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# An Analysis of Operating Synergy in Post-Merger Period- A Case Study of Axis Bank and Kotak Mahindra Bank

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**Abstract :** *The purpose of this paper is to study the concept of merger in detail by taking one example of some companies. The main objective is to analyse the operating synergy in selected merger. Merger/Acquisition is a phenomenon which is easy to think but hard to implement. In this paper the study period is restricted for 5 years and financial tool is ratio and statistical tool is Mean, Standard deviation, Kurtosis and Skewness are used in descriptive statistics and also T-test.*

**Key words-** *merger, synergy, mean, standard deviation, kurtosis, Skewness*

## I. INTRODUCTION

Mergers and Acquisitions: An Introduction. Mergers and acquisitions are among the most effective ways to expedite the implementation of a plan to grow rapidly. Companies in all industries have grown at lightning speed, in part because of an aggressive merger and acquisition strategy.

Mergers and acquisitions are among the most effective ways to expedite the implementation of a plan to grow rapidly. Companies in all industries have grown at lightning speed, in part because of an aggressive merger and acquisition strategy. The impact of technology and the Internet has only further increased the pace and size of deals. Buyers of all shapes and sizes have many of the same strategic objectives—to build long-term shareholder value and take advantage of the synergies that the combined firms will create—but each industry has its own specific objectives.

### A. Reasons Behind Decision to Participate in M & A Deals

- 1) Growth
- 2) Synergy
- 3) Access to intangible assets

### B. Share holder's Implications of M & A

The extensive literature on the implications of M&A produces mixed results regarding the merits of M&A on outcomes for specific stakeholder groups, with most attention going to shareholders. Acquiring-firm shareholders may suffer from overpayment, while target-firm shareholders may benefit in the short term, although some claim that the question remains unsettled.

### C. Reasons of Failure

- 1) Cultural differences
- 2) Lack of Experience and Knowledge
- 3) External Environment
- 4) Over-optimism

### D. Background

Now that Axis Bank's long-time chief Shikha Sharma is all set to step down at the end of 2018, time is ripe for Kotak Mahindra Bank to make a bid for merging Axis Bank with itself. A report by Nomura says this is Kotak's best chance to merge with Axis Bank. "With a very short time left in the CEO's term at Axis Bank (nine months), RBI's pressure on Axis Bank's

management/board and with an asset quality clean-up exercise continuing, we believe this is the best opportunity for Kotak Bank to acquire/merge with Axis Bank," Nomura said.

Nomura noted that from Axis Bank's perspective, there would be limited push-back this time for any merger, given the loss of confidence that the regulator has expressed by not approving the renewal of the CEO's term, and a vacuum in top management.

A merger would make Kotak + Axis Bank combined a close second-largest private bank after HDFC Bank in terms of advances and also absolute CASA, and largest in terms of number of branches.

"Qualitatively, while Axis Bank's loan book will require some clean-up-related provisioning, the recent capital raise by Axis Bank and excess capital levels at Kotak Bank would aid the clean-up," Nomura said, adding a combination of franchise/reach of Axis Bank and underwriting/leadership of Kotak Bank would make the combined entity one of the largest and best private banks.

#### *E. Reason for Merger with Kotak Mahindra and Axis Bank*

- 1) Axis Bank has ramped on the NPA recognition process and the majority of the bad news is now known
- 2) Since the time of the last merger talks, Kotak Bank's stock has outperformed Axis Bank's by nearly 30 per cent, making the acquisition more reasonable
- 3) Kotak Bank would gain liability and retail asset size enough to rub shoulders with HDFC Bank
- 4) From the promoter's perspective, this should aid in diluting the promoter's stake down to RBI's requirements

## **II. LITERATURE REVIEW**

Pradeep Kumar Gupta, merger and acquisitions are the strategic growth devices in the hands of more and more companies not only to stay in the competition but also to extend their margins, market share and dominance globally, Dimitrios Maditinos, the study results was a beta-risk value for the Alpha bank which is a reconciliation of the beta-risks co-efficient of the 2 banks and reveal that Alpha bank is not only profitable but also competitive within the industry, Rima Tomosiuniene, Egle Duksaite, this study used to correlation analysis of the M&A. it presents the merits of M&A deals and underlines their features finally concludes that the number of M&A transactions most likely will increase, K.A Goyal and Vijay Joshi, 2012 this study will be helpful for policy makers, strategy makers, HR people, bankers, researchers And scholars, Dauber, Daniel, 2009 major findings of this study across papers are contradictory and to some extent biased and that future research should consider different facts of integration and culture, consider both partners in M&A deals and question the way cultural differences and integration are managed, Ronald Stunda, 2014 this study indicates that firms in certain industries may be more positively impacted, from a stock price perspective than firms in other industries, Susan Cartwright and Richard Schoenberg, 2006 the major findings of this study is possible reasons for this dichotomy are discussed, which in turn highlight the significant opportunities that remain for future M&A research, Mchroz Nidsa Dilshad, 2012 the major findings of this study banking mergers and acquisitions do have a positive or negative effect on value of banks and the linear relationship between the expected return of the security and the market portfolio, Disk Michael Boche, 2012 the major findings that research on international M&A's should acquirers M&A experience as well as the institutional characteristics of their target countries, Helen Anderson, Virpi Havila and Johan Holtstrom, 2003 the findings of this study is how the literature has addressed effects on customers and suppliers, Sandra A.

Waddock, Samuel B. Graves, 2006 the major findings of this study emerges from the relationship between acquiring firms and merged firms, James P. Walsh, 1988 the results of this study turnover rates in acquired top management teams are significantly higher than normal turnover rates, and that visible, very senior executives are likely to turnover sooner than their less-visible colleagues, Joao Corvalho Santos, 2011 the concluded by presenting a broad discussion comprising the methods used, the research questions investigated the type of articles, as well as limitations and avenues for future enquiry, Andreea Niccoleta POPOVICI, 2014 this study is to analyse the impact of M&A's on the study shows that a merger or an acquisition does not improve the value market of the shares of the bidder bank.

## **III. OBJECTIVES OF THE STUDY**

To analyse the operating synergy in selected merger

## **IV. RESEARCH METHODOLOGY:**

### *A. Type of Research*

The study is Descriptive research in nature and is based on secondary data

### B. Sources of Data

The sources of Secondary data gather from

- 1) Company website
- 2) Journals
- 3) Articles
- 4) Company profile

### C. Sampling Design

SL no.	Acquiring	Acquired	Type of activity	Deal value	Year of occurrence	Strategic motives
1	Axis Bank	Kotak Mahindra Bank	Merger	Rs. 25,739.1 cr	November 20, 2014	Since the time of the last merger talks, Kotak Bank's stock has outperformed Axis Bank's by nearly 30 per cent, making the acquisition more reasonable.

### D. Hypothesis of the Study

- 1)  $H_0$ : There is no significance change in operating efficiency

### E. Tools for the Study

- 1) *Statistical Tools*
- 2) *Descriptive Statistics*: In this study using of the statistical tool for to identifying the companies mean, standard deviation, Kurtosis and Skewness of the study
  - a) Mean – simple or arithmetic average of a range of value of qualities, computed by dividing the total of all values, also called arithmetic mean.
  - b) Standard deviation- it is a measures of the dispersion of a set of data from its mean. It is calculated as the square root of variance by determining the variation between each data point relative to the mean.
  - c) Kurtosis & Skewness- kurtosis is a measure of whether the data are heavy – tailed or light-tailed relative to a normal distribution. Skewness is a measure of symmetry, or more precisely, the lack of symmetry. A distribution, or data set, is symmetric if it looks the same to the left and right of the centre point.
  - d) T-test: It is the statistical hypothesis test in which the test statistic follows a student's t-distribution under the null hypothesis.
- 3) *Financial Tools*: In this study to analysing the ratio analysis using the companies consolidation balance sheet and income statement for both the companies.

## V. ANALYSIS AND INTERPRETATION

The following study ascertain the to analyse impact of merger and acquisition compare the operating synergy in post-merger period of the Axis bank after merging the kotak Mahindra bank considering the period from 2013-2017. The study using both statistical and financial tools.

Table no 6.1 Liquidity and Solvency Ratios

Liquidity and solvency ratio	2017	2016	2015	2014	2013
Current Ratio	0.10	0.07	0.03	0.03	0.03
Quick Ratio	17.10	25.74	20.64	18.57	20.10
Debt Equity Ratio	2.35	2.15	2.12	1.67	1.65
Long term debt equity Ratio	1.8	1.8	1.7	1.3	1.3



The above table shows that the company have the sufficient current assets to maintain their daily activities/expenses, i.e. it shows that the ratio is consentingly increased from 0.03 to 0.10. When compared to quick ratio, it little bit decreased from 20.10 to 17.10. Debt equity ratio shows above the standard ratio in every year, i.e. 1.65 to 2.35 and same as to compare the long term debt equity ratio also.

Table - 6.2 Management Efficiency Ratios

Management Efficiency Ratio	2017	2016	2015	2014	2013
Debtors turnover Ratio	0.13	0.13	0.14	0.14	0.15
Total assets turnover Ratio	0.08	0.08	0.08	0.08	0.09
Asset turnover Ratio	0.08	0.09	0.09	0.09	0.09

Sources- Authors calculation annual report database

The above table shows that to analyse of the company's management efficiency ratio. The compared to debtors turnover ratio, it little bit decreased from 0.15 to 0.13. Total assets turnover ratio it's also decreased in 0.09 to 0.08 and same as to compare the asset turnover ratio from 0.09 to 0.08.

#### A. Descriptive Statistics

Table - 6.3 Descriptive Analysis of the Liquidity and Solvency Ratio

Statistics	Current ratio	Quick Ratio	Debt equity ratio	Long term debt equity ratio
Mean	0.052	20.43	1.988	1.58
Standard Deviation	0.031937	3.274813	0.312282	0.258844
Kurtosis	-0.65167	2.107209	-2.55284	-3.21452
Skewness	1.080544	1.261538	-0.22962	-0.50166
Minimum	0.03	17.1	1.65	1.3
Maximum	0.1	25.74	2.35	1.8

Sources- Authors calculation & annual report database

The above table shows that the descriptive analysis of the study and comparison of the mean value of the companies current and quick ratios is 0.052 and 20.43 respectively and the debt equity and long term debt equity ratios are increasing the value of 1.988 and 1.58 respectively. The standard deviation is the 0.031937 and 3.274813 respectively and the 0.312282 and 0.258844 is decreasing the values they will comparatively and the kurtosis value of the organization is current ratio, debt equity ratio and long term debt equity ratio are negative values 0.65167, 2.55284, and 3.21452 respectively and quick ratio is positive value 2.107209. The Skewness value of the organization is the 1.080544 and 1.261538 of current and quick ratios it will be good company's wealth and debt equity and long term debt equity ratios are negative value is 0.22962 and 0.50166 respectively. The minimum of the current, quick, debt equity and long term debt equity ratios value are 0.03, 17.1, 1.65 and 1.3 respectively. The maximum value of current, quick, debt equity and long term debt equity ratios values are 0.1, 25.74, 2.35 and 1.8 is respectively.

Table - 6.4 Descriptive Analysis of the Management Efficiency Ratios

Statistics	Debtors turnover ratio	Total assets turnover ratio	Asset turnover ratio
Mean	0.138	0.082	0.088
Standard Deviation	0.008367	0.004472	0.004472
Kurtosis	-0.61224	5	5
Skewness	0.512241	2.236068	-2.23607
Minimum	0.13	0.08	0.08
Maximum	0.15	0.09	0.09

Sources- Authors calculation annual report database

The above table shows that the descriptive analysis of the study and the comparison of the mean value of the company debt turnover ratio is the 0.138 its decreasing the standard level is 5times all the 3 ratios are did not full fill in the standard level and the standard deviation are increasingly 0.008367 of debtors turnover ratio and total assets turnover and asset turnover ratio is 0.004472 increasing the percentage standard ratios. The kurtosis of the debt turnover ratios negatively impact and the remaining total assets turn over and asset turnover ratios are positive impact of the company. The debtors turnover and total assets turnover ratios are positive skewed in the 0.512241 and 2.236068 and remaining are negatively skewed in the company and they company are increasing the maximum of the debtors turnover ratios is 0.15 is positively increasing the companies debt.

Table No 6.5 One-Sample Test

	Test Value = 0					
	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
CR	3.641	4	.022	.05200	.0123	.0917
QR	13.950	4	.000	20.43000	16.3638	24.4962
DER	14.235	4	.000	1.98800	1.6003	2.3757
LTDER	13.649	4	.000	1.58000	1.2586	1.9014
DTOR	36.882	4	.000	.13800	.1276	.1484
TATOR	41.000	4	.000	.08200	.0764	.0876
ATOR	44.000	4	.000	.08800	.0824	.0936

Source-authors calculation SPSS Database

The above table 6.5 that represents the calculation of one sample T-test considering the study period 5 years. The study found that all the variables of T-test have both positive values with the degree of freedom at 4. This table shows the mean differences of the company are very high in the both DER and LTDER, the current ratio is positive value that is 0.22 this ratio is accepted the H0. The remaining ratios are negative value of less than 0.05 therefore it proven that is no significance change in operating efficiency. Further it observed that, all the ratios resulted P- value less than 0.05% significance level. Therefore H0 is rejected.

## VI. FINDINGS AND RECOMMENDATIONS

- In the context of the current and quick ratios are proportionate change in pre and post-merger. It shows the good performance of the bank.
- After merging with the bank they DER and LTDER are change in the proportionate in pre and post-merger. 1.67 and 1.3 in pre-merger and 2.35 and 1.8 in post-merger respectively.
- In the context of management efficiency ratio are did not change the proportionate change in pre and post-merger.

- D. In the descriptive analysis the liquidity ratio has been change proportionate in the CR and QR are increasing the operating performance of pre and post-merger.
- E. In the descriptive analysis the solvency ratio change in the pre and post-performance in DER and LTDER are given the good performance in pre and post-performance.
- F. The descriptive analysis is in the management efficiency ratio are given a good performance of the pre and post-merger. The DTR and ATR are constant in pre and post-merger.
- G. The one sample test will resulted in the there is no significance change in the operating efficiency in the context of pre and post-merger.
- H. The firm can concentrate on the operational efficiency for hiking the profitability.
- I. The efficiency of the company has been decreased from 2013 to 2017 so the company has to more focus on improving the overall efficiency of the firm.
- J. The liquidity ratio of the company is showing slight increase in ratio so that company should focus on increase in the liquidity by taking some action.

## VII. CONCLUSION

More importantly, the estimation of operating synergies seems decisive for two reasons. From a financial standpoint, it provides the necessary pedestal to perform synergies valuation- usually with the descriptive method- and to assess value creation in M&A moves. From an operational perspective, it allows the acquirer to track the realized synergies from the initial estimation and to monitor the adventurous phase of post-merger integration.

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### B. Websites

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