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A Study of Mergers in Banking Industry and Its Impact on General Economy

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CHAPTER 1 INTRODUCTION

The banking industry is a critical component of the global economy, and the consolidation of this industry through mergers and acquisitions has been a significant trend in recent years. While mergers can lead to increased efficiency and cost savings, they also have the potential to impact various economic indicators such as GDP growth, inflation rates, unemployment, and interest rates.

This study aims to examine the impact of mergers in the banking industry on the general economy. It will use both qualitative and quantitative research methods to analyze the effects of bank mergers on the economy and the potential benefits and drawbacks of such mergers.

The study will also explore how the impact of mergers on the economy is dependent on the size of the merged entity and the degree of market concentration in the banking industry. By analyzing these factors, this study will provide insights into the optimal approach to promoting competition and efficiency within the banking industry while ensuring equitable access to credit and protecting consumers.

The findings of this study will be useful for policymakers, industry participants, and other stakeholders interested in the impacts of mergers in the banking industry on the general economy.

Mergers and acquisition are having both the aspects of the strategic management's corporate finance and management dealing with the buying of selling dividing and combining the different companies of the similar entities.

After the merger the result is the transact the ownership and a control of a firm to another.

M&A is defined as a restructuring of the result in some entity reorganization with having the aim to provide growth or positive value. The consolidation of an industry or the sector that occurs when the wide spread M&A activity concentrates the resources of many small companies into a few larger ones such as occurred with the automotive industry between 1910 to 1940.

What is Merger

- A merger is an agreement that unites two existing companies into one new company.
- Mergers are commonly done to expand a company's reach, expand into new segments, or gain market share.
- All of these are done to please shareholders and create value.
- Merger is covered regulated/covered by the companies Act, 1856.

- Merger are been refers by finding an acceptable partner, determining upon how to pay each other and also ultimately creating a new company, which is a combination of both the companies.
- A merger is a business transaction that involves two or more companies combining into a single entity.
- It is often done to achieve economies of scale, increased market share, and cost savings.
- There are different types of mergers, including horizontal mergers (between companies in the same industry), vertical mergers (between companies in different stages of the supply chain), and conglomerate mergers (between companies in unrelated industries).
- Mergers can be friendly, where both parties agree to the merger, or hostile, where one party is unwilling to merge.
- The process of a merger involves due diligence, negotiation of terms, and regulatory approval.
- Mergers can have significant impacts on employees, customers, and shareholders of the companies involved.
- A merger is a business transaction that involves the combination of two or more companies to form a single entity.
- The goal of a merger is to create a stronger, more efficient, and more profitable organization than the individual companies were separately.
- Mergers can be friendly or hostile, with friendly mergers being the most common.
- There are several types of mergers, including vertical mergers, horizontal mergers, and conglomerate mergers.
- Mergers can have both benefits and drawbacks, such as increased market share and economies of scale, as well as potential job losses and increased competition.
- Mergers are subject to approval by government regulatory agencies to ensure that they do not result in anticompetitive behavior or harm to consumers.

Types of Merger

1. Conglomerate merger

When two or more companies are engaged into unrelated business activities. After the engaged the firm may be operate in the different industries or n different geographical regions. Pure conglomerate merger involves two firms that have nothing in common. Mixed conglomerate takes place between organizations that, while operating in unrelated business activities, are actually trying to gain product or market extensions throughout the merger.

2. Congeneric Mergers

Congeneric merger is also known as Product Extension merger. When the two or more companies are operating in the same market or sector with overlapping factors, such as technology, marketing, production process, research & development. a product extension merger is been achieved when a new product line from one company is been added to an existing product line of the other company.

3. Market Extension Mergers

When two companies that operates the same products but the complete in different markets. Companies that engage into a market extension merger seek to gain access to a bigger market so it is a bigger client base.

4. Horizontal Mergers

When the two companies are operating into the same industries with two or more competitors offering the same products or services. The goal is to create a larger business with the greater market share and economies of the scale since competition among fewer companies tends to be higher.

5. Vertical Mergers

When the two companies that are produce parts or services for a specific finished products merger, the union is referred as a vertical merger. Vertical merger is been occurs when the two companies operating at different levels within the same industry's in supply chain combine their operations. The objectives is to increase synergies achieved through the cost reduction an which results from merging with one or more supply companies.

MERGER 1 History of Bank of Baroda, Vijaya Bank and Dena Bank

Bank of Baroda

- On 20th July 1908, the Bank of Baroda was established as a private bank by the Maharaja of Baroda, Maharaja Sayajirao Gaekwad lll.

- Headquarter of Bank of Baroda is in Gujarat in Vadodara formerly known as Baroda.

- In Maharashtra in Mumbai BOB has its corporate office. In the year 1910, the Bank of Baroda as also opened their branch in Ahmadabad city.

- On 19 July 1969, Bank of Baroda is nationalized by the Government of India, along with the 13 other major commercial banks of India.

Dena Bank

- Dena Bank was established on 26 May 1938 by Devkaran Nanjee's family under the name of Devkaran Nanjee Banking company Ltd.

- On December 1939, Dena Bank adopted its new name by Dena (Devkaran Nanjee) Bank due to become a public company.

- Dena Bank Ltd was nationalized along with 13 other major banks and it became a Public Sector Bank on July 1969.
- It has it headquarter in Mumbai Maharashtra.

Vijaya Bank

- Vijaya Bank was established on 23 October 1931 by late Shri. A.B Shetty and other entrepreneurial farmers of Bangalore in Karnataka.

AFTER MERGER OF BANK OF BARODA, VIJAYA BANK & DENA BANK

- On September 17, 2018 the Narendra Modi Government announced plans to merger three public sectors banks Mumbai based Dena Bank. Bengaluru's Vijaya Bank and the Bank of Baroda that has its head office in Vadodara Gujarat.

- The merger entity legal asserts of over Rs 14 lakh crore, it will be India's third largest lender behind the State Bank of India and HDFC Bank.

- On 2 January 2019, the government of India approved the merger of Bank of Baroda with Vijaya Bank & Dena Bank. Under the terms of the merger, for every 1000 shares of Dena Bank & Vijaya Bank shareholders received 110 & 402 Bank of Baroda equity shares, respectively, of face value. Vijaya bank & Dena bank are merger into Bank of Baroda from 1st April 2019.

- The government has agreed to grant some Rs 5,042 crore to Bank of Baroda to strengthen the merger financial position.

- Due to the merger of Bank of Baroda its ranks second in India in terms of number of branches. The number of banks kept under the prompt corrective action framework by the RBI to four.

- Dena bank is among the five PSU banks kept under PCA watch over burgeoning losses and NPAs. It is based on the third quarter results of Dena bank & Vijaya bank, the key credit metrics of the merger entity, with the exception of profitability, will be broadly similar to that of Bank of Baroda, according to a Moody's report. It also predicts that Bank of Baroda's profitability will be dragged down by the NPAs of the other two banks.

MERGER 2 HISTORY OF PUNJAB NATIONAL BANK, ORIENTAL BANK OF COMMERCE & UNITED BANK OF INDIA

Punjab National Bank

- Punjab National Bank was founded on 19th May 1894. It is an Indian Multinational Banking and financial services company.

- The several leaders are including the state-owned corporation of Punjab National Bank was based in New Delhi, India.

- It covered over 80 million customers, 6937 branches & 10681 ATMs across 764 cities. According to RBI, among state run banks in India, Punjab National Bank topped in the number of loan fraud cases across the India.

Oriental Bank of Commerce

- Oriental Bank of Commerce was established on 19th Feb 1943 in Lahore and it was founded by Late Rai Bahadur Lala Sohan Lal, the first chairman of the bank.
- On 15th April 1980 it was nationalized.

- The bank newly branches was formed in Pakistan that had to be closed down and the registered office was shifted from Lahore to Amritsar.

- The bank has a network of 530 branches and 505 ATMs spread throughout the India, and out of which 490 branches offer centralized banking solutions.

United Bank of India

- United Bank of India was established on 1959.
- It first branch was establish at Karachi.
- Union Bank was merged as United Bank.

AFTER MERGER OF PUNJAB NATIONAL BANK, ORIENTED BANK OF COMMERCE & UNITED BANK OF INDIA

- On 1st April 2020 Punjab National Bank (PNB) will take over Oriental Bank of Commerce (OBC) and United Bank of India (UBI) and to become the country's second largest lender after State Bank of India (SBI) in terms of business and branch network.

- The biggest chunk of recapitalization that will go to PNB at Rs 16,000 crore, followed by Union Bank at Rs 11,700 crore these two anchor banks for the merger.

- The synergy after the amalgamation will create a globally competitive in the next generation bank, PNB 2.0 the bank said that in a release and the added that all customers, including depositors, will be treated as the PNB customers.

- PNB 2.0 will be offering specified inter-operable services through all the branches and all the platforms including mobile and internet banking it added.

- The amalgamated bank will be a wider geographical reach through 11,000 plus branches, more than 13,000 ATMs, 1 lakh employees and a business mix of over Rs 18 lakh crore.

- SS Mallikarjuna Rao, MD & CEO of Punjab National Bank that "The bigger geographical footprint will help us to serve our customers more effectively and efficiently".
- The lender said that it has appointed 'Bank Sathi' at all the branches, zones, head office that will address the customer concerns and assist them in choosing the right products and services.

MERGER 3 HISTORY OF CANARA BANK & SYNDICATE BANK

Canara Bank

- Canara Bank was established on 1906 by Subba Rao Pai and it was known Canara Hindu Parliament fund in Mangalore.
- In 1910 the bank changed its name to Canara Bank.
- In 1969 this bank was nationalized.

- In 1979 Canara Bank inaugurated its 1000th branch.

- Canara Bank became the 1th Indian Bank to get ISO certificate in 1996 for the 'Total Branch Banking' for its Seshadripuram Branch in Bangalore.

Syndicate Bank

- Syndicate Bank was established on 1925 in Udupi, Karnataka it is the oldest and major commercial banks of India. During the time of it established the bank was known as Canara Industrial and Banking Syndicate Ltd.

- By the three visionaries Shri Upendra Ananth Pai. A businessman, Shri Vaman Kudva, an engineer and Dr. T M A Pai, a physician with a intention to provide financial support to the local weavers.

- Syndicate Bank was nationalized in 19 July 1969 by the government of India.

- The headquartered of this bank was in the university town of Manipal India.

- It has 13 major commercial banks of India.

- The bank objective was to primarily to extend financial assistance to the local weavers.

AFTER MERGER OF CANARA BANK & SYNDICATE BANK

- On 1th April 2020, the Syndicate Bank was merged with Canara Bank.

- After the merger Canara Bank has become the India's fourth largest public sector bank.

- Canara Bank has taken over Syndicate Bank by which the shareholders pf Syndicate Bank get 158 shares for every 1000 shares of Canara Bank.
- After merger the banks will have 10,342 branches and 12,829 ATMs and Canara Bank also worth 15.20 lac crore.

- They have a combined strength of 91,685 employees.

- The merger of this banks shall massively enhance the reach of banking sector to the larger public and the financial inclusion activities currently underway.

- The integration would lower operating costs because of network overlap.

- After the merger these two banks has identical work cultures, and it is possible a seamless integration.

MERGER 4 HISTORY OF UNION BANK OF INDIA, ANDHRA BANK & CORPORATION BANK

Union Bank of India

- Union bank of India was registered on 11th November 1919 and it has limited company in Mumbai and it was inaugurated by Mahatma Gandhi.

- ATMs was introduced firstly in India by union bank of India.

Andhra Bank

- Andhra bank is an Indian public sector bank.

- Andhra bank was registered on 20th November 1923.

- Andhra bank was founded by the eminent freedom fighter and the multifaceted genius, Dr. Bhogaraju Pattabhi Sitaramayya.

- It has more than 1900 branches, 15 extension counters and also more than 1100 automated teller machines.

- It has operated in 25 states and three Union Territories.

- Andhra bank has its headquarters in Hyderabad, India.

- Andhra bank has pioneer in introducing credit cards in the country in 1981.

Corporation Bank

- Corporation bank was founded in the year 1906 in Udupi in a small town of South India.

- In 1980 Corporation Bank was Nationalized and been public in 1998.

MERGER 5 HISTORY OF INDIAN BANK & ALLAHABAD BANK

Indian Bank

- On 15th August 1907 Indian Bank was established as a part of the Swadeshi movement.

- It serves the nation with a team of over 18,782, dedicated staff of total business crossed Rs 2,11,988 crores as on 31th March 2012, operating profit has increased to Rs 3,463.17 crores on 31th March 2012, Net profit has increased to Rs 1746.97 crores on 31th March 2012.

- It has also overseas branches in Singapore, Colombo including a foreign currency of banking unit at a Colombo and Jaffna and 240 overseas correspondent banks in 70 countries.

Allahabad Bank

- In 1865 Allahabad bank was started in Allahabad and its headquarters of Allahabad bank was in Kolkata.
- The first directors of the banks are Mr.G. Brown, Mr.T. Moss, Mr.S. Bird and Mr. A. W. Wollaton.

- Allahabad Bank is the nationalized bank which has the more than 2500 branches across the India.

- In the year 2013 it has the total business of 3.1 trillion and it has branches across the world in Hong Kong and Shenzhen.

- Allahabad bank is the oldest joint stock bank of the country.

- It has set up in Allahabad on 24 April 1865 by a group of Europeans.CHATER 2 REVIEW OF LITERATURE

Parveen Kumari (2014)

In this research paper it considered the merger and acquisition of banks as strategic approach and told that the aim of the merger and acquisition of banks is increase credit creation and make progressive. According to the gathered post-merger data she concluded that the number of branches & ATM, Net Profit, Deposit, Net worth have increased.

Prof. Ritesh Patel & Dr. Dharmesh Shah (2016)

In this research paper it compared the financial performance of before and after merger of banks through Economic value-added approach and through others financial parameter like net profit margin, return on net worth, return on asserts, return on long term funds, interest earned and total assets and it is not necessary that EVA approach is common for all the other banks. They concluded that the financial performance of bank may be improved after the merger. But if its past financial data are examined before merger, it can be make merger fruitful.

Sanjay Sharma & Sahil Sidana (2017)

In this research paper it expressed the impact of SBI merger on financial condition of SBI. The SBI will get visibility at global level in the network increase of SBI & it is also able to provide cheaper funds more easily. The gross & net NPA of SBI it will come down after merger with their associate. The efficiency & effectiveness of the business it will increased because of single management.

Kotnal Jaya Shree (2016)

In this research paper it expressed “the economic impact of merger and acquisition on profitability of SBI” it various motives of merger in Indian Banking Industry. It was compares pre and post-merger financial performance of merging banks with the help of financial parameters like gross profit margin, net profit margin, operating profit margin, return on equity and debt equity ratio. Finally, it expresses that the banks have been affected positively but the overall development and financial illness of the banks can’t solve through mergers and acquisitions.

Bhan Akhil (2009)

In this research paper it insight into the motives and benefits of the mergers in Indian banking sector. This study examined eight merger deals of the Indian banks during the period of 1999 to 2006. The results of the study are indicated that mergers have been efficient for the merging banks and they have also created a value for the acquiring banks. Further it was concluded that in the Indian Banking context the effect of mergers is not seen over a short period of time but
over a considerable period of time.

S. Devarajappa (2012)

This study is destined in identifying the various reasons for merger and acquisitions in India. It also focused on pre and post-merger performance of banks from the view point of return on investment, ROCE, ROE. And this merger effects the helpful for surving of week banks by merging into larger banks.

Nisarg A Joshi and Jay M Desai

In this study it measured the operating performance and shareholder value of acquiring their performance before and after the merger. The ratio analysis is used on the basis of operating profit margin, Gross operating margin, Net Profit Margin, return on capital employed, Return on Net Worth, Debt-equity ratio, and EPS P/E for studying the impact. They also concluded the previous studies, mergers do not improve performance at least in the immediate short term.

Azeem Ahmed Khan (2011)

In this study, the researcher focused on explain the various motives for mergers and acquisition in India. The results of this study witnessed that mergers and acquisitions helped in declaration of dividends to equity shareholders.

Ramon, A.A., Onaolapo and Ajala, O. Ayorinde (2012)

In this research they examined the effects of merger and acquisition on the performance of selected commercial banks in Nigeria. on the basis of gross earning, profit after tax and deposit profit was chosen as financial efficiency parameters for the purpose of the study. The findings indicated an enhanced financial performance leading to improved financial efficiency. The study is recommended that the banks should be more aggressive in marketing financial products and also manpower training and re-training, investment in information technology should be emphasized.

CHAPTER 3 RESEARCH METHODOLOGY

Problem statement

- The banking industry has been experiencing major Merger and Acquisition in the recent years, with the number of global players emerging through successive Merger and Acquisition in the banking sectors. Only in today's tough environment will large organizations thrive. Government banks are in bad condition following demonetization. A lot of government banks have incurred huge losses owing to bad loans, which the lenders have not been willing to recover because they have ruined their company due to a range of factors, including demonetization. They have been discussions of the closing of certain banks because, in such a case, the general public may have withdrawn deposits from their accounts in a very risky circumstance. So, instead of shutting certain banks, the government, in consultation with RBI, it has taken a brave decision to merge banks through largescale economy operations. By merging many public sector banks into few and with efficient resources development, banks can be reinforced with a focus on upgrading services and revenues, optimum utilization of staff, cost efficiencies and reduced NPAs. Therefore, the study is taken up to know more details.

Research objectives

- To study the pre and post-merger financial performance of Bank OF Baroda
- To study the pre and post-merger financial performance of Punjab National Banks
- To study the pre and post-merger financial performance of Canara Bank
- To study the pre and post-merger financial performance of Union Bank
- To study the pre and post-merger financial performance of Indian Bank

Significance of the study

• The study is significant and useful as it has given the experience and knowledge about the merger and acquisition in Indian banking sector and what are its impact on the financial performance of the bank

Sources of data collection

• The study is purely based on secondary data taken from the annual reports of selected units and other websites.

• All the data related to history, growth and development of selected banking industries, it is been collected mainly from the books and magazine related to the banks and published papers, reports, articles and from the various newspapers, and other journals.

Selection of sample

Sample size: - 3 Mega Bank Mergers List in India 2019 to 2020

Acquiring Bank	**Acquired Bank**	**Year of a merger**
Bank of Baroda	Vijaya Bank, Dena Bank	April 1, 2019
Punjab National Bank	Oriental Bank of commerce, United Bank of India	April 1, 2020
Canara Bank	Syndicate Bank	April 1, 2020
Union Bank of India	Andhra Bank, Corporation Bank	April 1, 2020
Indian Bank	Allahabad Bank	April 1, 2020

Tools of analysis

• In this study SPSS Software is been used as statistical tool.

• This study is based on Ratio Analysis and Paired Sample T-Test.

1) Ratio Analysis

Ratio analysis is the important technique of financial analysis which shows the arithmetical relationship between any two figures. A ratio, in general, is a statistical yardstick by means of which the relationship between the figures can be compared and measured. The ratios are operating profit ratio, net profit ratio, return on assets, return on equity ratio, cost to income, debt equity ratio, CASA ratio,

2) Statistical Analysis

In this study mean, difference and standard deviation as tools of statistical analysis and paired t-test for judging hypothesis.

Paired T-test

- Paired t-test is the way to test the comparison between two related samples, involving small values of n that does not require the variances of the two population to be equal, but the two population are normal that must be continue to apply. For a paired T-test it is necessary that the observation of the.

Hypothesis of the study

- **Null Hypothesis:** There would be no significant difference in mean score of selected units, before and after merger and acquisition.

- **Alternate Hypothesis:** There would be significant difference in mean score of selected units, before and after merger and acquisition.

Limitation of the study

- This study is purely based on only 5 selected banks.

- In this study the pre and post data of the selected merger banks are used.

- All the limitations of ratio analysis affect the study.

CHAPTER 4 DATA ANALYSIS

1) Operating Profit Ratio

- Operating Profit Ratio = Operating Profit/Net Sales x 100
- Operating Profit Ratio is calculated by adding non-operating expenses and deducting non-operating income from net profit.
- It is typically measuring the operating performance and the efficiency of the company.
- The poor operational performance of the company is been analysis in which there is higher net profit ratio but the lower operating profit ratio.
- The profit is been increased because of other income and not the due.

Table 1 Operating Profit Ratio in selected Unit

Bank Name	Before Merger (x)	After Merger (y)	Difference (x-y)	Square of Difference (x-y) ^2
BOB	-20.82	-11.77	-9.05	81.9025
PNB	-33.81	-16.61	-17.2	295.84
CB	-13.30	-20.53	7.23	52.2729
UBI	-23.24	-23.55	0.31	0.0961
IB	-26.19	-22.83	-3.36	11.2896

		Total	-22.07	441.4011

(source: Moneycontrol.com)

Analysis

- In this above chart of operating profit ratio in which Bank of Baroda has lower ratio (-11.77) after the merger and it has highest ratio (-20.82) before the merger.
- Punjab National Bank has highest ratio (-33.81) before merger and it has lower ratio (- 16.61) after merger.
- Canara Bank has highest ratio (-20.53) after merger and it has lower ratio (-13.3) before merger.
- Union Bank of India has highest ratio (-26.19) before merger and it has lower ratio (- 22.83) after merger.
- Indian Bank has highest ratio (-26.19) before merger and it has lower ratio (-22.83) after merger.

Table 1.1 Analysis of t-test in selected units under the study of operating profit ratio

N	Means			S. D			d.f	t-test	p-vales	Result
5	x	Y	xy	x	Y	XY				
	-23.47	-19.05	-4.41	7.49	4.89	9.27	4	-1.064	0.347	Ho

- **Null Hypothesis: (Ho)**

There would be no significant difference in mean score of selected units, before and after merger and acquisition.

- **Alternate Hypothesis: (H1)**

There would be significant difference in mean score of selected units, before and after merger and acquisition.
At 5% level of significance, here t= -1.064 and p value = 0.347 So, t<p
As t is less than p value so Null Hypothesis is (Ho) is accepted means there is no significant difference in mean score of selected units, before and after merger & acquisition.

2) Net Profit Ratio

- Net Profit Ratio = Net Profit / Net Sales x 100
- This could be measured by modified for a use by nonprofit entity and it can change the net assets where it is to be used in the formula instead of net profits.
- Net Profit percentage after the tax profits to net sales. The remaining profit after all costs of production, administration and financing have been deducted from the sales, and income taxes recognized.
- This is the best measures of the overal result of a firm, especially when there is combined with an evaluation of how well it is using its in working capital
- This ratio is commonly measured reported on a trend line, to be judge performance over all time.

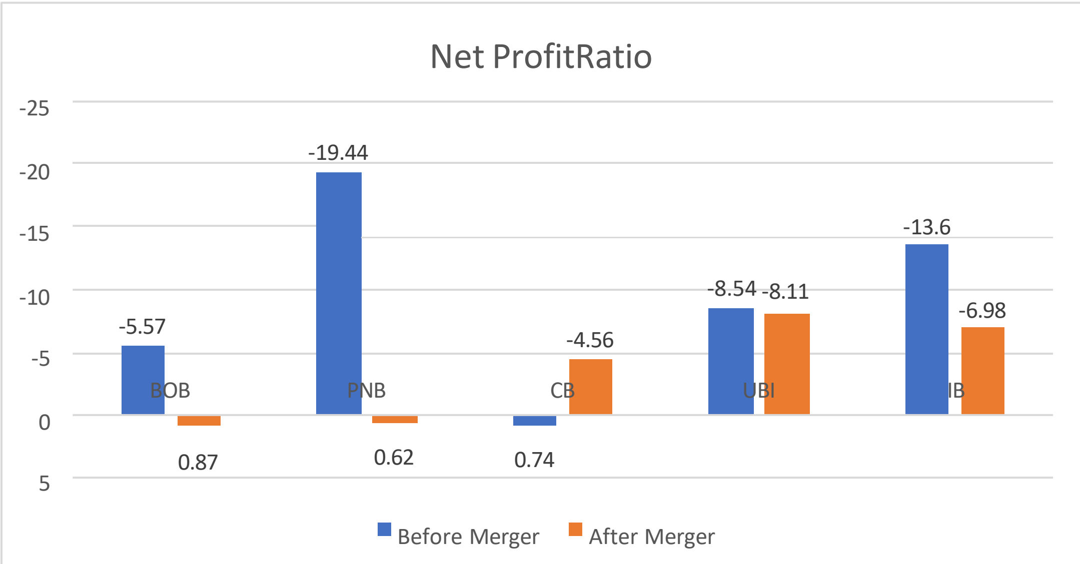
- And it is also be used to compare the results of a business with their competitors.
- Net Profit is not a indicator of cash flows, and since the net profit incorporates a number of non-cash expenses such as a accrued expenses, amortization and depreciation.

Table 2 Net Profit Ratio in selected Unit

Bank Name	Before Merger (x)	After Merger (y)	Difference (x-y)	Square of Difference (x-y) ^2
BOB	-5.57	0.87	-6.44	41.4736
PNB	-19.44	0.62	-20.06	402.4036
CB	0.74	-4.56	5.3	28.09
UBI	-8.54	-8.11	-0.43	0.1849
IB	-13.60	-6.98	-6.62	43.8244
		total	-28.25	515.9765

(source: Moneycontrol.com)

Analysis



- In the above chart of Net profit Ratio in which Bank of Baroda has highest ratio (0.87) after merger and it has lower ratio (-5.57) before the merger.
- Punjab National Bank has highest ratio (0.62) after the merger and it has lower ratio (- 19.44) before the merger.
- Canara Bank has highest ratio (0.74) before the merger and it has lower ratio (-4.56) after the merger.
- Union Bank of India has highest ratio (-8.11) a the merger and it has lower ratio (- 8.54) before the merger.
- Indian Bank has highest ratio (-6.98) after the merger and it has lower ratio (-13.6) before the merger.

Table 2.1 Analysis of t-test in selected units under the study of Net profit ratio

N	means			S.D			d.f	t-test	p-vales	Result
	X	Y	XY	X	Y	XY				
5	- 9.2820	-3.6320	- 5.65000	7.69	4.19	9.438	4	-1.338	0.252	Ho

- **Null Hypothesis: (Ho)**

There would be no significant difference in mean score of selected units, before and after merger and acquisition.

- **Alternate Hypothesis: (H1)**

There would be significant difference in mean score of selected units, before and after merger and acquisition.

At 5% level of significance, here t= -1.338 and p value = 0.252 So, t<p
As t is less than p value so Null Hypothesis is (Ho) is accepted means there is no significant difference in mean score of selected units, before and after merger & acquisition.

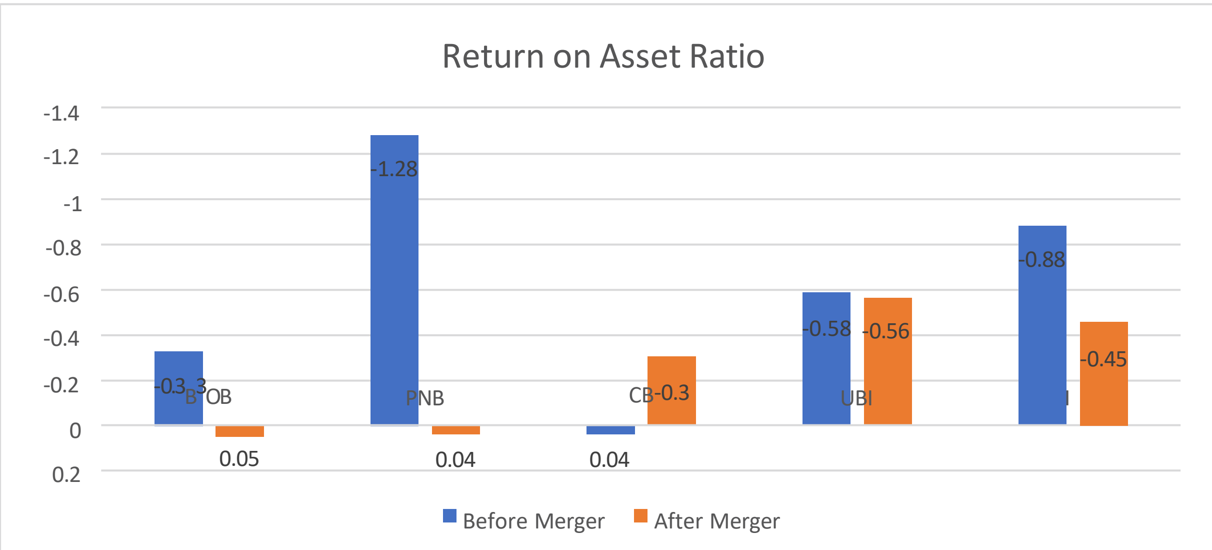
3) Return on asset

- Return on assert = Net Income / Total Assets
- The return on assets means that how much contribution of assets is been for generating the return.
- If more the assets is says to be the good because by the employee than more the assets the company can be earn more return and also the ratio will be more positive.
- ROA is similar to return on equity but it doesn't reflect the impact of a banks leverage. Because the banks are typically leveraged by a factor of 10 to 1, in order to generate a 10% return on equity, that a bank must earn the equivalent of at least 1% on its assets.
- It has a long been one of the bank industry's most commonly cited benchmarks.

Table 3 Return on Assets Ratio in selected Unit

Bank Name	Before Merger (x)	After Merger (y)	Difference (x- y)	Square Of Difference (x-y) ^2
BOB	-0.33	0.05	-0.38	0.1444
PNB	-1.28	0.04	-1.32	1.7424
CB	0.04	-0.30	0.34	0.1156
UBI	-0.58	-0.56	-0.02	0.0004
IB	-0.88	-0.45	-0.43	0.1849
		total	-1.81	2.1877

(source: Moneycontrol.com)



Analysis

- In the above chart of Return on Asset Ratio, in which Bank of Baroda has highest ratio (0.05) after the merger and it has lower ratio (-0.33) before the merger.
- Punjab National Bank has highest ratio (0.04) after the merger and it has lower ratio (- 1.28) before the merger.

- Canara Bank has highest ratio (0.04) before the merger and it has lower ratio (-0.03) after the merger.
- Union Bank of India has highest ratio (-0.56) after the merger and it has lower ratio (- 0.58) before the merger.
- Indian Bank has highest ratio (-0.45) after the merger and it has lower ratio (-0.88) before the merger.

Table 3.1 Analysis of t-test in selected units under the dy of Return on Asset Ratio

N	means			S.D			d.f	t-test	Sig. (2-tailed)	Result
	X	Y	XY	X	Y	XY				
	-O.6060	-0.2440	-0.36200	0.50585	0.27952	0.61897	4	-1.308	0.261	Ho

- **Null Hypothesis: (Ho)**

There would be no significant difference in mean score of selected units, before and after merger and acquisition.

- **Alternate Hypothesis: (H1)**

There would be significant difference in mean score of selected units, before and after merger and acquisition.

At 5% level of significance, here t= -1.308 and p value =

0.261 So, t<p

As t is less than p value so Null Hypothesis is (Ho) is accepted means there is no significant difference in mean score of selected units, before and after merger & acquisition.

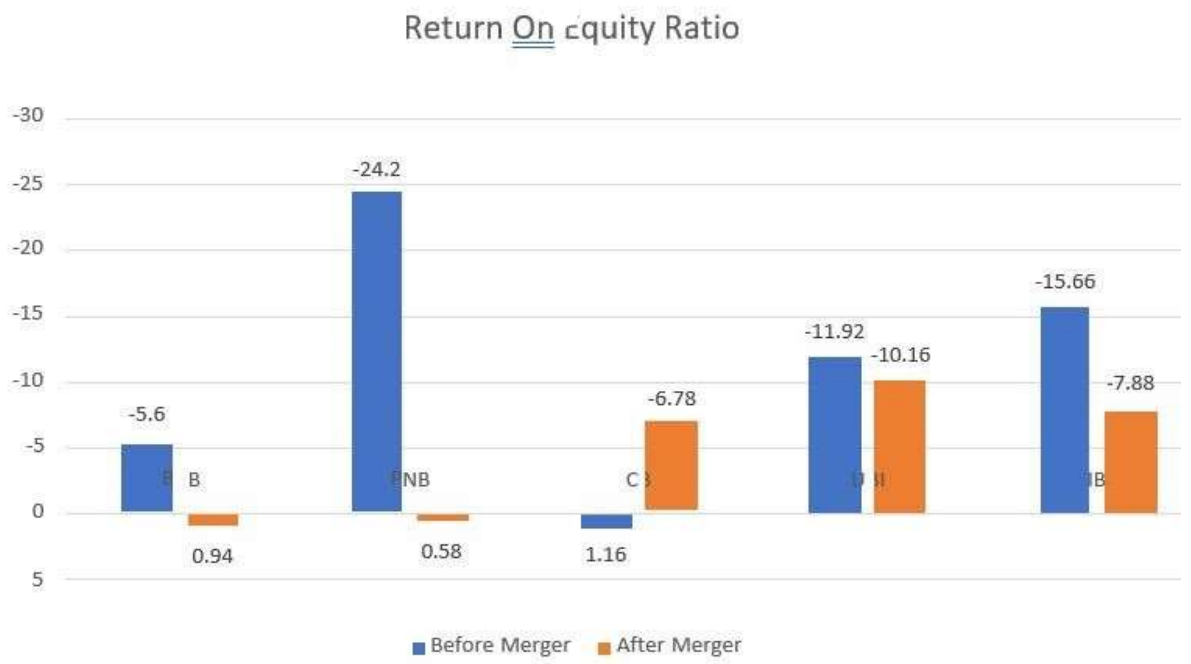
4) Return on Equity

- Return on equity = net income / shareholder's equity
- Return on equity is the most important metric in all of the bank investing.
- It can be measures profitability by dividing a bank's net income by its shareholders equity, higher the number, greater the return.
- Normally if we want to see a figure in excess of 10%, which is generally to mark the threshold between long-term value creation and destruction.

Table 4 Return on Equity Ratio in selected Unit

Bank Name	Before Merger (x)	After Merger (y)	Difference (x-y)	Square Of Difference (x-y) ^2
BOB	-5.60	0.94	-6.54	42.7716
PNB	-24.20	0.58	-24.78	614.0484
CB	1.16	-6.78	7.94	63.0436
UBI	-11.92	-10.16	-1.76	3.0976
IB	-15.66	-7.88	-7.78	60.5284
		total	-32.92	783.4896

(source: Moneycontrol.com)



Analysis

- In the above chart of Return on Equity Ratio, in which Bank Of Baroda has highest ratio (0.94) after the merger and it has lower ratio (-5.60) before the merger.
- Punjab National Bank has highest ratio (0.58) after the merger and it has lower ratio (- 24.20) before the merger.
- Canara bank has highest ratio (1.16) before the merger and it has lower ratio (- 6.78) after the merger.
- Union Bank of India has highest ratio (-10.16) after the merger and it has lower ratio (-11.92) before the merger.
- Indian Bank has highest ratio (-7.88) after the merger and it has lower ratio (- 15.66) before the merger.

Table 4.1 Analysis of t-test in selected units under the study of Return on Equity Ratio

N	means			S.D			d.f	t-test	p-vales	Result
	X	Y	XY	X	Y	XY				
5	- 11.24	-4.66	-6.58	9.66	5.09	11.90	4	-1.237	0.284	Ho

- **Null Hypothesis: (Ho)**

There would be no significant difference in mean score of selected units, before and after merger and acquisition.

- **Alternate Hypothesis: (H1)**

There would be significant difference in mean score of selected units, before and after merger and acquisition.

At 5% level of significance, here t= -1.237 and p value = 0.284 So, t<p

As t is less than p value so Null Hypothesis is (Ho) is accepted means there is no significant difference in mean score of selected units, before and after merger & acquisition.

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Analysis

- In this above chart of Cost to Income in which Bank of Baroda has highest ratio (48.92) before the merger and it has lower ratio (43.41) after the merger.
- Punjab National Bank has highest ratio (58.80) before the merger and it has lower ratio (41.81) after the merger.
- Canara Bank has highest ratio (40.83) after the merger and it has lower ratio (38.78) before the merger.
- Union Bank of India has highest ratio (46.11) after the merger and it has lower ratio (45.76) before the merger.
- Indian Bank has highest ratio (41.12) after the merger and it has lower ratio (40.72) before the merger.

Table 5.1 Analysis of t-test in selected units under the study of Cost to Income Ratio

N	Means			S.D			d.f	t-test	p-vales	Result
	X	Y	XY	X	Y	XY				
5	46.59	42.65	3..94	7.91	2.17	7.84	4	1.124	0.324	H1

- **Null Hypothesis: (Ho)**

There would be no significant difference in mean score of selected units, before and after merger and acquisition.

- **Alternate Hypothesis: (H1)**

There would be significant difference in mean score of selected units, before and after merger and acquisition.
At 5% level of significance, here t= 1.124 and p-value = 0.324 So, t>p
As t is less than p value so Null Hypothesis is (Ho) is accepted means there is significant difference in mean score of selected units, before and after merger & acquisition.

6) Earnings Per Share

- Earnings per share = Net income of the company / weighted average number of shares outstanding
- Earnings per share means it is generally considered to be the single most important variable in determining a share's price.
- A company's profile allocated to each outstanding shares of a common stock. Earing per share also serve as an indicator of a company's profitability.
- An important aspect of earning pe hare that often to ignored is the capital that is required to be generate the earning (net income) in the calculation.
- The two companies could be generate the same earning per share number, but only one could do so that it will be less equity (investment) that a company would be more efficient of using its capital to be generate income and , all other things are being equal , would be a "better" company.

Table 6 Earning Per Share Ratio in selected Unit

Bank Name	Before Merger (x)	After Merger (y)	Difference (x- y)	Square Of Difference (x-y) ^2
BOB	-64.97	-46.70	-18.27	333.7929
PNB	-30.00	1.00	-31	961
CB	8.00	-24.00	32	1024
UBI	-25.00	-13.00	-12	144
IB	-29.00	-9.00	-20	400
		total	-49.27	2862.793

(source: Moneycontrol.com)

Analysis

- In the above chart of earning per share ratio, in which Bank of Baroda has highest ratio (-46.70) after the merger and it has lower ratio (-64.97) before the merger.
- Punjab national bank has highest ratio (1.00) after the merger and it has lower ratio (- 30.00) before the merger.
- Canara Bank has highest ratio (8.00` efore the merger and it has lower ratio (- 24.00) after the merger.
- Union Bank of India has highest ratio (-13.00) after the merger and it has lower ratio (-25.00) before the merger.
- Indian Bank has highest ratio (-9.00) after the merger and it has lower ratio (- 29.00) before the merger.

Table 6.1

Analysis of t-test in selected units under the study of Earning Per Share Ratio

N	Means			S.D			d.f	t-test	p-vales	Result
	X	Y	XY	X	Y	XY				
	-28.19	-18.34	-9.85	25.86	18.20	24.37	4	-0.904	0.417	Ho

- **Null Hypothesis: (Ho)**

There would be no significant difference in mean score of selected units, before and after merger and acquisition.

- **Alternate Hypothesis: (H1)**

There would be significant difference in mean score of selected units, before and after merger and acquisition.

At 5% level of significance, here t= -0.904 and p-value = 0.417 So, t<p
As t is less than p value so Null Hypothesis is (Ho) is accepted means there is no significant difference in mean score of selected units, before and after merger & acquisition.

Analysis

- In this above chart of Debt equity ratio. in which Bank of Baroda has highest ratio (15.37) after the merger and lower ratio (15.07) before the merger.

- Punjab National Bank has highest ratio (17.36) before the merger and lower ratio (13.09) after the merger.
- Canara Bank has highest ratio (21.53) before the merger and lower ratio (20.27) after the merger.
- Union Bank of India has highest ratio (18.92) before the merger and lower ratio (16.44) after the merger.
- Indian Bank has highest ratio (15.6) before the merger and lower ratio (14.71) after the merger.

Table 8.1 Analysis of t-test in selected units under the study of ROCE Ratio

N	Means			S.D			d.f	t-test	p-vales	Result
	X	Y	XY	X	Y	XY				
	17.69	15.97	1.72	2.62	2.69	1.73	4	2.215	0.091	H1

- **Null Hypothesis: (Ho)**

There would be no significant difference in mean score of selected units, before and after merger and acquisition.

- **Alternate Hypothesis: (H1)**

There would be significant difference in mean score of selected units, before and after merger and acquisition.

At 5% level of significance, here t= 2.215 and p-value = 0.091 So, t>p
As t is less than p value so Null Hypothesis is (Ho) is accepted means there is significant difference in mean score of selected units, before and after merger & acquisition.

Analysis

- In this above chart of assets turnover ratio in which Bank of Baroda has highest ratio (0.07) after the merger and it has lower ratio (0.06) before the merger.
- Punjab National Bank is having equal ratio in both before and after the merger.
- Canara Bank is having equal ratio in both before and after the merger.
- Union Bank of India is having equal ratio in both before and after the merger.
- Indian Bank is having equal ratio in both before and after the merer.

Table 9.1 Analysis of t-test in selected units under the study of Assets Turnover ratio

N	Means			S.D			d.f	t-test	p-vales	Result
	X	Y	XY	X	Y	XY				
5	0.068	0.070	-0.002	0.004	0.000	0.004	4	-1.000	0.374	Ho

- **Null Hypothesis: (Ho)**

There would be no significant difference in mean score of selected units, before and after merger and acquisition.

- **Alternate Hypothesis: (H1)**

There would be significant difference in mean score of selected units, before and after merger and acquisition.

At 5% level of significance, here t= -1.000 and p value = 0.374 So, t<p
As t is less than p value so Null Hypothesis is (Ho) is accepted means there is no significant difference in mean score of selected units, before and after merger & acquisition.

10. CASA ratio

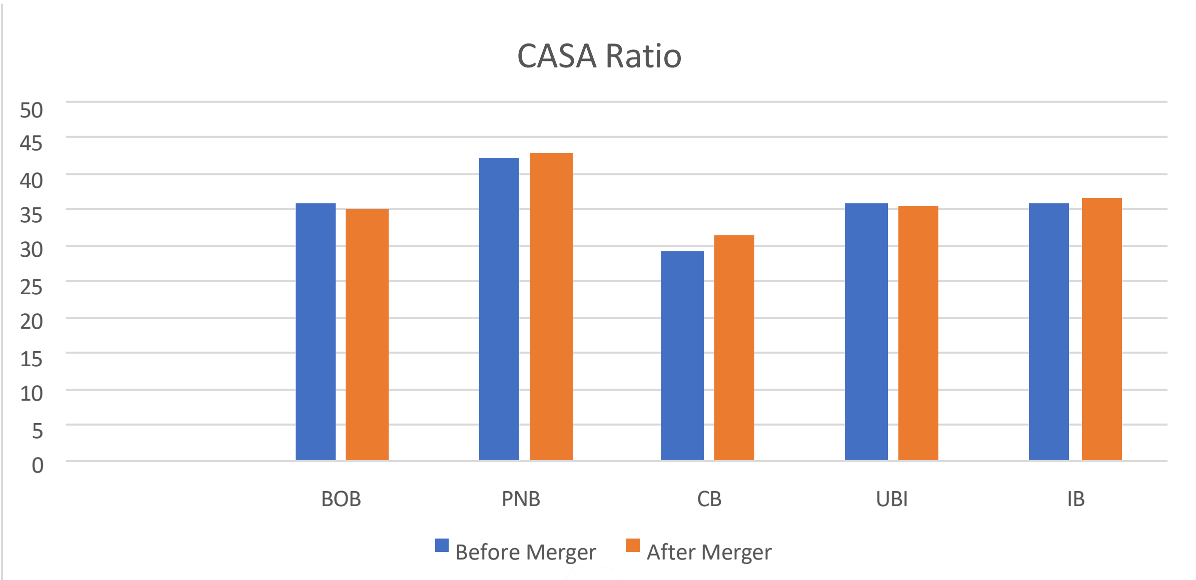
- CASA ratio means current account and saving account.
- Current Account are those account in which it is specially for customers those who have to carry out business and the large number of transactions in the account every day.
- In current account there is no restriction on the number of transactions.
- Savings bank accounts are specially for the individual persons or jointly individual (joint account), which has a limit of transaction at every day.
- For example, when the cash withdrawn once at ay and 100 times deposition at every year.
- This account is the bank pay interest for e le currency 4% interest rate on saving account.

CASA Ratio = Deposits in Current & Saving Account / Total Deposits

Table 10 CASA Ratio in selected Unit

Bank Name	Before Merger (x)	After Merger (y)	Difference (x-y)	Square of Difference (x-y) ^2
BOB	35.81	35.03	0.78	0.6084
PNB	42.16	42.97	-0.81	0.6561
CB	29.18	31.37	-2.19	4.7961
UBI	35.97	35.46	0.51	0.2601
IB	35.90	36.51	-0.61	0.3721
		total	-2.32	6.6928

(source: Moneycontrol.com)



Analysis

- In this above chart in which Bank of Baroda is having highest ratio (35.81) before the merger and it has lower ratio (35.03) after the merger.
- Punjab National Bank is having highest ratio (42.97) after the merger and it has lower ratio (42.16) before the merger.
- Canara Bank is having highest ratio (31.37) after the merger and it has lower ratio (29.18) before the merger.
- Union Bank of India has highest ratio (35.97) before the merger and it has lower ratio (35.46) after the merger.
- Indian Bank has highest ratio (36.51) after the merger and it has lower ratio (35.90) before the merger.

Table 10.1 Analysis of t-test in selected units under the study of CASA ratio

N	Means			S.D			d.f	t-test	p-vales	Result
	X	Y	XY	X	Y	XY				
	35.80	36.26	-0.464	4.59	4.21	1.184	4	-0.876	0.431	Ho

- **Null Hypothesis: (Ho)**

There would be no significant difference in mean score of selected units, before and after merger and acquisition.

- **Alternate Hypothesis: (H1)**

There would be significant difference in mean score of selected units, before and after merger and acquisition.

At 5% level of significance, here t= -0.876 and p-value = 0.431 So, t<p
As t is less than p value so Null Hypothesis is (Ho) is accepted means there is no significant difference in mean score of selected units, before and after merger & acquisition.

CHAPTER 5 FINDING

- In operating profit ratio before the merger, the highest ratio is (-33.81) in Punjab National Bank and the lower ratio is (-13.30) in Canara Bank. After the merger the highest ratio is (-23.55) in Union Bank of India and the lower ratio is (-11.77) in Bank of Baroda.

- In net profit ratio before the merger the highest ratio is (0.74) in Canara Bank and the lower ratio is (-19.44) in Punjab National Bank. After the merger the highest ratio is (0.87) in Bank of Baroda and lower ratio is (-8.11) in Union Bank of India.

- In return on assets before the merger the highest ratio is (0.04) in Canara Bank and lower ratio is (-1.28) in Punjab National Bank. After the merger the highest ratio is (0.05) in Bank of Baroda and lower ratio is (-0.56) in Union Bank of India.

- In return on equity ratio before the merger the highest ratio id (1.16) in Canara Bank and the lower ratio is (-

24.20) in Punjab National Bank. After the merger the highest ratio is (0.94) in Bank of Baroda and the lower ratio is (-10.16) in Union Bank of India.

- In cost to income ratio before the merger the highest ratio is (58.80) in Punjab National Bank and the lower ratio is (38.78) in Canara Bank. After the merger the highest ratio is (46.11) in Union Bank of India and the lower ratio is (40.83) in Canara Bank.

- In earning per share ratio before the merger the highest ratio is (8.00) in Canara Bank and the lower ratio is (-64.97) in Bank of Baroda. After the merger the highest ratio is (1.00) in Punjab National Bank and the lower ratio is (-46.70) in Bank of Baroda.

CHAPTER 6

CONCLUSION

- The banking industry has been experiencing major Merger and Acquisition in the recent years, with the number of global players emerging through successive Merger and Acquisition in the banking sectors.
- The current study indicates that the pre and post-merger and acquisition of the selected banks in India have no grater changes in profitability ratio in a few banks that are satisfactory during the study period. But in future there are robust projections of improvement in profitability. So, the result is to specify that the mergers led to higher level of cost efficiencies for the merging banks.
- Merger and acquisition are leads to the financial gain and the increase in price of target banks. it is depending on the condition and the different situations that it will be increase the share and the profit of acquirer or not.
- The primary purpose of the merger and acquisition is to reduce the competition and protect in existing markets in the economy.
- Mergers are good for the growth and development of the country only when it does not give rise to the competition issues.
- Merger and Acquisition impact on the shareholder value. The asset that are the structural factors such as relative sizes of merging the partners, technique of the financing Merger and Acquisitions and the number of bidders in Merger & Acquisitions that have the ability to influence the realization of a M&As success.
- The importance of considering the size of a potential target, the method to be used in funding of M&As. The structural factors acting autonomously the potential of influence the shareholder value.

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