to such clients.

#### Table 6

Event	Close Price	S&P	Ri	Rm	E (r)	AR	CAR	t-test
-10	725.8	14362.26	724.8	14361.26	705.7149	19.08506	19.08506	1.177389
-9	725.35	14305.35	724.35	14304.35	704.1893	20.16067	39.24573	1.243746
-8	742.1	14798.8	741.1	14797.8	717.4174	23.68256	62.9283	1.461017
-7	738.85	14805.97	737.85	14804.97	717.6096	20.24035	83.16865	1.248661
-6	737.85	14689.89	736.85	14688.89	714.4978	22.35216	105.5208	1.378942
-5	723.4	14386.45	722.4	14385.45	706.3634	16.03659	121.5574	0.989324
-4	725.25	14370.22	724.25	14369.22	705.9283	18.32168	139.8791	1.130295
-3	718.55	14625.65	717.55	14624.65	712.7757	4.774263	144.6533	0.294532
-2	716.6	14822.16	715.6	14821.16	718.0437	-2.44366	142.2097	-0.15075
-1	726.35	14846.18	725.35	14845.18	718.6876	6.662427	148.8721	0.411016
0	734.25	15012.05	733.25	15011.05	723.1341	10.11588	158.988	0.624066
1	726.25	14910.3	725.25	14909.3	720.4065	4.843537	163.8315	0.298806
2	725.3	14964.24	724.3	14963.24	721.8525	2.447546	166.2791	0.150993
3	715.9	14773.76	714.9	14772.76	716.7462	-1.84618	164.4329	-0.11389
4	718.25	14706.66	717.25	14705.66	714.9474	2.302595	166.7355	0.142051
5	716.85	14690.5	715.85	14689.5	714.5142	1.335803	168.0713	0.082408
6	716.9	14749.12	715.9	14748.12	716.0856	-0.18565	167.8856	-0.01145
7	719.7	14829.5	718.7	14828.5	718.2404	0.459575	168.3452	0.028352
8	716.05	14814.71	715.05	14813.71	717.8439	-2.79394	165.5513	-0.17236
9	719.05	14924.81	718.05	14923.81	720.7954	-2.74544	162.8058	-0.16937
10	757.2	15721.36	756.2	15720.36	742.1489	14.05113	176.857	0.866838

The abnormal and cumulative return has (10.11588) and (158.988) and t-test (0.624066) indicates there is a significant difference and also there is an impact of merger news and stock prices movement.

Kotak Mahindra Bank

Table 7

Established in the year 1985, Kotak Mahindra Bank is a standout amongst the most confided in financial institutions in the nation. It offers a wide scope of banking and financial services including investment banking, personal banking, general insurance, and life insurance and wealth management.

Event	Close Price	S&P	Ri	Rm in Engir	E (r)	AR	CAR	t-test
-10	1132	19872.26	1131	19871.26	1064.193	66.80732	66.80732	1.720005
-9	1123.1	19854.42	1122.1	19853.42	1063.31	58.79014	125.5975	1.513597
-8	1108.55	19749.4	1107.55	19748.4	1058.113	49.43709	175.0345	1.272796
-7	1108.4	19894.58	1107.4	19893.58	1065.297	42.1028	217.1373	1.083969
-6	1126.4	20117.78	1125.4	20116.78	1076.342	49.05767	266.195	1.263027
-5	1111.9	19975.48	1110.9	19974.48	1069.301	41.59944	307.7945	1.071009
-4	1089.35	20118.77	1088.35	20117.77	1076.391	11.95868	319.7531	0.307885
-3	1107.25	20201.93	1106.25	20200.93	1080.507	25.74348	345.4966	0.662785
-2	1085.15	20262.54	1084.15	20261.54	1083.506	0.644168	346.1408	0.016585
-1	1078.5	20130.6	1077.5	20129.6	1076.977	0.523267	346.664	0.013472
0	1157.05	20204.71	1156.05	20203.71	1080.644	75.40591	422.07	1.941383
1	1199.65	20683.54	1198.65	20682.54	1104.339	94.31083	516.3808	2.428104
2	1199.6	20927.2	1198.6	20926.2	1116.397	82.20322	598.584	2.116385
3	1159.9	20649.3	1158.9	20648.3	1102.645	56.25521	654.8392	1.448333
4	1160.7	20586.35	1159.7	20585.35	1099.53	60.17031	715.0095	1.549131



5	1155.8	20620.69	1154.8	20619.69	1101.229	53.57098	768.5805	1.379226
6	1202.25	21212.07	1201.25	21211.07	1130.494	70.75633	839.3368	1.821676
7	1201.85	21222.29	1200.85	21221.29	1130.999	69.85059	909.1874	1.798357
8	1214.55	21248.52	1213.55	21247.52	1132.297	81.25259	990.44	2.09191
9	1219.05	21339.82	1218.05	21338.82	1136.815	81.23457	1071.675	2.091446
10	1223.35	21501.48	1222.35	21500.48	1144.815	77.53477	1149.209	1.996192

The abnormal and cumulative return has (75.40591) and (422.07) and t-test (1.941383) indicates there is a

significant difference and also there is an impact of merger news and stock prices movement.

Banks	Beta	R-Square	St-Error
SBI (2010)	1.658901	0.403841	0.017503
rotor	1.06422	0.404007	0.01.0055
ICICI	1.06422	0.484997	0.016855
IDBI (2010)	1.06422	0.484997	0.016855
IDBI (2012)	1.087765	0.664593	0.012816
Indian Bank	0.012188	0.833876	6.196582
HDFC	0.026807	0.779536	16.20964
Kotak	0.049485	0.902539	38.84134
Average	0.709084	0.650626	8.7588

The above table shows that the average risk of these stock price and market return is 0.709084, R- Square are 0.650626 and Standard Error (S.E) is 8.7588.

### VI. CONCLUSION

As merger and acquisition are accepted to make esteem if the profits on the shares of the acquirers and targets increment on the declaration of the merger. This exploration had one essential goal. We needed to look at the impacts of a merger declaration of banks on stock values. Returns on stocks of banks were contrasted with the market returns i.e S&P BSE BANKEX index. The discoveries uncover that there is unquestionably activity in the costs of stocks around Day 0, yet the investigation additionally demonstrates that the merger may not be significant in assurance of the purpose behind the specific conduct. The estimation time frame keeps running from -250 to - 20 days while the test period is from - 10 to +10. A negative return will along these lines suggest that they have a negative inclination in the market while a positive return portrays that shareholders have positive sentiments or are being bullish about market data. Utilizing the market demonstrate for the examination in this investigation, aftereffects of the test measurements statistics that they are bullish and in this manner had the positive inclination in the market about the acquisition news.

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