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EFFECT OF MERGER AND ACQUISITION ON THE ACQUIRER BANK'S PERFORMANCE IN THE INDIAN BANKING SECTOR

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ABSTRACT—*Mergers and Acquisitions (M&A) are continuously being adopted for progressive company's competitiveness by expanding market share. The study emphasises on the Indian Banking Sector because it is one of the most prominent sectors in India since liberalisation. The main objective of the study is to analyse the effect of Mergers and Acquisitions on Acquirer Banks' performance. For this purpose, cases are selected of merger and acquisition in Indian Banking Sector during the study period of 2010-11 to 2017-18. The study also compares the financial performance of Acquirer Banks in pre and post-merger scenario with the help of accounting ratios and paired sample t-test.*

Keywords*: Merger and Acquisition, Banking Sector and Financial Performance.*

INTRODUCTION

Merger is the agreement where acquirer firm is ready to take over the business of target firm. It is a process of combination where two or more than two target firm liquidate their business and form a new firm or any existing firm purchase the business of target firms. The purpose of the merger is eliminate of competition; increase in efficiency and diversifies the product, services and markets and the benefit includes Economies of Scale; Operating Economies; Synergy effect; Increase in Shareholder's wealth. Banking Sector in India which comprises of 21 public sector and 21 private sector banks, is one the prominent sector which witnessed merger and acquisitions over a period of time. During the study period of 8 years i.e. 2010-11 to 2017-18, we found three merger cases in banking sector viz. ICICI Bank- Bank of Rajasthan, Kotak Mahindra Bank-ING Vysya Bank and State Bank of India-SBI Associates Banks. The study mainly emphasised on the financial performance of acquire banks in pre and post merger period.

LITERATURE REVIEW

Following are the main studies conducted to evaluate the merger and acquisitions at national and international level:

Author (Year)	Objective	Methodology	Findings
Dubey (2018)	To explain and identify strategic drivers of M&A with reference to changing market conditions	She framed Exploratory research design and conducted for study period of 3 years.	The study showed improvement of the target's operating and financial performance on a stand-alone basis post-acquisition
Adeyemi Babalola, Adeyemi Oluseyi Ewetade (2016)	To examine the state, quality and relationship between M&A and the performance of Nigerian banks.	The paired sample t-test statistics was used and responses of 60 employees from 5 banks of Nigeria were taken into consideration.	They concluded a significant difference between the performance of banks before and after M&A.
Emy Mashita Yanan, Sahibzada Muhammad Hamza, Abdul	To examine the impact of merger and acquisition on Net profit margin, return on equity, earning per share, sales growth	The study period was 12 years and technique used was paired t-test. The sample of the study consist of 100 samples firms.	The study documented the positive effect of merger and acquisition on financial performance of firms.

Basit (2016)			
Gwaya Ondieki Joash, Mungai John Njangiru (2015)	To measure the effect of the M&A on the shareholders' value in relation to financial performance.	The study has taken the sample of 14 banks in Kenya and the study period was 2000-2014. They used regression method to analyze the impact of Merger and Acquisition.	They found mergers and acquisitions raised the shareholders' value of the merged/acquiring banks in Kenya.
Neha Duggal (2015)	To analyze impact of merger announcement on the financial performance of the banks in the merger periods	Paired sample t-test was used and sample consists of 8 public sector banks merger for the study period of 8 years.	The study found improvement in some cases depicting that merger as a whole has positive impact on performance of banks.
DEVARAJAPPA S (2012)	To explore various motives of merger in Indian banking industry.	The study period qwas 2005-2011 and the study used Independent T-test to compare the performance of banks.	The study witnessed banks have been positively affected by the event of merger.
Azeem Ahmad Khan (2011)	To evaluate the effect of merger and acquisitions on banks' performance in the term of net profitability, debt equity ratio, equity shareholder.	The study used Mean, standard deviation and considered a sample of 2 merger case in banks placed during the study period.	He found banks positively affected and obtain efficiency by M&A and passes the benefit to the equity shareholder in the form of dividend.

The study fills the gap in the literature as it attempts to evaluate the financial performance of acquirer banks in pre and post merger period during the study period of 2010-11 to 2018. It consider the various financial variables which cover profitability, liquidity and solvency of the banks in India which diverse our study from existing.

RESEARCH METHODOLOGY

The main objective of the study is to compare the financial performance of acquired banks in pre and post merger period. We found 3 cases of merger and acquisition during the study period of 2010-11 to 2017-18, the details are as follows;

Table 1 Sample cases of Merger & Acquisition during study period

Case	Acquirer Bank	Target Bank	Year	Category
1	ICICI Bank	Bank of Rajasthan	2010	Private Sector
2	Kotak Mahindra Bank	ING Vysya Bank	2014	Private Sector
3	State Bank of India	State Bank of Bikaner and Jaipur, State Bank of Hyderabad, State Bank of Mysore State Bank of Patiala, State Bank of Travancore and Bhartiya Mahila bank,	2017	Public Sector

Source: Author's own Compilation

From these cases, we eliminated the Case-3, because the sufficient data is not available in post merger scenario and we left with two cases which took placed in private sector. The null hypothesis of the study is as follows:

Null Hypothesis: There is no significance difference between the pre and post-merger financial performance of acquired banks.

The study is based on the secondary data. The data has been taken from the annual reports of selected public and private sector banks for 4 years in pre and 4 years in post merger period. The description of variables to evaluate the financial performance, are as follows:

Table-2 Variables for Financial Performance

Financial Variables	Code	Measurement
Net Profit Margin	NPM	Net Profit/Total Income
Net Interest Margin	NIM	Interest Earned-Interest Expanded/Total Asset
Return on Equity	ROE	Net Profit/ Owners Equity
Capital Adequacy Ratio	CAR	Total Equity/ Total Assets
Total Deposit to Total Equity	TDTTE	Total Deposits/ Total Equity

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Investment to Total Asset	ITTA	Investment/Total Asset
Advance to Total Asset	ATTA	Advance/total Asset
Return on Assets	ROA	Net Profit/Total Asset

Source: Author's own Compilation

Apart from ratio analysis, the study used descriptive statistics and paired sample t-test to compare the financial performance of acquired banks in pre and post merger period.

ANALYSIS AND INTERPRETATION

This section deals with analysis and interpretation of the study which classified into two parts viz. Merger of Bank of Rajasthan (Target Bank) by ICICI Bank (Acquired Bank) and Merger of ING Vysya Bank (Target Bank) by Kotak Mahindra Bank (Acquired Bank).

Case-1 Merger of Bank of Rajasthan (Target Bank) by ICICI Bank (Acquired Bank)

The ICICI Bank acquired the Bank of Rajasthan in 2010 and table-4 shows the financial performance of both banks in pre merger period (4Years).

Table 4 Financial Performance of Bank of Rajasthan and ICICI Bank in Pre- Merger Period

	BANK OF RAJASTHAN				ICICI BANK			
	Mar-07	**Mar-08**	**Mar-09**	**Mar-10**	**Mar-07**	**Mar-08**	**Mar-09**	**Mar-10**
NPM	12.3669	9.5758	7.7779	-6.8238	6.3664	5.1875	5.2677	8.1266
NIM	2.6308	1.9846	2.1897	1.9342	1.6044	1.7149	2.0227	1.9259
ROE	102.7889	85.676	72.9532	-63.297	10.9885	6.9658	7.2245	9.442
CAR	0.0089	0.0085	0.0094	0.0093	0.0023	0.0023	0.0023	0.0023
TDTTE	10054.7	10299.9	9412.5	9335.2	27643.8	24893.3	23520.8	21668.6
ITTA	30.0687	29.9055	39.5075	38.8131	30.5874	32.9574	30.6836	38.0752
ATTA	47.1098	47.0086	45.1448	48.091	53.6091	51.7696	55.1348	46.1386
ROA	0.9132	0.7285	0.683	-0.5897	0.6678	0.6415	0.7001	0.9898

Source: Author's own Compilation

The table depicts that at the time of merger, the financial position of the Bank of Rajasthan was worse which is reflected by negative Net Profit Margin was negative (6.8%); Return on Equity (65.29) and Return on Assets (0.58%).

Table-5 Financial Performance of ICICI Bank in Post- Merger Period

	Mar-11	Mar-12	Mar-13	Mar-14		Mar-11	Mar-12	Mar-13	Mar-14
NPM	10.2577	11.9080	13.6513	14.6764	**TDTTE**	22496.28	24459.69	27286.36	31131.14
NIM	2.0119	2.0962	2.6437	2.4598	**ITTA**	39.2779	39.7000	37.8866	35.7994
ROE	11.4249	12.9543	14.7327	15.2796	**ATTA**	47.9645	48.3498	48.8980	51.8165
CAR	0.0022	0.0019	0.0017	0.0015	**ROA**	1.1837	1.2817	1.5011	1.5616

Source: Author's own Compilation

Table 5 shows the financial performance of ICICI bank during post merger period. It can be observed from the table that various financial indicators improved after merger which shows the synergy effect. The net profit margin was 10.67% in 2010-11 which reached to 14.67% in 2013-14. The efficiency is observed in Return on Assets and Return on Equity.

Table-6 Result of Paired Sample t-test (Bank of Rajasthan-ICICI Bank)

		Mean	S.D.	t-value	Sig (p value)
NPM	Pre- Merger	6.8161	1.75597	-4.266	0.0138*
	Post- Merger	12.9678	1.85429		
NIM	Pre- Merger	1.7792	0.18603	-7.719	0.002*
	Post- Merger	2.3906	0.32479		
ROE	Pre- Merger	25.8266	38.43222	0.667	0.541
	Post- Merger	13.9344	1.69689		
CAR	Pre- Merger	0.0028	0.00109	2.626	0.058
	Post- Merger	0.0017	0.0003		

TDTTE	Pre- Merger	22327.2	5185.94661	-2.069	0.107
	Post- Merger	27732.2	4492.85357		
ITTA	Pre- Merger	32.5216	3.28126	-2.788	0.049*
	Post- Merger	37.8629	1.66628		
ATTA	Pre- Merger	52.6034	4.00178	1.003	0.372
	Post- Merger	50.0219	2.28418		
ROA	Pre- Merger	0.7729	0.14932	-6.378	0.002*
	Post- Merger	1.419	0.17543		

Source: Author's own Compilation

The table-6 shows the result of paired sample t-test to test the hypothesis whether the pre and post-merger financial performance of ICICI Bank during significantly differ. It can be observed from the table that Post merger mean for all financial variables is higher than Pre merger mean except ROE, CAR and ATTA. The study found significant p value which rejects the null hypothesis in case of NPM, NIM, ITTA and ROA and p value is insignificant I case of ROE, CAR, TDTTE and ATTA.

Case-1I Merger of ING Vysya Bank (Target Bank) by Kotak Mahindra (Acquired Bank)

The Kotak Mahindra Bank acquired the Bank of Rajasthan in 2014 and table-7 shows the financial performance of both banks in pre merger period.

Table-7 Financial Performance of ING Vysya Bank and Kotak Mahindra Bank in Pre- Merger Period

	ING VYSYA BANK				KOTAK MAHINDRA BANK			
	Mar-11	**Mar-12**	**Mar-13**	**Mar-14**	**Mar-11**	**Mar-12**	**Mar-13**	**Mar-14**
NPM	9.5147	10.7207	10.9683	10.8336	14.2279	14.2197	13.8193	14.5442
NIM	2.5777	2.5702	2.8033	2.8988	4.4854	4.2539	4.1554	4.6416
ROE	12.1510	11.4700	13.2506	9.3037	14.3140	14.3440	14.4540	20.4605
CAR	0.0031	0.0032	0.0028	0.0031	0.0050	0.0040	0.0032	0.0032
TDTTE	32273.0	31318.0	35444.6	32058.6	7413.2	9845.0	13230.2	14780.9
ITTA	28.3203	27.0458	33.3022	27.6473	35.3537	34.2811	35.3152	31.7344
ATTA	60.4452	61.0904	57.8873	59.2407	55.9736	57.5462	57.2002	58.6506
ROA	0.8161	0.9705	1.1168	1.0877	2.1298	2.0038	1.9029	2.0547

Source: Author's own Compilation

The table-7 shows the stable trends in the financial performance of ING Vysya Bank during pre merger period. It shows that Return on Equity is decreased from 12.15% in 2010-11 to 9.30% in 2013-14. This is a case when a bank with sound performance acquired by another bank. The performance of Kotak Mahindra Bank was also sound. The Return on Equity of Kotak Mahindra Bank was 14.13% in 2010-11 which increased to 20.46% in 2014-15.

Table-8 Financial Performance of Kotak Mahindra Bank in Post- Merger Period

	Mar-15	**Mar-16**	**Mar-17**	**Mar-18**		**Mar-15**	**Mar-16**	**Mar-17**	**Mar-18**
NPM	14.2754	12.2399	14.5631	15.8377	**TDTTE**	188.6275	148.2229	168.9828	200.7042
NIM	4.2758	3.8532	3.9345	3.7499	**ITTA**	30.6839	29.1831	24.7881	26.9384
ROE	21.6750	14.3208	17.9210	16.4004	**ATTA**	59.6546	60.1290	60.5114	60.9964
CAR	0.0026	0.0038	0.0033	0.0028	**ROA**	2.0630	1.4249	1.7919	1.8202

Source: Author's own Compilation

Table-8 depicts the results in post-merger period for Kotak Mahindra Bank. Immediately after the merger, there is decline in NPM, NIM, ROE, CAR, ITTA and ROA in 2015-16. The benefit of the merger is not same for Kotak Mahindra Bank as compare to ICICI bank. The Return on Equity which was 21.67% in 2014-15 declined to 16.40% in 2017-18. The similar decline is also observed in NIM, ITTA and ROA.

Table-9 Result of Paired Sample t-test (Kotak Mahindra Bank and ING Vysya Bank)

		Mean	**S.D.**	**t-value**	**Sig (p value)**
NPM	Pre- Merger	14.2025	0.29511	-0.038	0.972
	Post- Merger	14.23	1.49037		

NIM	Pre- Merger	4.3841	0.22049	2.696	0.074
	Post- Merger	3.9534	0.22784		
ROE	Pre- Merger	15.8931	3.04549	-0.692	0.539
	Post- Merger	17.5793	3.10372		
CAR	Pre- Merger	0.0038	0.00086	1.232	0.306
	Post- Merger	0.0031	0.00054		
TDTTE	Pre- Merger	113.1738	33.19925	-3.653	0.035*
	Post- Merger	176.6343	23.0141		
ITTA	Pre- Merger	34.1711	1.69874	4.414	0.022*
	Post- Merger	27.8984	2.58233		
ATTA	Pre- Merger	57.3427	1.10256	-9.581	0.002*
	Post- Merger	60.3228	0.56962		
ROA	Pre- Merger	2.0228	0.09521	2.137	0.122
	Post- Merger	1.775	0.26322		

Source: Author's own Compilation

The table-9 shows the result of paired sample t-test to test the hypothesis whether the pre and post-merger financial performance of Kotak Mahindra Bank during significantly differ. It can be observed from the table that Post merger mean for all financial variables is higher than Pre merger mean except NIM, CAR, ITTA and ROA. The study found significant p-value which rejects the null hypothesis in case of TDTTE, ITTA and ATTA and p value is insignificant in case of NPM, NIM, ROE, Car and ROA which indicate the acceptance of null hypothesis.

CONCLUSION

Banking sector is one of the fast-growing sectors in Indian economy. Merger and Acquisition is one of the most useful strategies for growth and expansion. This present study shows the effect of the merger and acquisition on the financial performance of acquired banks during post- merger period. It also provides the comparison between financial performance of target and acquired bank in pre merger period. The study evaluate all cases of merger and acquisition in Indian banking sector from 2010 to 2018 and on the basis of availability of data the study left with two cases viz. ICICI Bank- Bank of Rajasthan, Kotak Mahindra Bank- ING Vysya Bank. The variables for measurement of financial performance are NPM, NIM, ROE, CAR, TDTTE, ITTA, ATTA and ROA. The study found significant NPM, NIM, ITTA and ROA in Case-I and TDTTE, ITTA and ATTA in Case-II which documents rejection of null hypotheses. The finding of the study indicates that performance of acquired bank significantly improved in post merger period as compare to pre-merger period. The study also shows that synergy benefit is enjoyed more by ICICI bank (Acquired Bank in Case-I) as compare to Kotak Mahindra Bank (Acquired Bank in Case-II).

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