Project Dissertation Report

on

Financial Performance Analysis: A Case of Indian Banks

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FOR THE AWARD OF THE DEGREE OF

EXECUTIVE MASTER

OF

BUSINESS ADMINISTRATION

CERTIFICATE

This is certified that the Project report with titled as “**Financial Performance Analysis: A Case of Indian Banks”** is a bonafide work carried out by Mr. Krishan Kumar of EMBA 2020-22 and submitted to Delhi School of Management (DSM), Delhi Technological University (DTU), Bawana Road, Delhi-110042 in partial fulfillment of requirement for the award of the Degree of “Executive Masters of Business Administration”.

Signature of Project Guide
Place: Delhi
Date: 06/5/2022

Signature of Head
Seal of Head

DECLARATION

I Krishan Kumar, student of EMBA 2020-22 of Delhi School of Management, Delhi Technological University, Bawana Road, Delhi 42, hereby declare that the dissertation report **""Financial Performance Analysis: A Case of Indian Banks"** submitted in partial fulfillment of Degree of Executive Masters of Business Administration (EMBA) is the original work conducted by me.

The information in the report and related data given in the analysis is authentic to best of my knowledge.

The Report "**Financial Performance Analysis: A Case of Indian Banks"** is not being submitted to any of the other university, for award of any other Degree, Diploma or Fellowship.

Place: Delhi **Krishan Kumar**
Date: 06-05-2022 **(2K20EMBA20)**

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Date: 06/5/ 2022 **KRISHAN KUMAR**
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ABSTRACT

Banking Business is an important part of economy of any country. The monetary progress of a state depends upon the banking system of that country. This research paper is done to analyse the effect of merger and acquisition process on the financial ratios before and after process of merger and acquisition. The research methodology in this case is used to study the financial performance of Bank of Baroda (A public sector Bank as well as the financial performance Kotak Mahindra Bank(A Private Bank) The null hypothesis is in this research is that there is a no significant change in the financial ratios of the selected banks in the pre and post-merger period. Which is analysed from shareholder's perspectives and the bank assets perspectives. In the research design, the exploratory research is conducted different variables has been taken from the banking web sites as well as other websites like www.moneycontrol.com . The data of three year prior to merger and three year after of merger is considered. The pre and post-merger influence has been assessed based on the subsequent financial results obtained by determining of mean value, standard deviation and thereafter, t test and p test is derived from the excel work book. That data is analyzed and found that there is no major change in the wealth of the shareholder's as well as assets of the bank is noticed.

The impact of the merger and acquisition varies in different scenarios. The merger and acquisition not always advantageous to the acquirer but it depends upon certain conditions and therefore different procedural steps are followed before attain finality of the merger and acquisition.

In this report, the paired t test is used to analyses the impact of the merger and acquisition and to make it more reliable the t test is conducted one of the public sector bank and another is done on the private bank.

The outcome of the research is that there is increase in the efficacy of the bank but not to a significant level.

Large cost reduction potential due to network overlaps. It also helps in cost saving as well as income opportunities. Second Canara Bank consolidated with Syndicate Bank to form the fourth largest public sector bank. The anchor bank got capital infusion of Rs. 6500 crore. The third merger was of Union Bank merged with Andhra Bank & Corporation bank and become the fifth largest public sector bank. It becomes the seventh largest public sector bank. Allahabad Bank became part of Indian Bank.

It aimed to create next –generation banks with strong National presence and global outreach accompanied with enhanced capacity to increase credit to various sector of economy.

Keywords: Acquirer, Amalgamation, Conglomerate, Economy of scale, Economy of scope, CASA (Current and Saving Accounts), BaNCS (banks, custodians, CSDs, Insurance Firms).

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Chapter 1

1. INTRODUCTION

In past few years, the companies of the world are facing fierce competition. They are using different techniques to grow internally as well as externally. To achieve internal growth the following factors play an important role:-

1. Streamlining the operation
2. Improving the Management
3. Investing Capital into the existing business of the Firm

The other methods that can be used for external growth are:-

1. Merger & acquisition
2. Joint Ventures
3. Strategic Alliance etc

There are various hindrances for the growth of merger and acquisition in the pre-liberalization phase. These are:-

1. FERA Act (Foreign Exchange Regulation Act 1973)
2. MRTP Act , (Monopolies Restrictive Trade Practice)
3. ICA Act 1956 (Indian Companies Act 1956)

The Indian Banks are also reformed by the different Governments. In the year 2019, there were 27 commercial banks but by using the merger and acquisition, the strength of the public sector bank reduced to 12. The apex body which governs the Merger and acquisition is the Reserve Bank of India. The RBI has enhanced the banking standard of India i.e. all the banks are follow the sound directions of the RBI.

Two common type of merger are defined in the Banking Regulation Act 1949. These are:-

1. Forced Merger
2. Voluntary Merger

As far as role of merger is concerned, it is mainly focused on the company's performance for the shareholders. Before going into merger and acquisition, the pro-forma analysis of the target firm is calculated. Merger is happened when market value of the target Firm is less than replacement cost of its assets. So various theories are propounded by the different researchers or the institution and these are reproduced in following two categories:-

1. Value increasing Efficient Market School
2. Value decreasing Agency School

In broader way the theories of Merger can be classified as:-

1. **Differential efficiency Theory**: - It means combination of two companies into one. According to this theory, merger is an option if the management is found inefficient in running a business and so the company is operating at below optimal level.
2. **Inefficient Management Theory**: - Replacement of incompetent manager.
3. **Operating Synergy Theory**: Economies of Scale: It means reduction of average cost with increase in volume of production.
4. **Financial Synergy Theory**: the value of the two firms together is more than the sum of individual value.
5. **Pure Diversification Theory**: preserving the organizational gain and acquiring new capabilities is the motive.
6. **Undervaluation Theory**: - The market value of the stock of the target firm does not reflect the true or potential value.
7. **Signaling Theory**: It signals to market participants that future cash flow is increasing.
8. **Agency Theory**: This theory stated that firms merge to resolve the conflict of interest that exists between the shareholder and managers.
9. **Hubris Theory**: The acquiring Firm overestimates the value of the target to win the bid.

10. **Jensen's Free Cash Flow Theory** :-According to this theory operating performance changes are –vely related to the amount of free cash flows and the relationship is stronger for buyer with less growth opportunities.

In merger two or more enterprises merged into single entity. That single entity will hold all the assets and liabilities. Thus the shadowed company lost its identity. Merger & acquisition is common in banking sector in all over the world. By doing merger & acquisition, the banks have increase their efficiency and decrease their expenses. The rivals are reduced to great extent by the procedure of merger and acquisition.

The merger of banks is a kind of horizontal merger because generally both the entities are dealt with same kind of operation. It is also a possibility that some non-banking financial institution may be merged with the banks. Recently the housing Finance company HDFC merged with the HDFC Bank. By merger & acquisition the size of the banks are increased with minimum efforts and the customer base line are also increased to a significant level.

Merger and acquisition has also effects in negative way because some extra employees has to left the job particularly those who are indulged in the same kind of job in two different banks at the same location as now there is reduction in requirement of the employees.

Most of the banks somehow connect with the national economy because they are lending the money and thus bring liquidity in the market and thus increasing the purchasing capacity of the bank. The banks bear a high grade of responsibility and obligation. The merchant banks are occupied the central position in the financial system and I is just like a mirror to showcase the condition of the economy of the nation.

A rigorous banking system capably mobilized savings in productive businesses and a solvent banking system confirms that the bank's is efficient of meeting its responsibility to the depositors. The Merger and acquisition is not panacea for all problems of the banking system but as the banks had the hard earned money of the depositors so the merger and acquisition of a poor performing bank with a healthy bank is just like a blessing to the shareholders as well as the account holders.

The banking condition in the India is comparatively sound and rarely faced any critical conditions. The companies are having two kinds of growth pattern; one is organic and another one is inorganic growth. The inorganic growth is fast and obtained through merger and acquisitions.

Merger and Acquisitions is used for; becoming bigger in size, lion share in banking market, speedy growth, synergy, technology advancement and other like parameter i.e. economy of scale.

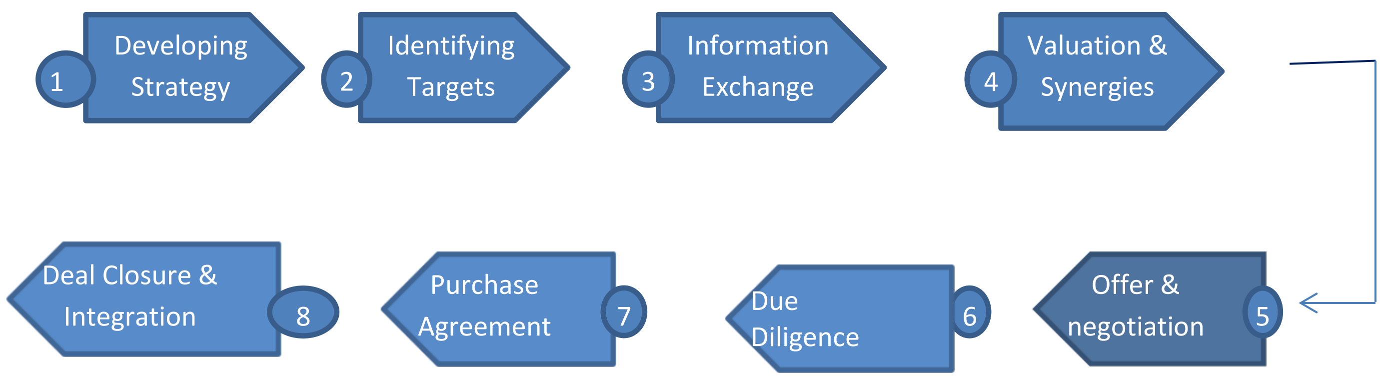
Chapter 2

Merger & Acquisition Process & Types

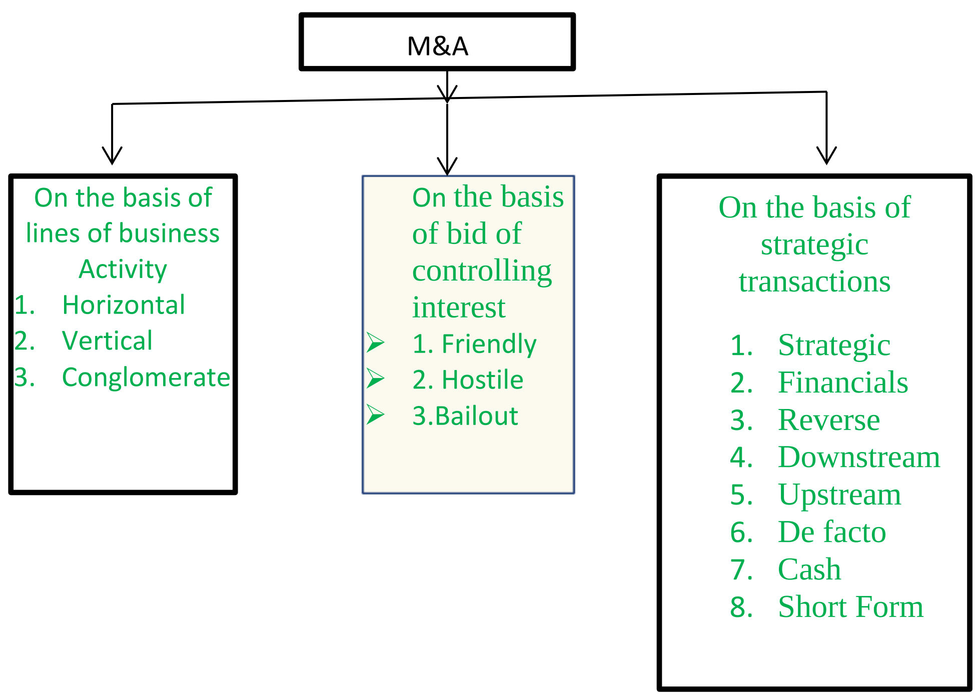
The term merger & acquisition are often used interchangeably and misunderstood. Mergers are voluntary in nature where two or more entities decide to merge one of them into other entity while Acquisition is not voluntary but it is a forced action. Acquisition involve large amount of cash outgo from large entities to the owners of taken over entity**.** There are four main types of Merger & Acquisitions- they are Horizontal, Vertical, conglomerate and concentric. Merger model is framed by the investment bankers and M&A professionals after studying about the feasibility of mergers & acquisition and to ensure the success of amalgamations. Following Factors considered in making of Merger's Model:-

1. Method of discharge of purchase consideration
2. Intangibles
3. Synergies

1.1 Merger & Acquisition Process



1.2 Types of Merger & Acquisitions



Chapter 3

HISTORY OF MERGERS AND ACQUISITION IN INDIAN BANKING

The history of merger and acquisition can be divided into two broad categories one is the pre-liberalization phase and another one is post-liberalization phase of merger and acquisition in the banking sectors. The government of India nationalized 14 commercial banks in the year 1969 and later on 6 more commercial banks were nationalized by the Govt. of India in the year 1980. But in the year 1993 the merger of Bank of India with the Punjab National Bank, the strength of the commercial banks reduced to 19. The Government of India in the post liberalization phase, issue license to the private banks and that ultimately lead to a new era of India Banking Business. The Narasimhan Committee II submitted its report in 1998 and in its report it has recommended for merger of large Indian banks with the objective of attaining a stronger banking system which could support international trade.

The merger statistics is as under:-

1. Pre-nationalization Era (1961-1968): - 46 merger have been initiated
2. In the Nationalization Era (1962-1992):- 13 merger takes place
3. Post Liberalization Era (1993-2020):- 24 merger takes place

The above discussed merger may be forced merger or voluntary merger or any transformation of financial institution into banks. By this development many Development Finance Institutions were converted into banks or non-banking financial companies.

In August 2008, the prudential norms for off-balance sheet exposure of Banks have classified the credit exposure into non- performing assets after an overdue period of 90 days. It has been reversed from the P/L accounts and held in the suspense account. The financial crisis of 2008-09 viciously slaughtered the banking sector where a large number of banks had either bailed out by the Government or merged with stronger banks. The year 2008 learnt as the Global Financial Crisis (GFC). It was biggest recession since 1930. The global economy collapsed. The RBI's monetary policy had injected new strength by which economy start recovering in the post crisis period. Some development related to M&As after 2008 are as under:-

1. The HDFC Bank acquired the Centurion Bank of Punjab on 23 May 2008.
2. The ICICI Bank acquired the Bank of Rajasthan on 13th August 2010. Now ICICI Bank got 2nd position after SBI in assets figure.
3. Kotak Mahindra Bank acquired the ING Vyasa Bank in the year 2014. In April 2017 SBI merged with its five associate Banks and in the year 2019, the ten public sector banks merged into four large entities. In Recent development, merger has taken placed between the HDFC and HDFC Bank in the April of the current year.

Chapter 4

REASON OF MERGER AND ACQUISITIONS OF INDIAN BANKS

1. **To Pool the Resources**: Merger of banks make the use of resources under single management which was previously divided between two or three entities.

2. **To widen coverage:** Merger & acquisition widen the coverage ratio of the bank and thus these banks have broader area of customer base line and scope of business thus increases.

3. **Technology Advancement:** The older banks some time becomes noncompetitive because of lack of metamorphosis as per the requirement of the users and thus the customer of new generation doesn't like such banks so these banks ultimately merged with the bank which are using New Technology.

4. **Non-Performing Assets**: The non-performing assets are very big reason for the merger of the bank. NPAs reduce the cash flow of the bank and thus it put burden on the lender. The NPAs if not been managed at early stage it become a serious cause of closure of bank or the merger of bank.

5. **To reduce Competition**: The Merger & acquisition of banks reduce the competition among the same kind of banks and thus the growth of the bank is hampered in competitive market. To influence the customer the competition may affect the revenue generation of the banks.

6. **To reduce Overhead:** The same employee can discharge the duty of merged entity which are previously handled their own business independently. This result into cost reduction and indirectly saving has happened or the profit of the bank increased.

7. **Safeguard the interest of the client of the weak banks:** The weak banks are merged with the vigorous banks to safeguard the interest of the client of the weak banks. After Narasimhan committee-II, the banking sector has make the merger and amalgamation more viable and defensive for the clients of the weaker bank.

8. **Risk Management:** The risk after merger is mitigate or spread to larger area so it is a kind of risk management.

9. **Expansion and Cost Cutting**: the merger technique is expansion of the acquirer banks and therefore cost cutting on the employees, and other resources is also happened.

10. **Economies of Scale:** Merger has the competency to produce economies of scale.

11. **Globalization Impact**: Now banks cannot be limited to the national boundary and they have branches globally thus to serve the global clients, the banks should have sufficient resources and technology to serve the international clients as per their requirements.

Chapter 5

6. Literature Review

The literature review has been carried out for understanding the merger and acquisition in a more better way. Following research work has been carried out by different researchers:-

P Akhil Bhan (Mergers in Indian Banking Sector- Motive & Benefits) :- By using t test and EVA value calculation it was determined by him that mergers in the banking sector in the post reform period possessed considerable gains.

Sudhar J and Selvam. M (2007) has studied the consequences mergers and acquisitions activities on stock price responses.

Mantravadi Pramod & Reddy A Vidhyadhar (2007) has pointed out by examining of pre & post financial ratios in sample public limited and traded companies that there are minor variation in terms of the operating performance after merger.

Anand Manoj & Singh Jagandeep (2008): His analysis on the return of the Shareholder's wealth as a result of merger after studying the Indian Banking sector.

Bhaskar A Uday et al., (2009) causes and outcome of effective, behavioral and cognitive reaction to merger and acquisition.

Kuriakose Sony & Gireesh Kumar G. S (2010) studied the 7^{th} voluntary merger in Indian banking sector i.e. ICICI Bank – Bank of Rajasthan. Strategic similarity index and relatedness are significant in synergy creation.

Aharon David Y et al., (2010). Strategically similarities and relatedness are very important in the synergy creation because relatedness have significant impact on the outcome.

Okpanachi Joshua (2010) did the comparative analysis of the impact of merger and acquisition on financial efficiency of banks in Nigeria. It uses parameters like gross earning, profit after tax and net assets of the selected banks as indices to determine the financial efficiency.

Antony Akhil (2011) in a study “Post-merger profitability of selected banks in India” scrutinized the effect of the banks merged in India from 1999 to 2011. The research conducted by the researcher showed that net profit margin and return to capital show significant improvement in post-merger period while the least performing ratios are earning per share and return on equity.

Dr. K.A. Goyal & Vijay Joshi (2012) have founded some rising issues like employee reception, brand size, customer perception, communication, change management strategies, Human Resource Management. He studied the need of merger and concludes the result that merger & acquisition have positively impacted the merged bank.

Gurubaksh Singh & Sunil Gupta (2015) have also conclude in its paper title “ An impact of merger and acquisition on profitability of consolidation banking sector in India” have concluded that merger & acquisition have positively impacted the merged bank. He gave his analysis on the basis of study of public sector and private banks with a data of last five years of pre-merger and post-merger period.

Dr Sangita Ghosh(2016): Her research area was merger between Global Trust bank and Oriental Bank of Commerce. She found that profitability and efficiency of the acquirer bank improved but no change on liquidity position of OBC.

Prof Ritesh Patel & Dr. Dharmesh Shah (2016): He studied that EVA (Economic value Added) approach is not common for all banks. He stated that Financial performance of the banks may be improved after merger but it depends upon study of the past financial data.

Dr. Konstantin’s Agorastos et al (2012) studied the consequences of M&As of acquiring firms in Greece among different industries using accounting data (financial ratios). The outcome is that M&A if compared in general worsened the performances after merger in comparison to the before merger results.

Chapter 6

Research Methodology

➢ 6.1 Objectives of the Study

1. To study; the Financial performance of the Bank of Baroda after merger. (A public Sector Bank)
2. To study; the Financial performance of the Kotak Mahindra Bank (A Private Bank)
3. To study; impact on the shareholder's wealth after merger and acquisition.

➢ 6.2 Hypothesis Used in Study

The following Hypothesis is drawn for the study of the above objectives:-

II. To study the Financial performance of the Bank of Baroda before and after merger. (A public Sector Bank).

H0 (Null Hypothesis): There is no significant change in the financial ratios of selected banks in pre & post- merger period.

H1 (Alternative Hypothesis): There is a significant change in the financial ratio of selected banks in pre & post-merger period.

II. **For assessing the effects on Shareholder's wealth in terms of a few key ratios of the above selected banks**.

H0 (Null Hypothesis): No significant change after merger.

H1 (Alternative Hypothesis): Significant change after merger

➢ 6.3 Research Design

The procedure and methodology involved in the study are a kind of descriptive/ illustrative and exploratory research. In descriptive type of research, the researcher has no control in the manipulation or change of any variables. So the variables are recognized, noticed and measures. It explains the impact in an objective manner. It is exploratory research as is completely based on secondary data taken form annual reports and from other websites like www.moneycontrol.com., the research is quantitative in nature and having uncontrolled variables. Here we are using the Descriptive Research because of the following reasons:-

To analyze the DATA Trend:- change of variable are studied over a given period of time and then trends are analysis.

To Equate variables:- the different kind of variables are equated and then their trend are analysed in subsequent years.

As the data used in these kind of research design, there are various methods of data collections which can be used in these kinds of researches. Here we have used the secondary data obtained from the various website authenticate by the government departments or used by the maximum users. However utmost care has been taken to fetch the data but the possibility of the phenomenal or human error cannot be ruled out. The Risk of error in such a scenario is however negligible but cannot be called it the risk free. It is more like a comparative study wherein the comparison of the data of two different periods is compared to draw conclusions. As the research design is exploratory type of research so the nature is open ended. However the research on more or less same or similar grounds has already been conducted by the various research scholars but in this case the research is again becomes important when the data period is having a relevancy with the results. In the case of Bank of Baroda data up to the year 2021 is taken which was not been taken by the previous researchers and similarly data up to year 2017 is hereby taken for this study. Earlier, the amity.edu has more or less studied these parameters on the same bank but data was confined to two years and so the result varies with the change in the inputs. So it is a kind of dynamic research that can be called as empirical research.

- **6.4 Data Collection**

Data collection is required as the data is in the form of quantity. Secondary data are used in such a scenario where raw data related is extensively available and that raw data is used for supplementary findings or the outcomes. For analysis of the data in the present study, raw data is collected from the bank's annual reports and it is also available on the various website like www.moneycontrol.com, Bombay stock Exchange, national Stock Exchange. Thus secondary data is used to put relationship between the historic data. So that the implication of merger & acquisition can be studied in a broader way. The secondary data collection have some advantages over the primary data collection, as it is easy to collect, more credible and even less expensive but simultaneously it have some disadvantages like non-alignment of the collected data with researcher's question of objective or the limited availability or usability. The researchers have no control on the data as it is collected originally from the different sites or books or journals etc... The more precisely the data is choose the more valuable result or conclusion can be drawn.

- **6.5 Data sample**

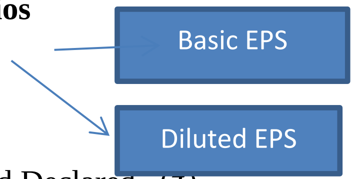
Sample data is collected from the websites and as stated above both private and public banks are chosen to undertake a decisive stand after analyzing the data. The quantitative method of secondary data analyse is used in the present scenario. The data in the quantitative form available at various sites as discussed above and different researchers used this data sampling method in such kind of research work.

Selection of Banks: Two banks are chosen for the study of role of merger and acquisition in different financial ratios. Here I have choose; one public sector bank and another one is the private sector bank.

Sr. No.	Name of the Acquiring Bank	Name of the Targeted bank	Year of Merger
1	Bank of Baroda	Vijaya Bank & Dena Bank	September 2018
2.	Kotak Mahindra Bank	ING Vysya Bank	December 2014

The pre & post - merger influence has been assessed based on the subsequent financial measures.

1. **Per Share Ratios**
    - EPS (₹)



    - Dividend Declared (₹)
    - Operating. Revenue/Share in rupees
    - Net Profit./Share in rupees
2. **Key Performance Ratios**
    - The Net profit margin in percentage
    - The Operating Profit Margin in percentage
    - The Return on Assets in percentage
    - The Return on Equity Net worth in percentage
    - The Net Interest Merging. (X)
    - The Interest Income/Total Assets in percentage
    - The Operating Profit/Total Assets in percentage

To study the effect of merger, pre and post-merger data of the above ratios is compared in the excel tools. The main source of the data is the financial site that is www.moneycontrol.com

Paired t-test:- A t-test is a statistical hypothesis test in which the test statistic validates a student's t distribution if the null hypothesis is established in statistics. They compare the means of two groups of observations in a Paired T-Test. A paired samples t-test always uses the following null hypothesis: H 0: μ 1 = μ 2 (the two population means are equal) the alternative hypothesis can be either two-tailed, left-tailed, or right-tailed: H 1 (two-tailed): μ 1 ≠ μ 2 (the two population means are not equal)

- 6.6 **Tools and Techniques Used:**

The researchers required data-gathering tools and techniques. In the present research work, the data are processed in MS Excel 2010. For evaluation of the research work, paired sample t-test is used to check the financial performance before and after the merger activities. We have a few built-in tools in Excel that are utilised for data analysis.

However, these only become active when you pick one of them. Go to the File menu's Options tab to enable the Data Analysis feature in Excel. Select any of the analysis packs, such as Analysis Toolpak, and click Go once we have the Excel Options box from Add-Ins. Thereafter the data analysis is performed by comparing the data of pre-merger with the post-merger and result is derived by the excel in the forms f means, std. deviation, paired t test and the p value along with the critical t value. All these data are useful in detail analysis of the result. The research work in the study of the both selected bank is more or less similar. The paired t test and the p value at .05 (level of significance) is found very important analytical tool. The tools and technique chosen here are also used by the researchers in similar or other researcher works. This Technique can be modified as per the requirement of the test.

➢ 6.7 Data Analysis and Interpretation

The critical financial ratios have been evaluated of the selected banks, The ratios obtained from the internet are used here. Most common parameters used in the research are classified into two broad groups. These are as under:-

(i) Per Share Ratios,
(ii) Key Performance Ratios.

Excel 2010 is then used to derive the result or for more accuracy SPSS software can be used.

1. Firstly the merger of Bank of Baroda (Acquirer Bank) and Vijay Bank & Dena Bank (Acquired Bank) are hereby studied. The comparison of two kinds of data is then performed. One period is belonging to the premerger period and other one is the post-merger period. The year of merger is taken as the base year and not been taken for this study.

Bank of Baroda	FINANCIAL RATIOS : PRE & POST MERGER					
	PRE-MERGER			POST-MERGER		
	2015	**2016**	**2017**	**2019**	**2020**	**2021**
Per Share Ratios						
EPS (Rs)	15.83	-23.89	6	1.64	1.36	1.78
Dividend /Share (Rs)	3.2	0	1.2	0	0	0
Operating Revenue/share (Rs)	193.72	190.7	182.65	187.68	164.22	136.15
Net Profit/ Share (Rs)	15.32	-23.35	5.99	1.63	1.18	1.6
Key Performance Ratios						
Net Profit Margin (%)	7.91	-12.24	3.27	0.87	0.71	1.17
Operating Profit Margin(%)	-2 .33	-23.59	-12.73	11.77	-12.85	-16. 36
Return on Assets (%)	0.47	-0.8	0.19	5	0.04	0.07
Return on Equity/ Net worth (%)	8.53	-13.42	3.43	0.94	0.76	1.07
Net Interest Margin(X)	1.84	1.89	1.94	2.36	2.37	2.49
Interest Income /Total Assets(%)	6	6.56	6.07	6.37	6.56	6.1
Operating Profit /Total Assets (%)	-0.14	-1.54	-0.77	-0.75	-0.84	-0.99

Table 1 Financial Ratio of Pre and Post-Merger; Sources:- www.moneycontrol.com

The Table 1 exhibits the statistics for Bank of Baroda's financial ratios. The above financial ratios include the data of pre-merger and post-merger statistics three year before the base period and three years after the base period as shown above. From the above table it can be determined that:

(i) In the pre-merger period

- Per share ratios such as Basic EPS, Dividend Payout Ratio, Operating Revenue Ratios, and Net Profit Ratios exhibit a decreasing trend, whereas all other ratios exhibit mixed trend, with the exception of operating revenue.
- The operating revenue had exhibit decreasing trend over the years after merger.

(ii) Key Performance Ratios Analysis:-

- The Net Profit Margin, Operating Profit Margin, Return on Assets, Return on Equity etc. exhibit the mixed trend for the studies in the pre & post-merger era.

. **Financial Ratios**	Mean		Standard Deviation		t-value	P-value
	Pre	post	Pre	Post		
Per Share Ratios						
EPS (Rs)	-0.69	1.59	20.687	0.214	-0.193	0.865
Dividend /Share (Rs)	1.47	0.00	1.617	0.000	1.571	0.257
Operating Revenue/share (Rs)	189.02	162.68	5.722	25.799	2.255	0.153
Net Profit/ Share (Rs)	-0.68	1.47	20.179	0.252	-0.187	0.869
Key Performance Ratio						
Net Profit Margin (%)	-0.35	0.92	10.552	0.234	-0.211	0.852
Operating Profit Margin(%)	-18.16	-0.54	7.679	17.409	-1.300	0.323
Return on Assets (%)	-0.05	1.70	0.667	2.855	-1.235	0.342
Return on Equity/ Net worth (%)	-0.49	0.92	11.487	0.156	-0.215	0.850
Net Interest Margin(X)	1.89	2.41	0.050	0.072	-5.482	0.002
Interest Income /Total Assets(%)	6.21	6.34	0.305	0.231	-1.124	0.378
Operating Profit/Total Assets (%)	-0.82	-0.86	0.701	0.121	0.112	0.921

Table 2 Note : Significance at 5%.

Table 2 exhibit the descriptive data and analysis of Bank of Baroda's in the form of ratios. The average EPS, dividend per share, and net profit per share ratios during the post merger period were found to be higher than the bank's pre-merger statistics. Operating revenue per share is falling. This indicates that under post-merger situations, the Bank of Baroda's equity shareholder worth has increased in terms of these measures. The paired t-test in SPSS is useful for determining whether there is a significant difference in financial ratios before and after a merger.

Dividend per share and Operating revenue per share per share are not statistically significant, with t-values of 1.571 (Dividend per share) and 2.255 (Operating revenue per share per share) (Operating revenue per share).Other ratios like EPS and Net profit per share did not display any important modification as their p-value was more than 5% but their t-value was -0.193 and -0.187 respectively which exhibit that there is significant change after merger.

For key performance Ratios mean value of all the ratios except operating profit to total Assets ratio after merger get strengthened so it can be said that these ratios got influence by merger. Moreover, the p value of all the key performance ratio at .05 are found significant except the net interest margin. This means that the banks have not obtained significant interest margin.

II. Merger of Kotak Mahindra Bank (Aquirer Bank) and Ing Vysya Bank (Aquired Bank)

Table 3 Financial Ratios of Pre & Post Merger

	FINANCIAL RATIOS: PRE & POST MERGER					
KOTAK MAHINDRA BANK	PRE-MERGER			POST-MERGER		
	2011	2012	2013	2015	2016	2017
Per Share Ratios						
Basic EPS	11.35	14.69	18.31	24.2	11.42	18.57
Diluted EPS	11.28	14.61	18.24	24.14	11.4	18.55
Dividend /share	0.5	0.6	0.7	0.9	0.5	0.6
operating Revenue/Share	56.86	83.44	107.72	125.85	89.32	96.14
Net Profit /share	11.1	14.65	18.23	24.16	11.39	18.53
Key Performance Ratio						
Net Profit Margin	19.52	17.55	16.91	19.19	12.75	19.27
Operating Profit Margin	0.89	1.74	2.48	-1.67	-3.18	-0.37
Return on Assets	1.6	1.65	1.62	1.76	1.08	1.58
Return on Equity/net Worth	11.97	13.59	14.37	13.19	8.72	12.35
Net Interest Margin	4.12	3.82	3.83	3.98	3.58	3.78
Interest Income /Total Assets	8.23	9.41	9.6	9.16	8.52	8.24
Operating Profit /Total Assets	0.07	0.16	0.23	-0.15	-0.27	-0.03

Table 3 Financial Ratios of Kotak Mahindra Bank

The table 3 gives the data of various financial ratios of Kotak Mahindra Bank. The above financial ratios include the data of pre-merger and post-merger statistics three year before the base period and three years after the base period as shown above. From the above table it can be determined that:

(i) During the pre-merger period, per-share ratios all exhibited an upward trend. It first spiked in the year 2015, but it decreased in 2016 when compared to previous years.

(ii) Key Performance Ratios:- Most of the measures appeared to have a mixed tendency, and operating profit exhibit the negative during during the post-merger period.

Financial Ratios	Mean		Std. Deviation		t-value	p-value
	Pre	Post	Pre	Post		
Per Share Ratios						
Basic EPS	14.78	18.06	3.481	6.405	-0.670	0.572
Diluted EPS	14.71	18.03	3.481	6.386	-0.681	0.566
Dividend /share	0.63	0.67	0.100	0.208	-0.400	0.728
operating Revenue/Share	93.22	103.77	25.439	19.424	-0.862	0.479
Net Profit /share	16.34	18.03	3.565	6.400	-0.680	0.567
Key Performance Ratio						
Net Profit Margin	18.29	17.07	1.360	3.741	0.442	0.702
Operating Profit Margin	0.05	-1.74	0.796	1.406	4.634	0.044
Return on Assets	1.55	1.47	0.025	0.352	0.689	0.562
Return on Equity/net Worth	12.37	11.42	1.224	2.376	1.074	0.395
Net Interest Margin	3.85	3.78	0.170	0.200	2.612	0.121
Interest Income /Total Assets	8.86	8.64	0.742	0.472	0.630	0.593
Operating Profit /Total Assets	0.00	-0.15	0.080	0.120	4.712	0.042

Table 4: Financial Ratio of Kotak Mahindra Bank

Table 4 exhibit analysis of Kotak Mahindra Bank's various ratios. The average ratios of EPS, dividend per share, operating revenue per share, and net profit per share for the post-merger period were found to be **higher** than the bank's pre-merger ratios. The mean ratios of Net profit margin, Operating profit margin, Return on assets, Return on net worth, net interest margin, and interest income to total assets, and operating profit to total assets were found to be less in the post-merger scenario. For more specific relationship between the data of the two periods, the paired t test is conducted and the outcome is reflected in the above table.

All of the Per Share ratios exhibited no significant fluctuation because their p-values were greater than 5% but their t-values were negative, indicating that the situation has improved but not much after the induction of merger of banks.

Because the value of all the ratios fell following the merger, it was determined that these ratios were not encouraged by the merger. Furthermore, it was shown that there was no significant difference (p-value) between before and post-merger periods because it was greater than the established level, i.e., 5%. Accordingly it can be said that there is no reason to reject the null hypothesis.

- 6.8 **Limitations**

Each pilot research has its own set of constraints. These constraints are brought forward so that the limitations listed if any are considered when any further research is conducted. These are the results of that merger, which were analyzed in the above two cases. One analysis excludes any other business section of the economy in order to compare this segment to others. Limited ratios worked well. The information used in the ratio analysis are based on the Historical Data and by no means it will remain same in the future because business performance are a dynamic and not static features and it will change with every passing of time. In such studies which are influenced by the inflation and inflation rate is going on changing then in such a scenario the comparison of the year wise data make no sense. In the above study the inflation plays a crucial role because Inflation rate (as per the Laspeyres formula) are changing as mentioned below: -

- India inflation rate for 2020 was 6.62%, a 2.9% increase from 2019,
- India inflation rate for 2019 was 3.72%, a .22% decline from 2018,
- India inflation rate for 2018was 3.95%, a .62% increase from 2017,
- India inflation rate for 2017 was 3.33%, a 1.62% decline from 2016

The data used from the financial statement may aggregate in different proportion in the past and to check the trend analysis on the basis of these ratios will never give the true picture so it also a reason. Some time in any business, drastic change in operation has been happened because of unexpected need and thus use of the historic data is of no use in such circumstances. Ratio analysis ignores the qualitative view of the business and tends to include the monetary aspect only. The data given in the balance sheet are always bears a chance of manipulation because scope of window dressing by way of manipulation is cannot be rule out in any business. Ratio analysis can be misleading at times because elements from P& L statement are based on actual cost but elements of the B/s are based on the Historical. So comparing a mix of both may result into deceptive results. Some ratios of the balance sheet are suffered with time effect if it is prepared on the accounting year's last day. So sudden shoot or decline in that number can drastically influence the overall ratio analysis.

Chapter-7

Conclusion

In India, the banking industry is one of the fastest growing industry/ business. It has transformed from a dormant enterprise to a thriving industry. This category has grown at an incredible rate, and it has become the preferred destination for overseas investors. Merger is in the present time more significant than ever, particularly in financial business.

Mergers in the banking industry are a type of horizontal merger because the merging of businesses are having more or less similar goals as the acquirer bank have before merger. Mergers and acquisitions in the banking industry allow banks to achieve:-

- Significant development in their Operations
- Cut costs significantly and
- To minimize rivalry because mergers eliminate competitors from the banking market.

This analysis focused on the impact of M&As in the Indian banking industry, using two examples as a sample and examining whether the merger resulted in a profitable state or not. Broad Ratios or broad categories of banking industry benchmark ratio that recreate financial functionality as well as equity's shareholder wealth have been used to compare pre- and post-merger performance. The pre-merger performance of acquirer banks is compared to the post-merger performance of that bank. The pre- and post-merger performance of the banks was examined using a paired t-test of the SPSS for the purpose of this study. The conclusion was that bank efficiency and performance did not exhibit significant improvement after the merger. In the first case, the merger increased shareholder wealth in the form of EPS and net profit per share but did not improve other financial performance. When key financial ratio are compared it is found that only interest margin ratio is having significance value when the figure of pre-merger is compared with the post-merger, other parameters have no significant change because the p value is much greater than the desired p value of 0.05. Similarly in the second case, per share ratios are no doubt exhibit improvement but the improvement is not found significant as the p value is not showing the significant result while in key performance ratios, only two parameters has shown significant p value that are operating profit margin and other is operating profit to total assets ratio but in this result the significance is not favor the merger. The public sector bank if compared to private sector bank it have more –ve impacts. The top management role is crucial in making the merger of bank successful by proper studying the historical date to make financial performance positively impacted. To achieve desired synergy due diligence is required in identification and selection of banks. Consolidation of banks will become fruitful if it gives the desired result to the shareholders as well as to the management. The biggest threat to the banking sector is the bad loan and its directly impact the profitability of the banks or the HFCs. The public sector banks are more prone to become the prey of bad loans.

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