International Journal for Multidisciplinary Research (IJFMR)
E-ISSN: 2582-2160 ● Website: www.ijfmr.com ● Email: editor@ijfmr.com

Merger and Acquisition in Indian Banking System

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Abstract
In the emerging economy with the changing scenario in the banking sector there are various steps taken to strengthen the financial sector. Since the aeon of globalisation and post-liberalisation of the Indian economy, the banking sector has begun to reform itself with the changing period of time. But since 2019 with the move to grow toward $5 trillion economy many steps had been taken in the banking sector, one of the major steps in the history of banking sector was the mega merger. In 2019 under union finance minister Nirmala Sitharaman in the form of mega merge in the banking sector many banks were merged, such as Punjab national bank with united bank of India and oriental bank of commerce (making it a 2nd largest public sector bank), Canara bank with syndicate bank (making it a 4th largest public sector bank) and recently hdfc merged into hdfc ltd (the biggest mortgage lender) on 4th 1pril,2022. This study deal with the merger and acquisition in the banking sector, types of mergers, history of merger and acquisition, reasons and outcomes

Introduction
A merger can be defined as "the voluntary combination or agreement of two companies to form a new en tity." it is also considered a way of mixing or merging two business organizations into a single organizati on that is less than a merger (indrapriya, 2018). An acquisition means "one company buys or takes over another company." simply put, we can say it is "the acquisition of one company by another company for its management.
Mergers and acquisitions occur for many reasons; damage to the company or increase in product failure, decreased competition among competitors, etc.

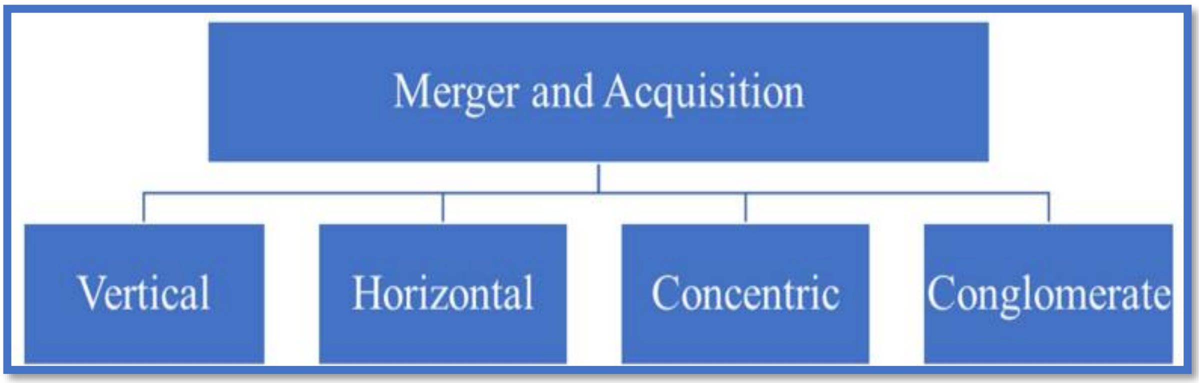
Overview of Indian banking industry
The indian banking system is one of the largest and most complex in the world, with more than 100 sche duled banks and more than 96,000 branches. It has undergone significant changes since india's independ ence in 1947 and today plays an important role in india's economic development. In the early years of in dependence, the indian banking system was dominated by a handful of stateowned banks, with limited b anking and payment services, especially in some regions. However, in the following years, the indian go vernment, in consultation with the reserve bank of india (rbi), introduced various monetary and fiscal ref orms that led to the expansion of the financial institution. One of the most significant changes in the indi an banking system was the nationalization of 14 major banks in 1969 and six more in 1980. This brought almost 80% of the banking sector under government control and expanded banking services to many rur al and unbanked areas. In addition, the government has also issued policies to support the development o

f local regional banks and cooperative banks and further expand banking services in rural areas. In the 1 990s, the indian government permitted commercialization, allowing private and foreign companies to op erate in india. This has led to increased competition and the entry of many new players into the market. The introduction of technologies such as online banking and mobile banking has also increased the effici ency and service of the financial institution.

Throughout its history, Indian banking flourished in the late 18th century (bank of Hindustan, 1770). The banking sector has experienced many ups and downs since its early days and continues to do so. In the 18th century, efforts were made to establish the Hindustan bank in 1770 (liquidated between 1829 and 1832) and the universal bank of India in 1786, but failed in 1791 ("banking in India," 2023). The oldest surviving bank is the state bank of India (sbi), which is said to have been formed by the merger of three banks, including bank of Bengal (established in June 1806 as bank of Calcutta), bank of Bombay (established in 1806). 1840) and the madras bank (established 1843). After independence, the banks were merged to form imperial bank of India in 1921 and state bank of India in 1955. During the swadeshi movement between 1906 and 1911, many banks came from bank of India, Canara bank, bank of India, south India bank, central bank of India, corporation bank, bank of Baroda and catholic Syrian bank. Then came the period of nationalization, divided into two rounds. The first round took place in 1969, when the 14 largest companies were counted. In the second round in 1980, six more banks were nationalized, bringing the total number of state-owned banks in India to 20. Reserve bank is the central and governing body of India and is also known as bankers' bank or apex bank. It was founded on April 1, 1935 and is headquartered in Mumbai, Maharashtra, India. It was under the jurisdiction of the ministry of finance, government of India. It has full and sole responsibility for the management, issuance and custody of the Indian rupee in the market. After India's independence on 15 august 1947, the reserve bank of India was appointed on 1 January 1949.

Types of mergers and acquisitions

Based on the relationship and the agreement between two company or firm involved in the deal following are the types of mergers and acquisition:



Vertical: - a vertical merger occurs when two or more companies, each responsible for different parts of the supply chain, combine to provide a common product or service (vertical merger, n.d.). This type of merger aims to decrease competition in the market by creating a single entity with a larger share of the market. For instance, if a tire manufacturing company merges with a car company, it would not only reduce operational costs but also lead to business expansion and higher profits.

Horizontal: - a horizontal merger occurs when two companies operating in the same stage of the supply chain or within the same industry merge together. This type of merger is more common among companies in the same space, as competition tends to be higher in these areas. By merging, companies can potentially gain synergies and a larger market share, as seen in the example of xyz, a pvc pipe manufacturer, and abc, a pvc water tank manufacturer. By merging, these companies can increase synergies and potentially gain a larger market share due to their shared use of pvc.

Concentric: - a concentric merger occurs when two companies in the same industry merge to expand their product or service offerings to customers (guide to concentric mergers, n.d.). This type of merger is common when two companies in the same industry combine to form a more powerful entity, and can also involve companies from different industries that have complementary resources (what is a concentric merger? 2022). For instance, in 2007, coke and vitamin water merged to gain a stronger presence in the beverage industry.

Conglomerate: - a conglomerate merger refers to a consolidation of two companies or unrelated entities coming together. The primary motivations for such a merger are to increase market share, diversify business operations, cross-sell products, and leverage synergies (conglomerate mergers, n.d.). There are two types of conglomerate mergers: pure & mixed. A pure conglomerate merger occurs when two companies with no market overlap or unrelated businesses in distinct markets merge. On the other hand, a mixed conglomerate merger involves two companies joining forces to expand their markets, products, or services (conglomerate merger, n.d.). For instance, in 2017, amazon acquired whole foods market to expand its presence in the grocery industry.

Merits of a bank merger

- A large capital base would help the acquirer banks to offer large loans amount.
- This merger makes rbi to have better control on the system and the implementation of policies will became easy.
- It will be easy of penetration to the market.
- Technological upgradation can be considered.
- Recapitalization need from the government to reduce.
- The cost of operation is been reduce with the help of merger.
- The professional standard is been improve.
- It helps in improve the risk management.
- The geographically concentrated regionally present the banks to expand their coverage with the help Of merger.
- It provides better efficiency ratio for the business of operations as well as the banking operation which is beneficial for the economy.
- Service delivery can be get improved with the help of merger.
- Rbi will be watching banks on its performance, especially in the terms of npa (nonperforming asset) otherwise loans which are not recovered.
- Customers will have a wide range of products like mutual funds and insurance to choose from the additional to the traditional loans and deposits.
- It npa percentage of the bank is above prescribed norms, it will ask to merge with a bigger bank to the case the situation as to combined capital of banks that will be higher and thereby reducing the npa percentage.

Demerits of a bank merger

- All different banks have different cultures, systems, processes, procedures. Merger will lead to culture conflicts.
- Bank employees and police unions oppose unionization due to labour, security, employment and other issues.
- A few large, interconnected banks expose the broader market to greater financial risk.
- Large bank employees the bank does not treat small bank employees equally. And once the bank fixe the problem, customers will start having problems.
- It will take some time for customers to realize that their banks are merging. Although banks must notify all customers about the merger, some
- Customers may miss this communication and be surprised to find that theirboard has been replaced by a new board. The bank must bear the burden of the weak bank causing the risk. Managing different financial and human resources is difficult.
- The idea of decentralization, because many banks with regional audiences and customers tend to have a very positive attitude towards purchasing money from the bank.
- Large banks have the potential to cause global economic problems that can cripple the entire country's economy
- With the consolidation of many banks, customers will have fewer options for banks.
- The new bank's board of directors may cause operational problems, and dealing with angry employe e may be another challenge.

Reasons for merger and acquisitions

Looking at the history of mergers and acquisitions, there can be many reasons for mergers and acquisitions in the banking sector of the Indian economy. Some of the reasons behind mergers and acquisitions are:

1. Many companies need rapid business growth or product diversification and therefore need to collaborate to achieve their goals or objectives.
2. Many small companies are merging with large companies in order to increase efficiency and reduce competition in the market.
3. To survive in the competitive market, small companies must maintain their presence in the market through mergers and acquisitions.
4. Competition in the market is intensifying as new technologies and services are added and old banks cannot compete, so they decided to merge.
5. Many companies are merging to benefit from tax benefits. For example, when a bankrupt company merges with a profitable company, the other company can absorb the losses, which can help pay taxes.

Merger and acquisition in Indian banking industry

When we look upon the records of merger and acquisition in banking enterprise it started with its first merge in 1921 with the merge of bank of Calcutta, bank of Bombay and bank of madras to shape imperial bank of India. The number one goal in the back of every merger and acquisition is the introduction of synergy and to achieve boom at the strategic stage. Banks also opt for mergers and acquisitions to acquire the blessings of economies of scale through reduction of expenses and maximization of both economic and non-economic blessings (Kumari, ...). In current time we are able to see numerous merger and acquisition in banking quarter, some of the currents are Punjab national bank with united bank of India and oriental bank of commerce, Canara bank with syndicate bank Allahabad with Indian bank and currently hdfc bank ltd merged into hdfc ltd (the most important loan lender) on 4th april,2022. This merger and acquisition are a pass to move toward making Indian economic system a $five trillion economic system by means of fy 2028.

list of merger and acquisition in Indian banking sector after nationalisation of banks:

Sr.No.	Transferor Bank	Transferee Bank	Year of M&A
1	Bank of Bihar Ltd.	State bank of India	1969
2	National Bank of Lahore Ltd.	State Bank of India	1970
3	Miraj State Bank Ltd.	Union Bank of India	1985
4	Lakshmi Commercial Bank Ltd.	Canara Bank	1985
5	Bank of Cochin Ltd.	State Bank of India	1985
6	Hindustan Commercial Bank	Punjab National Bank	1986
7	Traders Bank Ltd.	Bank of Baroda	1988
8	United Industrial Bank Ltd.	Allahabad Bank	1989
9	Bank of Tamilnadu Ltd.	Indian Overseas Bank	1990
10	Bank of Thanjavur Ltd.	Indian Bank	1990
11	Parur Central Bank Ltd.	Bank of India	1990
12	Purbanchal Bank Ltd.	Central Bank of India	1990
13	New Bank of India	Punjab National Bank	1993
14	Bank of Karad Ltd.	Bank of India	1993-1994
15	Kashinath Seth Bank Ltd.	State Bank of India	1996
16	Bari Doab Bank Ltd.	Oriental Bank of Commerce	1997
17	Punjab Co-operative Bank Ltd.	Oriental Bank of Commerce	1997
18	Bareilly Corporation Bank Ltd.	Bank of Baroda	1999
19	Sikkim Bank Ltd.	Union Bank of India	1999
20	Times Bank Ltd.	HDFC Bank Ltd.	2000
21	Bank Of Madura Ltd.	ICICI Bank Ltd.	2001
22	ICICI Ltd.	ICICI Bank Ltd.	2002
23	Benares State Bank Ltd.	Bank of Baroda	2002
24	Nedungadi Bank Ltd.	Punjab National Bank	2003
25	South Gujarat Bank Ltd.	Bank of Baroda	2004
26	Global Trust Bank Ltd.	Oriental Bank of Commerce	2004
27	IDBI Bank Ltd.	IDBI Ltd.	2005
28	Bank of Punjab Ltd.	Centurion Bank Ltd.	2005
29	Ganesh Bank of Kurundwad Ltd.	Federal Bank Ltd	2006
30	United Western Bank Ltd.	IDBI Ltd.	2006
31	Bharat Overseas Bank Ltd.	Indian Overseas Bank	2007
32	Sangli Bank Ltd.	ICICI Ltd.	2007
33	Lord Krishna Bank Ltd.	Centurion Bank of Punjab	2007
34	Centurion Bank of Punjab	HDFC Bank Ltd.	2008
35	The Bank of Rajasthan	ICICI Bank Ltd.	2010
36	ING Vysya Bank	Kotak Mahindra Bank	2015
37	State Bank of Bikaner and Jaipur	State Bank of India	2017

38	State Bank of Mysore, Hyderabad, Travancore, Patiala	State Bank of India	2017
39	Bharatiya Mahila Bank	State Bank of India	2017
40	Dena Bank and Vijaya Bank	Bank of Baroda	2019
41	Oriental Bank of Commerce and United Bank of India	Punjab National Bank	2020
42	Syndicate Bank	Canara Bank	2020
43	Corporation Bank and Andhra Bank	Union Bank of India	2020
44	Allahabad Bank	Indian Bank	2020
45	HDFC Ltd.	HDFC Bank Ltd.	2022

Source: (assistant professor nirma institute of management, nirma university, Sarkhej Gandhinagar highway, Ahmedabad, Gujarat, India et al., 2023)

- union finance minister Nirmala Sitharaman on 30th august 2019 she announced the consolidation of the state-owned banks (psbs) in which 10 psbs being the merged to form 4 bigger lenders to the strengthen the banking sector struggling with a bad loan.
- the aimed at clean-up of the bank balance sheets and creating the lenders of global scale that can be support the economy's surge to$5 trillion by 2024.
- done with two rounds of the bank consolidation earlier, this is what we want to do for the robust banking system and a $5 trillion economy.
- FM Sitharaman said that they are trying to build next generation banks, big banks with the capacity to the enhance credit.
- the key factors for the mergers are the technological platform, cultural similarities, customer reach, competitiveness, finance secretary Rajiv Kumar added.

Some major mergers in India

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 nationalised by the government of India, along with the 13 other major commercial banks of India.

Vijaya bank

- Vijaya bank was established on 23 October 1931 by late shri. A.b Shetty and other entrepreneurial farmers of Bengaluru in Karnataka.
- on 15th April the Vijaya bank was nationalized. It has corporate office in Bengaluru. • in 1958 the bank became a scheduled bank.
- its merger with nine smaller banks on 1969-1968 to grew steadily into a large India bank.

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 headquartered in Mumbai Maharashtra.

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 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 has based on the third quarter results of Dena bank and Vijaya bank, the key credit metrics of the merger entity, with the exception of profitability, will be broadly similar 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. As per the market reports, cultural integration of the three banks is been likely to remain an overhang on the bank's nearby term performance. The back – end technology integration would, however to be relatively smooth as all the three banks operate the Finacle CBS platform.
- the bank of Baroda is set 7,000 crores as a capital.
- the agenda of this merger was to reduce non-performing assert (npa). At the time of the merger proposal the gross npa ratio of bank of Baroda, Vijaya bank & Dena bank were 12.4%, 6.9% & 22% respectively. Before the merger of bank of Baroda, the entity would 40% more deposits and 44% more loans, but it would also have 70% more distribution. So, there would be more products and services available to customers after merger. The total business of bank of Baroda is expected to be more than Rs 15 trillion after merger. The sign of merger is expressing through this financial analysis.

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's an Indian multinational banking & 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 February 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 were 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.
- it has more than 1300 branches and it has 15 overseas branches. • united bank of India has a good track record of 56 years.
- united bank of India has over all assets of Rs. 300 billion.

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 recapitalisation 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 Mallikarjun 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 sati’ at all the branches, zones, head office that will address the customer concerns and assist them in choosing the right products and services.
- it will also smoothen the customer transition, it added. A robust risk governance mechanism has been set up to mitigate risks and to make the banking experience secure and safe, pnb noted,
- pnb has unveiled a new logo following the merger of united bank of India and oriental bank of commerce with it.
- the new logo will be bear distinct signages of all the three public sector lenders.

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 Seshadri Puram 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 an 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 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 gets 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.
- corporation bank holds a unique record of posting profits right from inception.
- fy 2010-11 uninterrupted dividend payment track record since inception and declared highest ever dividend of 200%.

After merger of union bank of India, Andhra bank & corporation bank

- on 1st April 2020 Andhra bank, corporation bank merge into union bank of India.
- the central government is in exercise of the powers conferred by section 9 in the banking companies act 1970/1980 after consultation with rbi notified the amalgamation of Andhra bank and corporation bank into union bank of India scheme 2020.
- union bank has become the country's fifth largest public sector lender after amalgamating Andhra bank and corporation bank into union bank.
- from Wednesday the merger effective with harness rich individual legacies and forge a dynamic shared future.
- after the merger all the employees, customers, and branches of Andhra bank and corporation bank will become the part of the union bank of India.
- the merger is also the expected to generate cost and revenue synergies to the tune of in 2,500 crores over the next three years.
- the customers get the benefit of wider access to branches, ATMs, digital services and credit facilities and also now in a much stronger position as a bank
- the banks also offer a wide range of products and services to more than 120 million customers across its over 9,500 branches and more than 13,500 ATMs.
- after combined they becomes the India's fourth largest banking network and fifth largest public sector bank.
- in order to minimize disruption, the account numbers, ifsc codes, debit/credit cards and internet / mobile banking portals and login credentials will remain the same.

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 nationalised 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.

After merger of Indian bank & Allahabad bank
- on 1st April 2020 Allahabad bank merger into Indian bank.
- finance minister Nirmala Sitharaman had announced the merger of several public sector banks in budget 2020 held in march last year.
- the Indian banks announced a share of swap ratio of 115 equity shares of Rs 10 each for every 1,000 shares of Rs 10 each of Allahabad bank. As per the scheme the Allahabad bank was amalgamated into Indian bank along with other nine psbs merged into four.
- Allahabad bank has its headquartered in Uttar Pradesh's Allahabad initially. In presence Gwalior district of Madhya Pradesh 45 years ago. Now its headquarters was later shifted to Kolkata after 20 years of establishment.
- Allahabad bank has the largest number of fixed assets as to compared with other banks. It has largest number of 3,230 branches across the country primarily located in UP, Bengal in the 2nd position, Bihar in the 3rd position and Madhya Pradesh at 4th with 150 branches.
- it was announced that a fair equity shares exchange ratio of 115 equities of Rs 10 each for every 1000 shares of Rs 10 of Allahabad bank as a part of the merger of the latter in the bank.
- the board of directors, approved in the meeting that the share exchange ratio, subject to statutory and the regulatory approvals.
- a grievance redressal committee headed by the retired judge of madras high court, Chitra Venkataraman was formed to be address the grievances of minority of shareholders individually and collectively holding at least one percent of the total paidup equity capital of one pf these two banks.

Objectives
- To study about merger and acquisition in banking industries.
- To study different types of merger and acquisitions.
- To study some of the bank in respect of pre & post- merger and acquisition.
- To study the reasons of merger and acquisitions.

Review of literature

(Kumari, n.d.) 2014: - in her research conducted in 2014, Kumari explored the strategic benefits of merger and acquisition in the Indian banking system. She found that such activities have a positive effect on the sector's growth, and also examined the challenges faced by smaller banks in addressing these issues.

(assistant professor nirma institute of management, nirma university, Sarkhej Gandhinagar highway, Ahmedabad, Gujarat, India et al.,) 2016: - in his research, evaluation became made with the help of many parameters. Check financial performance by way of evaluating the common rating with Eva. It is concluded that everyone banks except icici confirmed advantageous impact on Eva after merger. It goals to study whether or not the evaluation of the financial institution's targets through the acquiring bank has any effect on income and payouts

(Goyal, n.d.),2011: - his take a look at conducted on the idea of variety of branches and geographical penetrations. Apart from this this takes a look at additionally offers in monetary performance, human resource control and organisation behaviour. It tried to expose many superb effects of merger and acquisition with various forms of rising problem within the system of merger and acquisition

(Mishra,)2022: - in his examine based the subject "an analysis at the back of the merger of banks" tried to evaluation the following technology financial institution and the bank to be merger with the anchor bank. In his take a look at the additionally attempted witness the impacts of merging and capital inclusion below public sector banking.

(Jayadevan & sensarma, n.d.): - the paper attempts to examine the going merger and acquisition in the banking industry. The have a look at attempted to awareness on each the binder and the targeted bank and it also confirmed the bank control which strongly favoured the mergers. He also tried to check numerous feasible blessings of merger derived by way of shareholders, stockholders and depositors.

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 today's complex of large organizations can thrive. State banks are in bad shape after demonetisatio n. Many stateowned banks have suffered huge losses due to bad loans, which borrowers are reluctant to recall due to various factors such as liquidating their companies. They discussed closing some banks w here it would be too dangerous for the public to withdraw money from their accounts. Therefore, instead of closing

down some banks, the government took a bold decision to merge banks from the larger market in consult atiowith the Reserve Bank of India. By consolidating many public banks into a few banks and improving capital quality, banks can be strengthened by focusing on improving services and revenues, improving e mployee utilization, improving costs and reducing non-performing loans. 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

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.

International Journal for Multidisciplinary Research (IJFMR)

E-ISSN: 2582-2160 ● Website: www.ijfmr.com ● Email: editor@ijfmr.com

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
- all the limitations of secondary data make an impact in the analysis because this study is based on the data only
- for this study before and after merger 1 year data is been compare of selected units.

Data analysis

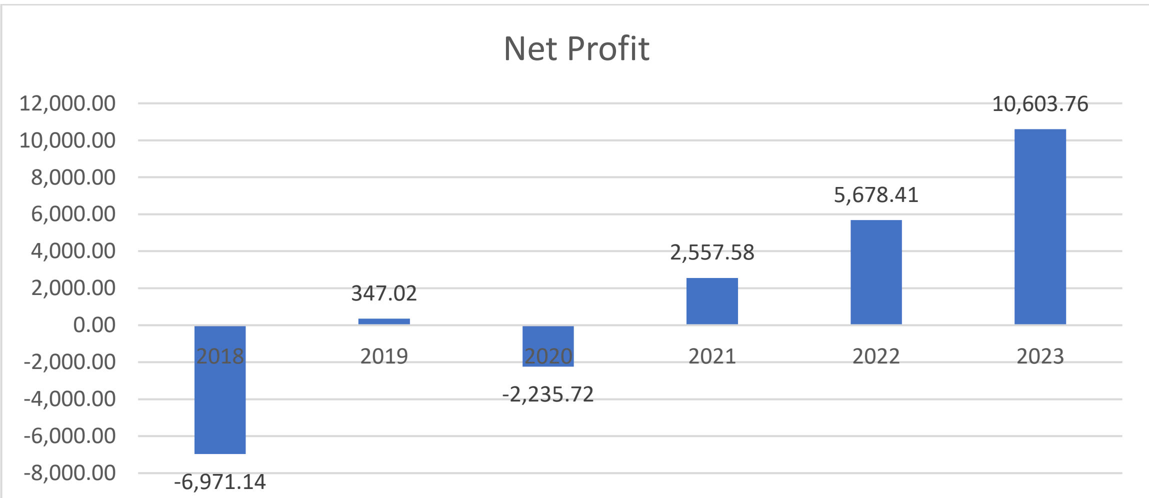
Merger and acquisition analysis of some of the banks

1. **Syndicate bank with Canara bank in 2020**: Canara bank one of the oldest public sector financial institutions established on 1stjuly, 1906 by ammembal subha rai pai whereas, syndicate bank one of the major commercial public sector banks was founded by upendra ananth pai, t. M. A. Pai and vaman srinivas kudva in 1925. It was merged with Canara bank on 1stapril, 2020 under union finance minister Nirmala Sitharaman. The agreement followed up with shareholders receiving of 158 equity shares in the former of every 1,000 shares. With this merger and acquisition between the banks Canara bank became the 4th largest bank with Rs 15.2 lakh core business.

sr.no.	Content	Canara bank	Syndicate bank	After m&a
1.	Branches	6,333	4031	10,364
2.	Employee	58,350	31,535	89,885
3.	Total business	10,43,249cr	4,77,046cr	152,0295cr
4.	Deposit	5,99,123cr	25,9896cr	859,019cr
5.	Casa ratio	29.18%	32.58%	30.21%
6.	Net npa	5.37%	6.16%	5.62%
7.	Advance	4,28,114cr	2,05,044cr	6,33,158cr

Source: computed from different sources.

Net profit before and after merger and acquisition of Canara bank:



Source: https://www.moneycontrol.com

International Journal for Multidisciplinary Research (IJFMR)
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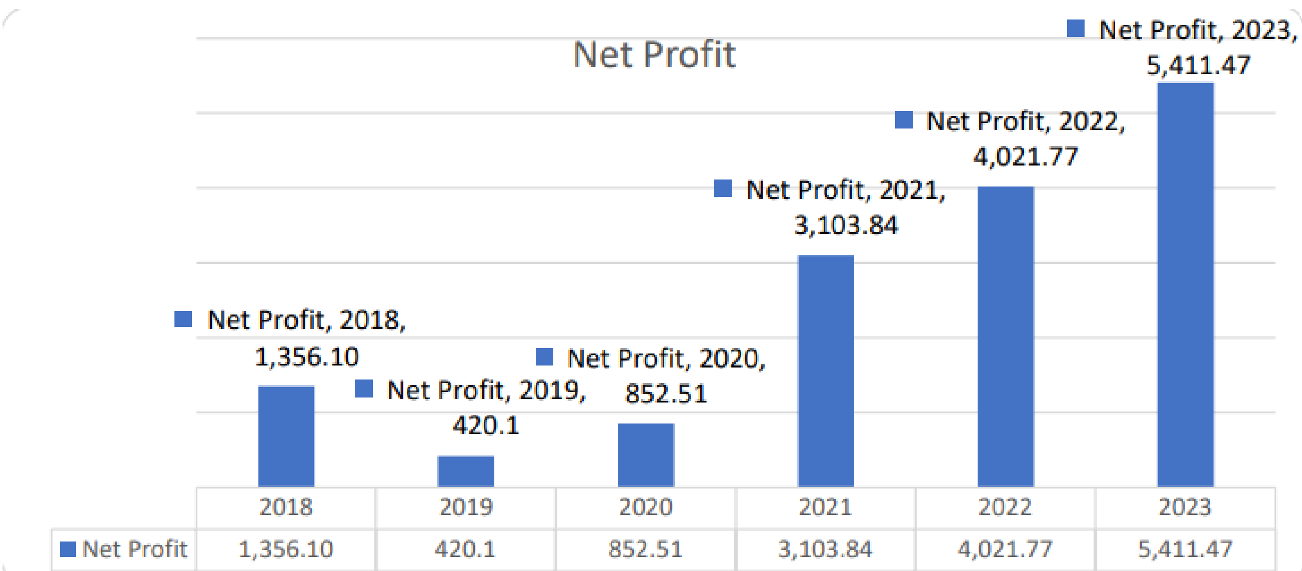
2. **Allahabad bank with Indian bank in 2020**: Indian bank the 115 years old bank established out of swadeshi movement during 1907. It was merger with Allahabad bank on 1st april,2020 making Indian bank the 7th largest bank public sector bank. Allahabad bank was formed by a group of European in 1865 at Allahabad, as a joint stock company. The Indian bank announced a share swap ratio of 115 equity shares of Rs 10 each for every 1,000 shares of Rs 10 each of Allahabad bank (Allahabad bank-Indian bank merger: this 155-year-old psb will cease to exist on February 15, n.d.).

sr.no.	Content	Indian bank	Allahabad bank	After m&a
1.	Branches	2,584	3,230	5,814
2.	Employee	19,604	23,210	42,814
3.	Total business	4,29,972cr	3,77,887cr	8,07,859cr
4.	Deposit	2,42,040cr	2,14,335cr	4,56,375cr
5.	Casa ratio	34071%	49.49%	41.65%
6.	Net npa	3.75%	5.21%	4.39%
7.	Advance	1,81,216cr	1,42,212cr	3,23,428cr

Source: computed from different sources.

Net profit before and after merger and acquisition of Indian Bank:



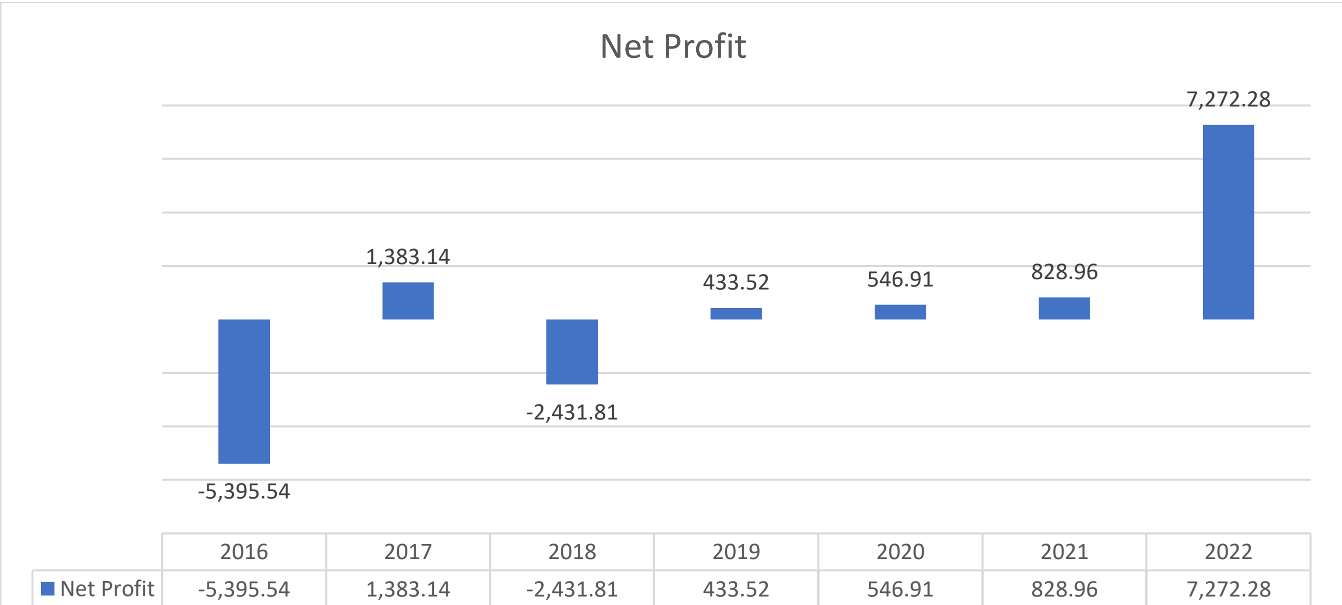
source: https://www.moneycontrol.com

3. **Dena bank and Vijaya bank with bank of Baroda in 2019:** on 1st apirl,2019 Dena bank and Vijaya bank were merged with bank of Baroda with an approval of 110 and 402 equity shares of the bank of Baroda, respectively, of face value ₹2 for every 1,000 shares they held. Vijaya bank was founded on 1931 by a group of farmers headed by a p Shetty in Mangalore whereas, Dena bank was by sons of devkarannanjee (choonilaldevkarannanjee, pranlaldevkarannanjee) on 26th may 1938 and bank of Baroda one of the Indian public sector banks founded by Sayajirao Gaekwad iii on 20 July, 1908 in Ahmedabad.

sr.no.	Content	Dena bank	Vijaya bank	Bank of Baroda	After m&a
1.	Branches	1,874	2,128	5,573	9,775
2.	Employee	13,440	15,875	56,360	85,675
3.	Total business	1,66,981cr	3,07,249cr	10,59,248cr	15,33,478cr
4.	Deposit	1,06,130cr	1,57,287cr	8,54,731cr	8,54,713cr
5.	Casa ratio	41.24%	22.32%	34.06%	34.06%
6.	Net npa	11.04%	4.10%	5.71%	5.71%
7.	Advance	69,920	1,22,350cr	448,330cr	6,40,600cr

Source: computed from different sources.

Net profit before and after merger and acquisition of Bank of Baroda:



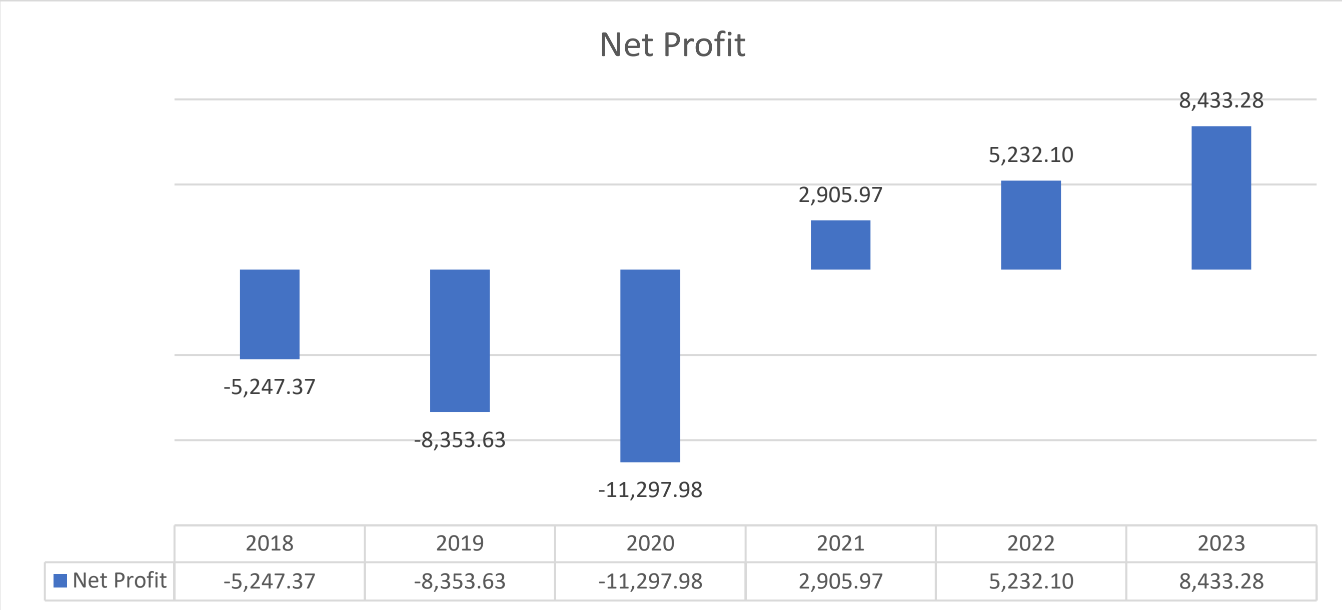
source: https://www.moneycontrol.com

4. **Andhra bank and corporation bank with union bank of India:** union bank commonly known as ubi was founded on 11th November, 1919 by Seth Sitaram Poddar. It is one of the largest and the oldest public sector unit. Under the union finance minister Nirmala Sitaraman in 2020 announced a merge of Andhra bank and corporation bank with ubi. Andhra bank a medium sized bank founded by bhogaraju pattabhi Sitaramayya (a political leader and the first governor of Madhya Pradesh) on 28th November, 1923. It operated in 25 states and three union territories ("Andhra bank," 2023). Corporation bank a public sector bank formed and guided under the principles of swadeshi movements. Corporation bank was registered on 12th march, 1906being of the oldest bank. The merge took place as with 325 and 330 equity shares of ubi for every 1000 equity shares held in the Andhra bank and corporation bank respectively, with a face value of rs.10 each fully paid up. With this merger union bank Indian become the fifth largest public sector bank under the banking sector of India

sr.no.	Content	Andhra bank	Corporation bank	Union bank of India	After m&a
1.	Branches	2,885	2,432	4,292	9,609
2.	Employee	20,346	18,935	37,262	76,543
3.	Total business	3,98,511cr	3,19,616cr	7,41,307cr	14,59,434cr
4.	Deposit	2,19,281cr	1,84,567cr	4,17,504cr	8,21,352cr
5.	Casa ratio	31.39%	31.10%	36.10%	33.82%
6.	Net npa	6.0%	6.0%	6.85%	6.30%
7.	Advance	1,58,822cr	1,21,251cr	2,98,780cr	5,78,853cr

Source: computed from different sources.

Net profit before and after merger and acquisition of Union Bank of India:



source: https://www.moneycontrol.com

Operating Profit Ratio

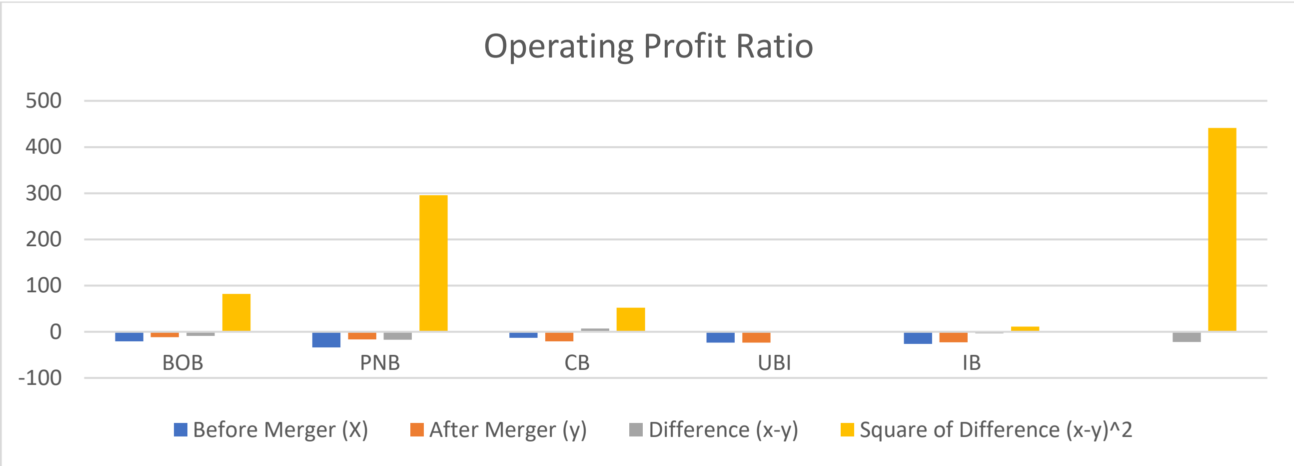
- Operating Profit Ratio = Operating Profit/Net Sales x 100
- Operating Profit Ratio is calculated by adding non-operating expenses and deducting non- operating income from net profit.
- It is typically measuring the operating performance and the efficiency of the company.
- The poor operational performance 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	-13.3	-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.

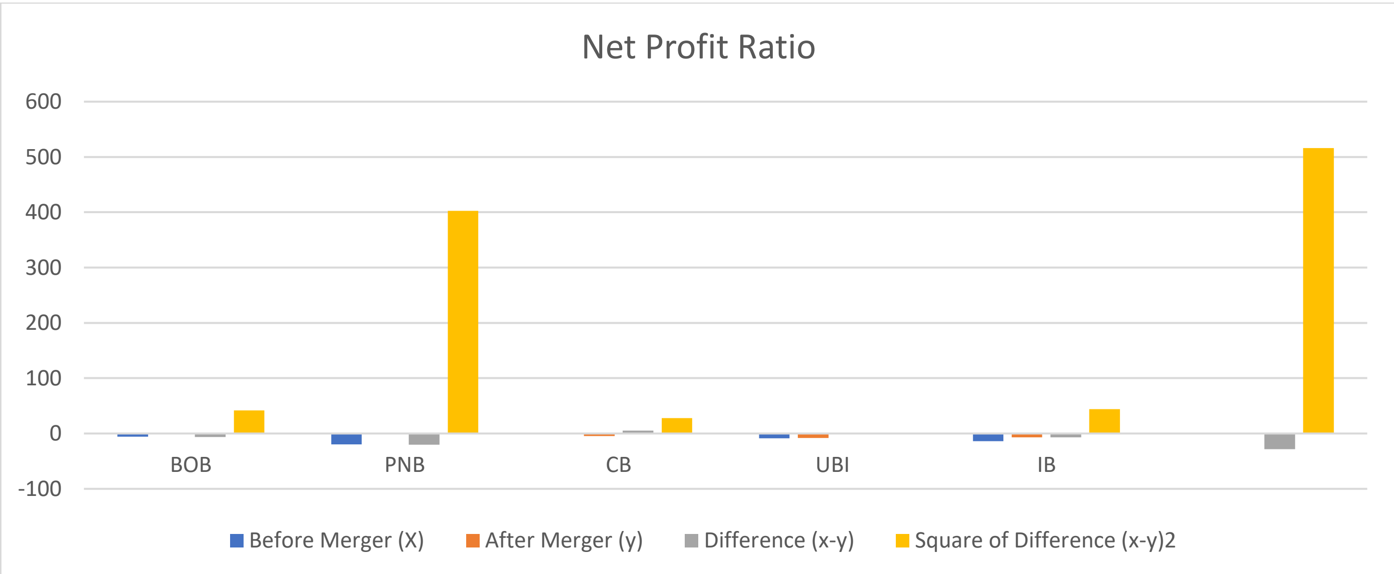
1) Net Profit Ratio

- 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 overall 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 an indicator of cash flows, and since the net profit incorporates a number of non-cash expenses such as an 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	-13.6	-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) after 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

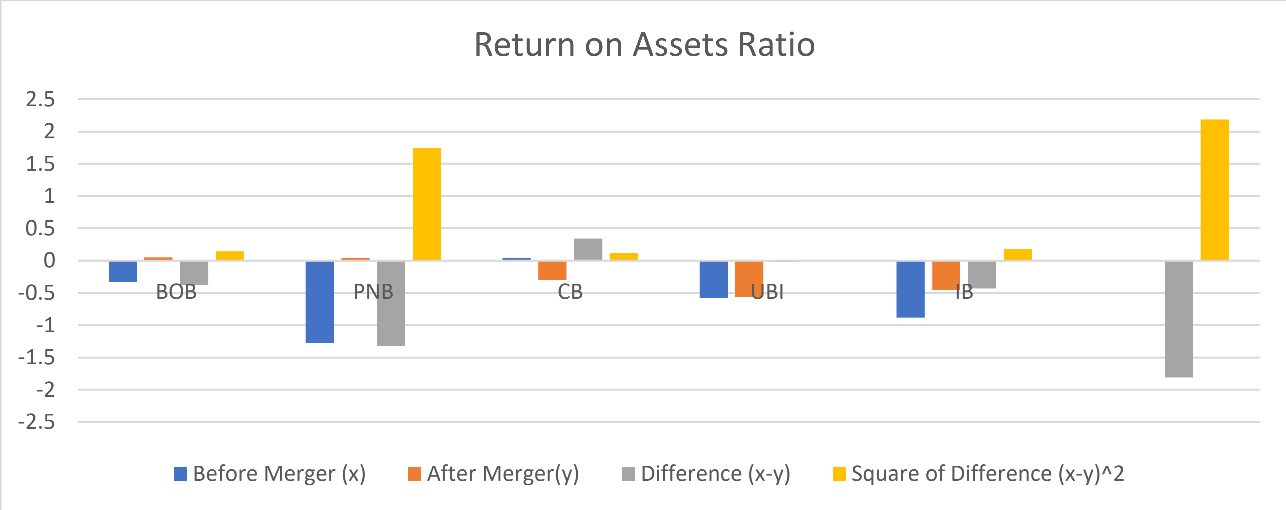
2) Return on asset

- 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 are saying 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 banks 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	-0.3	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 study 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.

3) Return on Equity

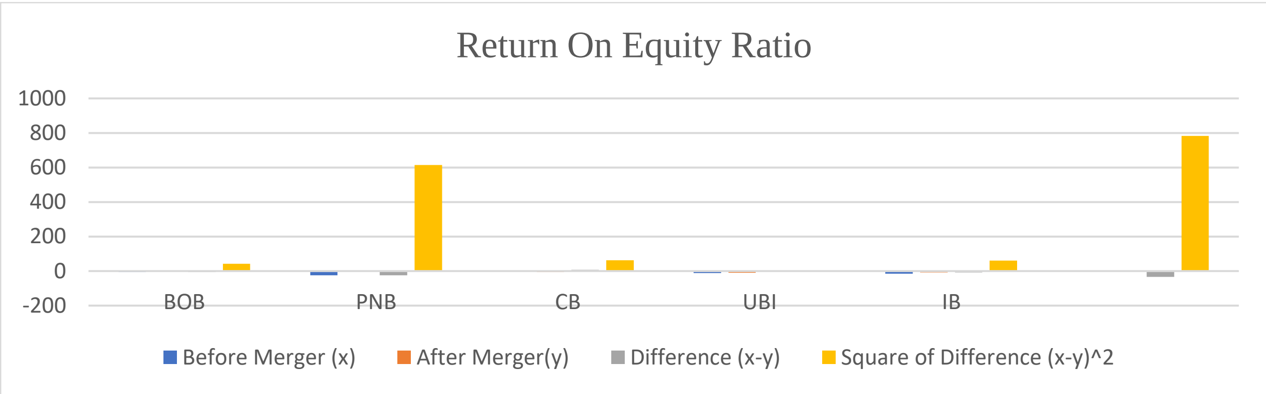
- Return on equity = net income / shareholder's equity
- Return on equity is the most important metric in all of the bank investing.
- It can be measures profitability by dividing a bank's net income by its shareholders equity, higher the number, greater the return.

- 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	-5.6	0.94	-6.54	42.7716
PNB	-24.2	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

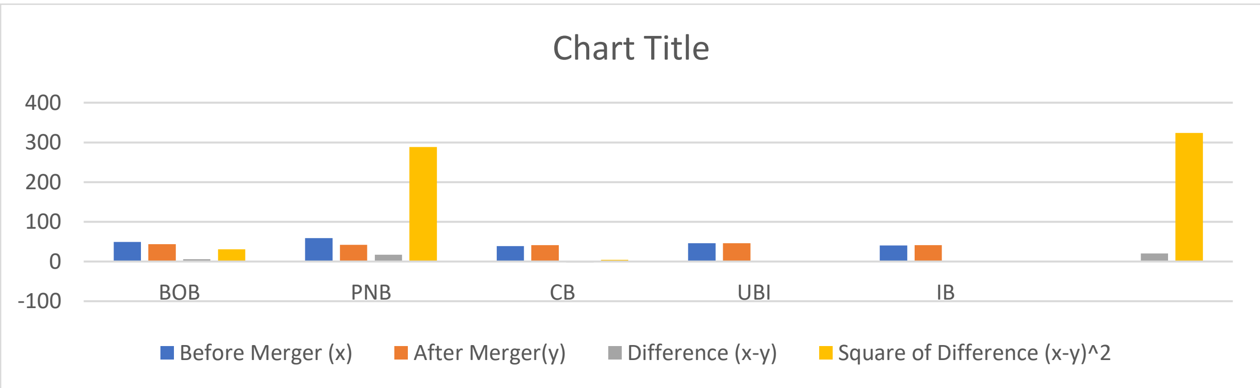
4) Cost to Income Ratio

- Cost to Income ratio is the measurement that is been used in the company in the order to evaluate its efficiency.
- Cost to income is usually used in the microfinance institution or bank in order to measure its operating cost that compared to the income it generates.
- In order to have a better analysis of a company's performance in terms of efficiency. and the microfinance institution or bank that may need to benchmark of the ratio to the historical period of the industry average.
- The lower cost to income ratio that is better for the company's performance. Likewise, the lower ratio is the more efficiency of the company that can achieve in the period.
- In order to reduce the cost to income of the company that needs to either increase its operating income or reduce its operating costs. Operating costs include both personnel expenses and administration expenses.
- Cost to Income Ratio = Operating costs / Operating Income

Table 5 Cost to Income (%) Ratio in selected Unit

Bank Name	Before Merger (x)	After Merger(y)	Difference (x-y)	Square of Difference $(x-y)^2$
BOB	48.92	43.41	5.51	30.3601
PNB	58.8	41.81	16.99	288.6601
CB	38.78	40.83	-2.05	4.2025
UBI	45.76	46.11	-0.35	0.1225
IB	40.72	41.12	-0.4	0.16
		Total	20.1	323.5052

Source: Moneycontrol.com



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.

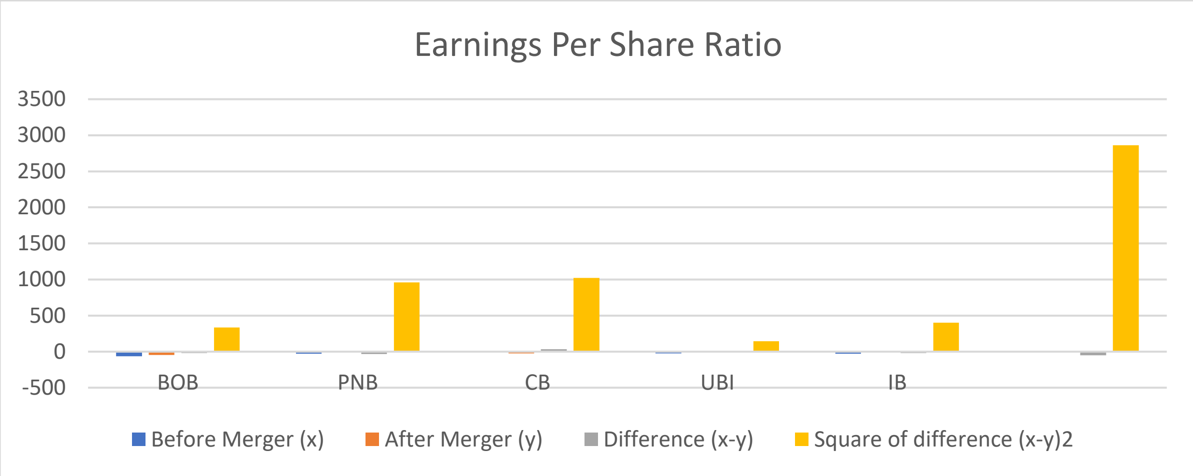
5) Earnings Per Share

- Earning per share = Net income of the company / weighted average number of shares outstanding
- Earning 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 per share 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 generating 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 Earnings 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	-46.7	-18.27	333.7929
PNB	-30	1	-31	961
CB	8	-24	32	1024
UBI	-25	-13	-12	144
IB	-29	-9	-20	400
		Total	-49.27	2862.7929

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) before 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.

6) Debt Equity Ratio

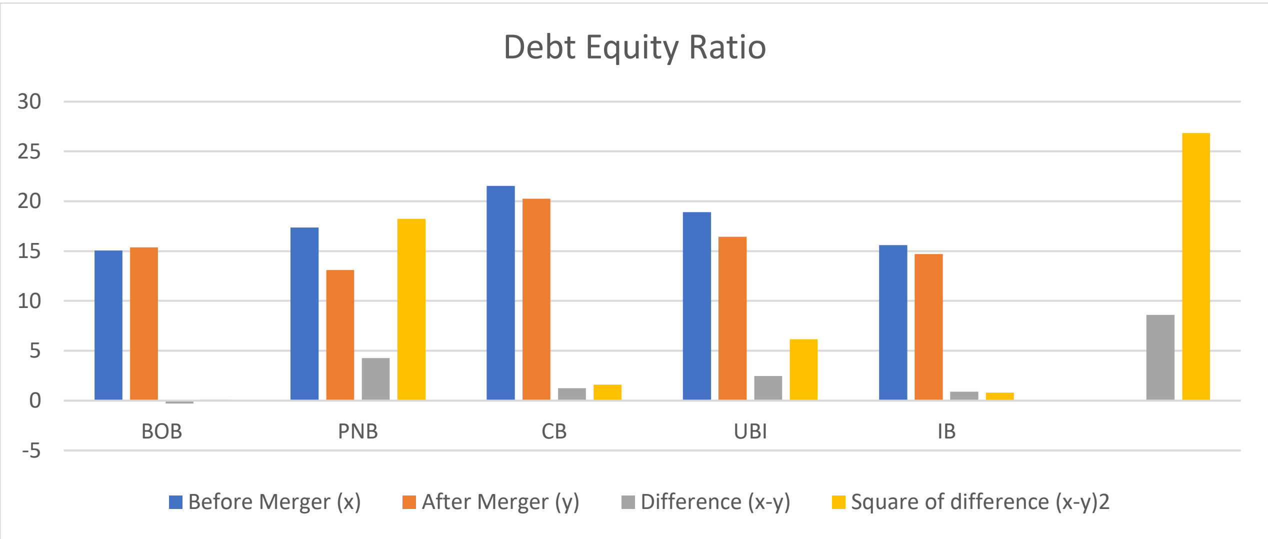
- Debt Equity Ratio = total liabilities / total shareholders' equity
- Debt equity ratio is measured the company's financial leverage calculated by dividing the total liabilities by a stockholders' equity. By this it indicates that what is proportion of equity and debt of the company is using to its finance assets.

- It is also known as the personal debt/equity ratio, and this ratio can be applied to the personal financial statement and also as well as corporate ones.
- "Debt" is been involves borrowing money to be repaid, plus interest. "Equity" is been involves raising money by its selling interests in the company.
- There is a high debt/equity ratio is generally means that a company is been aggressive in their financing their growth with debt. And this can be result in volatile earning as a result of an additional interest expenses.

Table 7 Debt Equity Ratio in selected Unit

Bank Name	Before Merger (x)	After Merger (y)	Difference (x-y)	Square of difference $(x-y)^2$
BOB	15.07	15.37	-0.3	0.09
PNB	17.36	13.09	4.27	18.2329
CB	21.53	20.27	1.26	1.5876
UBI	18.92	16.44	2.48	6.1504
IB	15.6	14.71	0.89	0.7921
		Total	8.6	26.853

Source: Moneycontrol.com



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 7.1Analysis 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

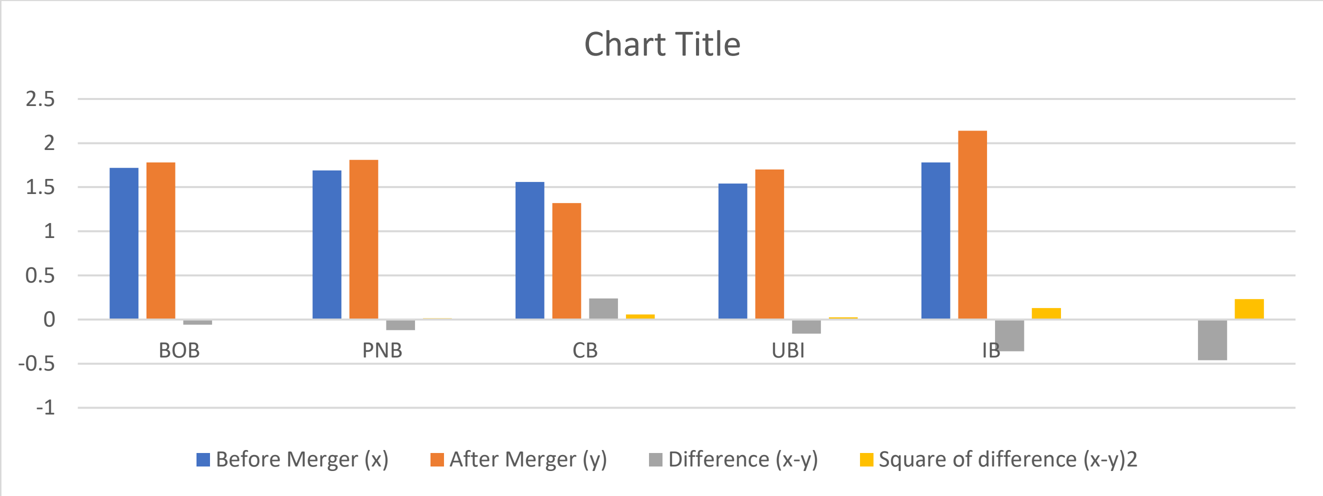
7) ROCE (%) Ratio

- Return on Capital Employed (ROCE) that is used in finance as a measure of returns that a company is realizing from its capital employed.
- Capital Employed is the represented as total assets minus current liabilities. In other word the value of the assets that contribute to a company's ability to generate revenue.
- ROCE is a ratio that indicates the efficiency and the profitability of a company's capital investments.
- ROCE = Earning / Capital Employed x100
- The numerator is earning before interest and tax. that the net revenue after all the operating expenses is deducted.
- The denominator (capital employed) that denotes the sources of the funds such as equity and short-term debt financing which is used for the day-to-day running of the company.
- It is useful measurement for comparing the relative profitability of the companies.

Table 8 ROCE (%) Ratio in selected Unit

Bank Name	Before Merger (x)	After Merger (y)	Difference (x-y)	Square of difference $(x-y)^2$
BOB	1.72	1.78	-0.06	0.0036
PNB	1.69	1.81	-0.12	0.0144
CB	1.56	1.32	0.24	0.0576
UBI	1.54	1.7	-0.16	0.0256
IB	1.78	2.14	-0.36	0.1296
		Total	-0.46	0.2308

Source: Moneycontrol.com



Analysis

- In this above chart of ROCE (%) in which Bank of Baroda has highest ratio (1.78) after the merger and it has lower ratio (1.72) before the merger.
- Punjab National Bank has highest ratio (1.81) after the merger and it has lower ratio (1.69) before the merger.
- Canara Bank has highest ratio (1.56) before the merger and it has lower ratio (1.32) after the merger.
- Union Bank of India has highest ratio (1.70) after the merger and it has lower ratio (1.54) before the merger.
- Indian Bank has highest ratio (2.14) after the merger and it has lower ratio (1.78) before 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				
	1.65	1.75	-0.092	0.104	0.293	0.217	4	-0.948	0.397	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= -0.948 and p-value = 0.397

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.

8) Assets Turnover Ratio

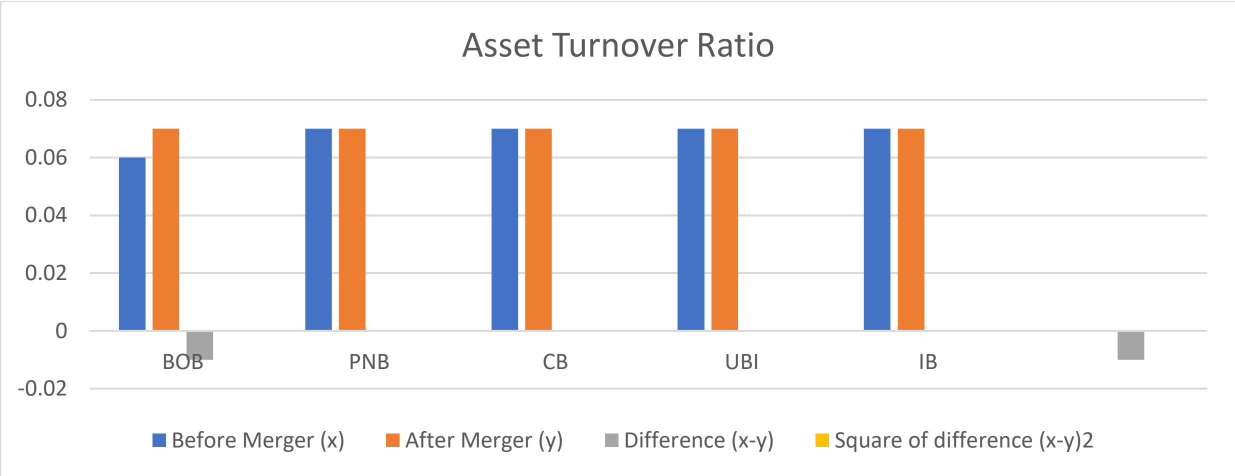
- Asset Turnover Ratio = Sales Revenue / Total Assets.
- Asset turnover ratio means it include the ratio of a firm's sales to its assets. Its indicates that how well a firm's assets are utilized in producing revenue.
- Assets turnover ratio takes into the account both the fixed as well as the current assets to measure the overall efficiency in generation of the revenue with the asset's utilization.

- Higher ratio are the indicative of the efficient management and the utilisation of the resources while low ratios are indicative of under-utilisation of the resources and presence of idle capacity.

Table 9 Asset Turnover Ratio in selected Unit

Bank Name	Before Merger (x)	After Merger (y)	Difference (x-y)	Square of difference $(x-y)^2$
BOB	0.06	0.07	-0.01	0.0001
PNB	0.07	0.07	0	0
CB	0.07	0.07	0	0
UBI	0.07	0.07	0	0
IB	0.07	0.07	0	0
		Total	-0.01	0.0001

Source: Moneycontrol.com



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 merger.

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.

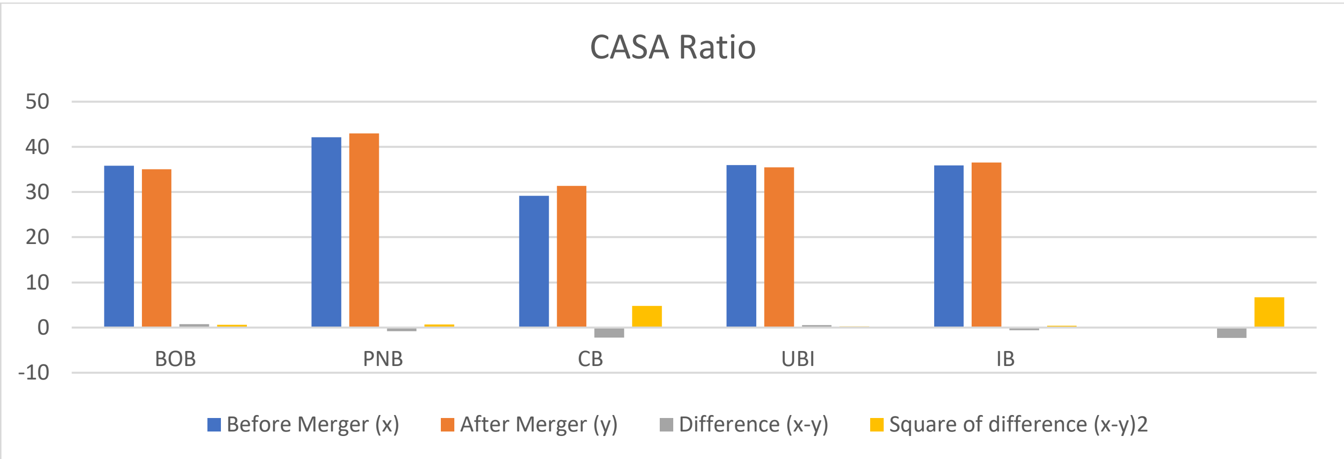
9) CASA ratio

- 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 a day and 100 times deposition at every year.
- This account is the bank pay interest for example 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	35.9	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.

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.
- In debt equity ratio before the merger the highest ratio is (21.53) in Canara Bank and the lower ratio is (15.07) in Bank of Baroda. After the merger the highest ratio is (20.27) in Canara Bank and the lower ratio is (13.09) in Punjab National Bank.
- In ROCE ratio before the merger the highest ratio is (1.78) in Indian Bank and the lower ratio is (1.54) in Union Bank of India. After the merger the highest ratio is (2.14) in Indian Bank and the lower ratio is (1.32) in Canara Bank.

- In asset turnover ratio before the merger the highest ratio is (0.07) in Punjab National Bank, Canara Bank, Union Bank of India, and Indian Bank and the lower ratio is (0.06) in Bank of Baroda. After the merger the ratio (0.07) are equal in all the merged banks.
- In CASA ratio before the merger the highest ratio is (42.16) in Punjab National Bank and the lower ratio is (29.18) in Canara Bank. After the merger the highest ratio is (42.97) in Punjab National Bank and the lower ratio is (31.37) in Canara Bank.

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.
- The administration of the banks and the other organizations that intended to undertake merger and acquisition that should seek to evaluate and that consider how these structural factors are likely to impact on the achievement of the intended merger and acquisition.
- Mergers has improved the competition edge of the industry in order to complete with the competitors in the global market but the merger shrink the industry because of the number of firms reduces.
- Mergers help the banks to be strengthen their financial base and the access tax benefits and the direct access to cash resources.
- In banking industry, it helps the weaker banks to be strengthen their position by merging with the bigger and stronger banks.
- The above study shows the impact of merger and acquisition on selected banks like Vijaya Bank, Dena Bank merge with Bank of Baroda, Oriental Bank of Commerce and United Bank of India merged into Punjab National Bank, Syndicate Bank merged with Canara Bank, Andhra Bank and Corporation Bank merged with Union Bank of India and Allahabad Bank merged with Indian Bank

REFERENCES

1. Sanjay Sharma & Sahil Sidana (2017)
2. Kotnal Jaya Shree (2016)
3. Prof. Ritesh Patel &Dr. Dharmesh Shah (2016)
4. Parveen Kumari (2014)
5. S. Devarajappa (2012) • Ramon, A.A. Onaolapo and Ajala, O. Avorinde (2012)
6. Azeem Ahmed Khan (2011)
7. Nisarg A Joshi and Jay M Desai
8. Bhan Akhil

Website

1. www.google.com
2. www.moneycontrol.com
3. www.bankofbaroda.com
4. www.punjabnationalbank.com
5. www.canarabank.com
6. www.unionbankofindia.com
7. www.indianbank.com