EVALUATING THE PRE AND POST MERGER IMPACT ON FINANCIAL PERFORMANCE OF BANK OF BARODA AND KOTAK MAHINDRA BANK.

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ABSTRACT:
Mergers are the daily financial affair in today’s world. However, it has set its foot to the banking sector only recently. This study intends to understand the financial performance of a public sector- Bank of Baroda and a private sector- Kotak Mahindra Bank. Secondary data from various sources are employed for the data collection. The financial performance has been evaluated based on ratio analysis, percent change and T-test. The analysis shows that there was major negative impact on the profitability, liquidity, growth of Bank of Baroda while a positive impact from pre-merger to post- merger in case of Kotak Mahindra Bank. This study suggests that due diligence should adopted in the identification and selection of banks to be merged to achieve desired synergy.

Keywords: Mergers, Banking sectors, T-test, financial performance and ratio analysis.
I. INTRODUCTION

Mergers is the trend of the banking sector today. There have been many mergers happening in the banking sector in recent times. Mergers in banking sector in India have mainly taken place to strengthen the banking system by combining the loss making or inefficient banks with the stable or profit-making banks due to the increasing trends in NPAs of banks. However, mergers are also taking place between good and strong banks also with the view of attaining synergies or for becoming the largest banks in operation in terms of rankings.

1.1. Bank of Baroda:

Bank of Baroda (BOB) is an Indian Multinational, public sector Banking and financial services company. it is the second largest public sector bank in India post-merger. The government of India announced the merger of Bank of Baroda, Vijaya Bank and Dena Bank on September 17th, 2018, to make the country's third largest lender. The amalgamation is that the first-ever three-way consolidation of banks within the country, with a combined business of Rs 14.82 trillion.

Kotak Mahindra Bank:

Kotak Mahindra Bank is an Indian private sector bank head quartered in Mumbai; Maharashtra established by Uday Kotak. It offers banking products and financial services for corporate and retail customers through a spread of delivery channels and specialized subsidiaries within the areas of private finance, investment banking, general insurance, life assurance, and wealth management. As of April 2019, its second largest Indian private sector bank by market capitalisation. On November 20, 2014, Kotak announced the merger with ING Vysya in an all-stock deal worth of US$2.4 billion. The process of merger was completed in 2016.

II. REVIEW OF LITERATURE

Manju Rajan Babu (June 2019): The main objective of this research paper is to evaluate the profitability and liquidity position of banks pre- and post-merger. The sample size of the study is 17 nationalized and private banks from the period 1998-2016. CAMELS (Capital adequacy, Asset quality Management, Earnings, Liquidity and Sensitivity to market risk) Approach and data envelopment analysis is used to evaluate the performance. The study concluded that financial performance of banks of India is moving towards betterment after post-merger years.

Sonia Singh and Subhankar Das (Jan 2018): It covers the area of performance evaluation of mergers and acquisition in Indian banking sector during the period pre and post period of six years of Merger and Acquisition activity. The data analysis is done with the help of financial parameters like, Net Profit margin, operating Profit margin, return on Capital Employed, Return on Equity, earnings per share, capital adequacy ratio, dividend per
share. Data analysis is done using CAMELS approach and parametric t-test. The study concludes that the market has initially tried to react negatively to the most of the banks’ acquisition announcement but overall, there was either destruction or creation in shareholder wealth of investors of public and private sector.

**Ritesh Patel (2018):** In this study, the objective was to know the before- and after-the merger comparative position of long-term profitability with respect to the selected Indian banks. He has used descriptive research design and basic research approach and paired t-test to test the hypothesis. He had concluded that there is negative impact of merger on return on equity, return on assets, Net profit ratio, yield on advance and yield on investment. However, Earnings per Share, Profit per employee and Business per employee have shown positive trend and grown after the merger.

### III. THEORETICAL FRAMEWORK

This study focuses on the pre-merger and post-merger impact on the financial performance of a private and a public bank. The variables analyses are based on the profitability, liquidity, and the growth of the banks from pre-merger to post-merger. The dependent variables are the ratios and the stock prices of the banks post-merger while the independent ones are the ratios and stock prices of the bank’s pre-merger.

### IV. OBJECTIVES OF THE STUDY

The main objective of this study is to compare the financial performance between the public and private sector bank i.e. Bank of Baroda and Kotak Mahindra Bank pre- and post-merger.

### V. HYPOTHESIS OF THE STUDY

**H₀:** There is no significant difference between pre-merger and post-merger financial performance of the selected banks.

**H₁:** There is a significant difference between pre-merger and post-merger financial performance of the selected banks.

### VI. SOURCES OF DATA COLLECTION

Annual reports of the banks, journals, and websites like economic times, moneycontrol.com are used. The research design is predicated on descriptive analysis approach. The financial statements of Bank of Baroda and Kotak Mahindra Bank are analyses for the period from 2014-2020.
DATA ANALYSIS AND INTERPRETATION

For data analysis and testing of the hypothesis, the percentage change, t-test, and correlation are used.

a. **Percentage Change**: Percentage change shows in what percent the financial ratios have changed from pre-merger to post-merger. It analyses the increase or decrease in the financial ratios of the bank from pre-merger to post-merger.

b. **T-Test**: A t-test is an inferential statistic used to analyses if there is any significant difference between means of two variables.

c. **Correlation**: The correlation is used to measure the relationship between two variables. It must be always between 1 and -1. It measures the strength and direction of the given two variables. It means for a positive increase or decrease in one variable, there is either same or opposite increase or decrease in the second variable.

\[
 r_{xy} = \frac{\sum (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum (x_i - \bar{x})^2} \sum (y_i - \bar{y})^2} 
\]

KOTAK MAHINDRA BANK:

The percentage change of various financial ratios of Kotak Mahindra Bank

On seeing Table 4.31, it can be understood that the net profit margin ratio (-11.84%), return on assets (-13.34%), Return on equity (-17.11%) and Earnings per share (-31.56%) have shown a negative trend from pre-merger to post merger while the liquidity ratio i.e. current and quick ratio are concerned, these are in positive at 16% and 4.59% respectively. Also, the P/E ratio is showing a 5.53% change from pre to post merger, which is a good sign. On seeing the Graph, it can be inferred that there is no or very less significant changes post-merger most of the ratios show that there is a negative impact on the financial performance of the bank after merger. This means that there is negative impact on the profitability and to some extent on the growth of the bank post-merger. On the other hand, the liquidity aspect of the bank is in good position post-merger that is current ratio and quick ratio have impacted positively.
T-Test

<table>
<thead>
<tr>
<th></th>
<th>Pre- Merger</th>
<th>Post-merger</th>
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<tbody>
<tr>
<td>Mean</td>
<td>14.70</td>
<td>13.40</td>
</tr>
<tr>
<td>Variance</td>
<td>126.95</td>
<td>129.86</td>
</tr>
<tr>
<td>P Value</td>
<td>0.28</td>
<td>-0.97</td>
</tr>
<tr>
<td>Correlation</td>
<td></td>
<td></td>
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The null hypothesis of there is no significant difference between pre-merger and post-merger performance of Kotak Mahindra bank is to be accepted since the p value (0.28) is greater than the significance value of 0.05 and also it can be seen that they are highly and negatively correlated. The mean and variance also do not show much significance in terms of pre- and post-merger.

BANK OF BARODA:

The percentage change of various financial ratios of Bank of Baroda

On comparison with premerger and post-merger, most of the changes are negative in case of Bank of Baroda. The net profit margin ratio which stands at -17.48%, the return of assets at -17.14% and return on equity at -18.32% indicates that the profitability is negatively impacted the current ratio and quick ratio being 33.33% and 8.19% positively changed shows that the liquidity position is good even after the merger however, there is negative change of -17.24% in the EPS but positive change of 22.74% in P/E ratio which indicates that the growth rate is pretty much Good for the bank.

The below graph is represented the percent change of Bank of Baroda, it can be concluded that the pre-merger and post-merger financial performance is not that great in respect of profitability, and better in terms of growth. However, it is good in terms of liquidity.
T-Test.

<table>
<thead>
<tr>
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<th>Pre- Merger</th>
<th>Post-merger</th>
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</thead>
<tbody>
<tr>
<td>Mean</td>
<td>3.81</td>
<td>8.78</td>
</tr>
<tr>
<td>Variance</td>
<td>72.96</td>
<td>206.74</td>
</tr>
<tr>
<td>P Value</td>
<td>0.019</td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>0.81</td>
<td></td>
</tr>
</tbody>
</table>

The p value being 0.019 which is lesser than the significance level of 0.05 indicates that the null hypothesis should be rejected. Hence, we accept the alternate hypothesis which says there is significant difference between pre- and post-merger financial performance of Bank of Baroda, but the correlation shows that they are moderately correlated.

VII. FINDINGS AND SUGGESTIONS

- From the analysis it can be figured out that the banks need to improve in terms of their profitability and their growth post-merger. There should be a proper guidance for the banks throughout the premerger period and post-merger period so that their financial performance is positively impacted. Top management must have an appropriate analysis of past data of financial performance to form better merger deals.

- The public sector banks have more negative impact as compared to the private sector bank which needs to be investigated properly.

- The risk of bad loan constitutes the biggest threat to the existence of a banking institution.

- Consolidation of banks are a good idea provided it is done with due diligence in the identification and selection of banks that need to achieve desired synergy.

VIII. CONCLUSION

Mergers are a useful tool for the expansion of Indian banking. It helps in the survival of weak banks to be a part of a better performing bank. It also helps in the economic stability as the banking sector is the backbone of the economy. Hence better planning and execution of the merger can result good in terms of financial performance and stock returns as in the case of Kotak Mahindra Bank as compared to Bank of Baroda.
REFERENCES:


WEBSITE:

https://www.moneycontrol.com/financials/ratios/