Merger and Acquisition in Banking Industry

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ABSTRACT

Mergers and acquisitions (M&A) represent significant strategic maneuvers in corporate finance and management, involving the combination, acquisition, or division of companies to achieve various objectives. This paper explores the fundamental concepts of M&A, focusing on mergers as agreements uniting two companies into one entity. Mergers are pursued to expand reach, enter new markets, diversify offerings, or gain market share, ultimately aimed at creating shareholder value. Two primary types of mergers are discussed: conglomerate mergers, which involve companies in unrelated business activities, and congeneric mergers, where companies operate in the same sector with overlapping factors. Understanding the nuances of these mergers is essential for stakeholders involved in corporate decision-making. Additionally, regulatory frameworks, such as the Companies Act, 1856, play a crucial role in governing M&A transactions, although regulatory landscapes may vary across jurisdictions. By delving into the intricacies of M&A, this paper provides insights into strategic management practices and the dynamic landscape of corporate restructuring.

DATA ANALYSIS

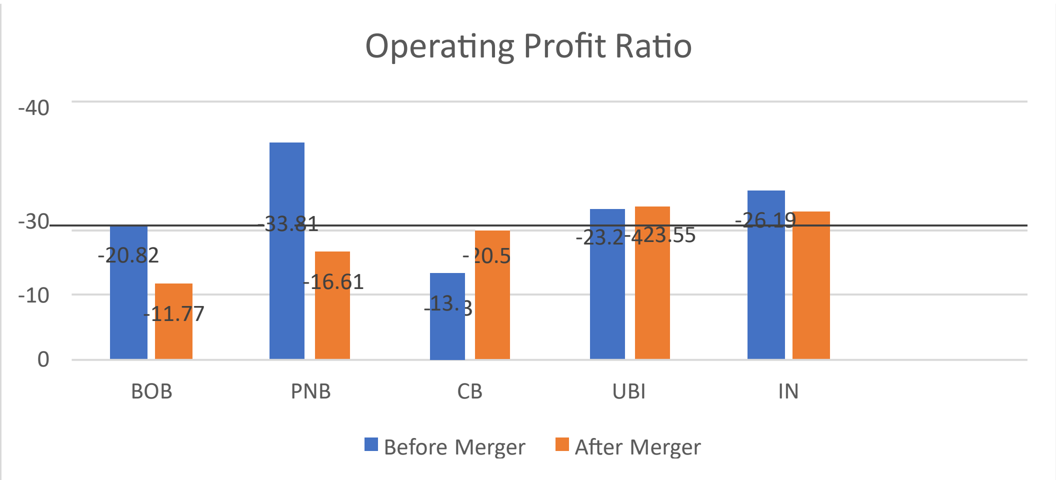
1. Operating Profit Ratio

- 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 measures the operating performance and the efficiency of thecompany.
- 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



➢ 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)

Their 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.

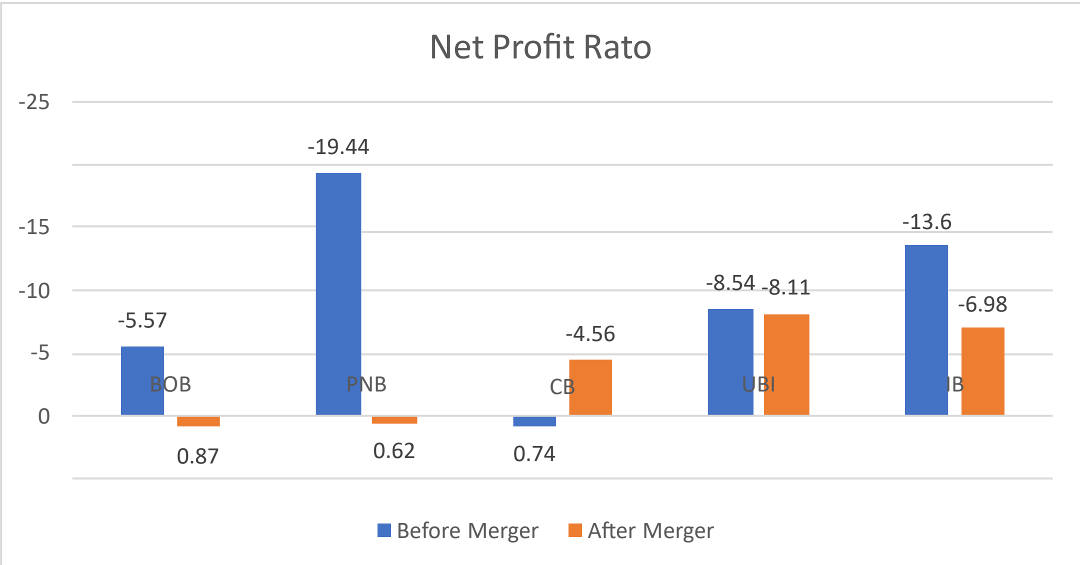
2. Net Profit Ratio

- Net Profit Ratio = Net Profit / Net Sales x 100
- This could be measured by modified for a use by non profit entity and it can changethe net assets were 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 thesales , 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 performanceover 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 anddepreciation.

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



➢ **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)**

Their 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.

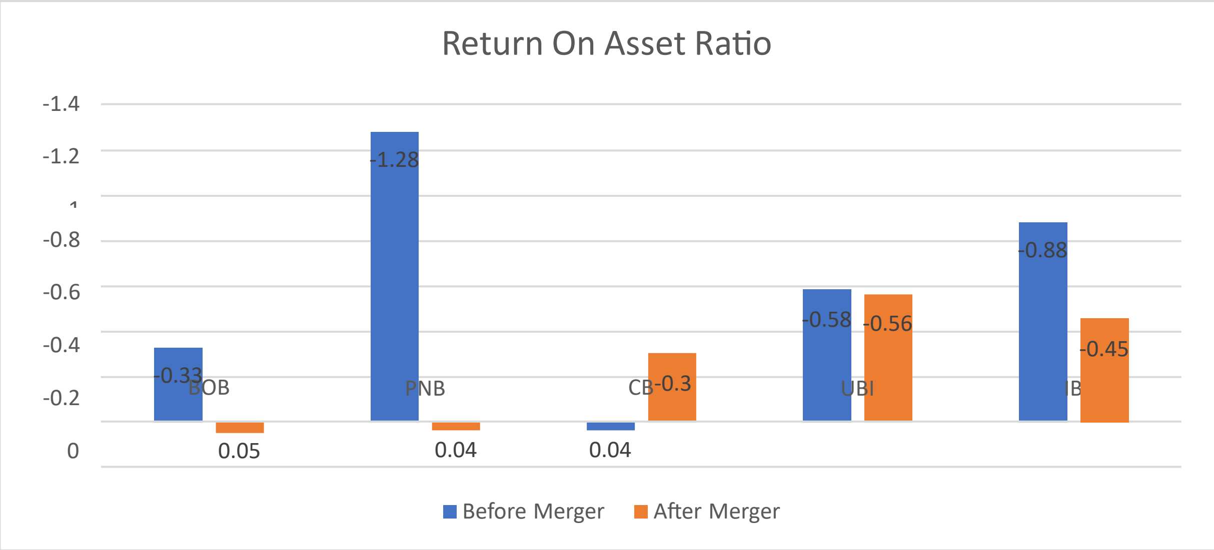
3. Return on asset

- 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 factors of 10 to 1, in orderto generate a 10% return on equity, that a banks must earn the equivalent of at least1% 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



➢ 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)**

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

- **Alternate Hypothesis: (H1)**

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

At 5% level of significance , here t= -1.308 and p value = 0.261

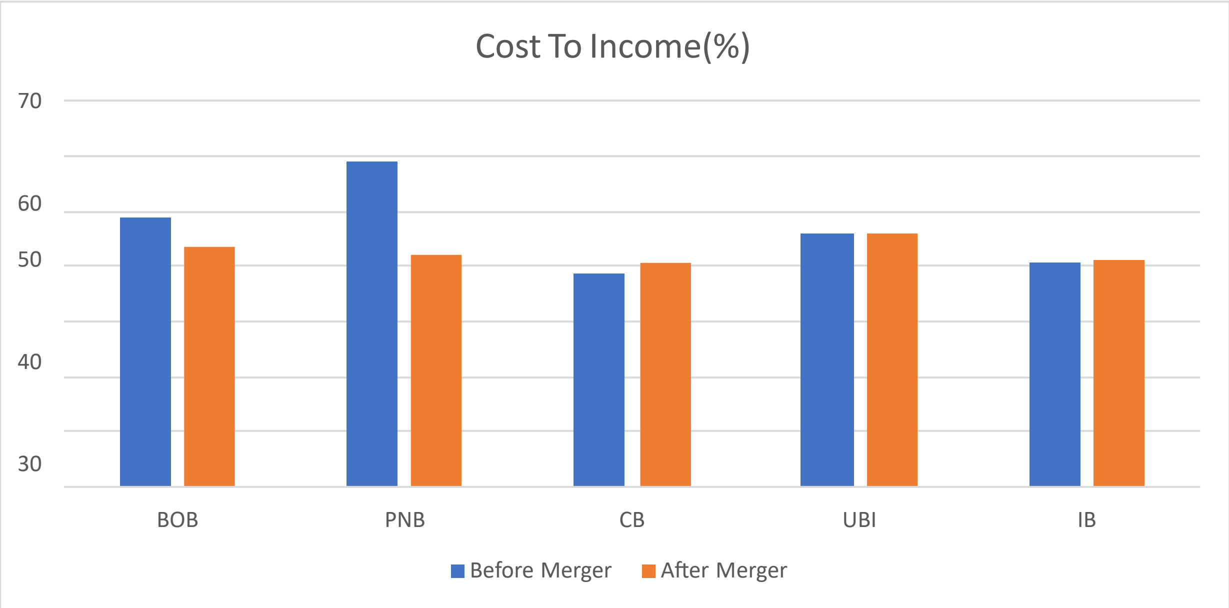
So, t<p
As t is less than p value so Null Hypothesis is (Ho) is accepted means there is no significant difference in mean score of selected units, before and after merger & acquisition.

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



- 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)

  Their 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 mergerand 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.

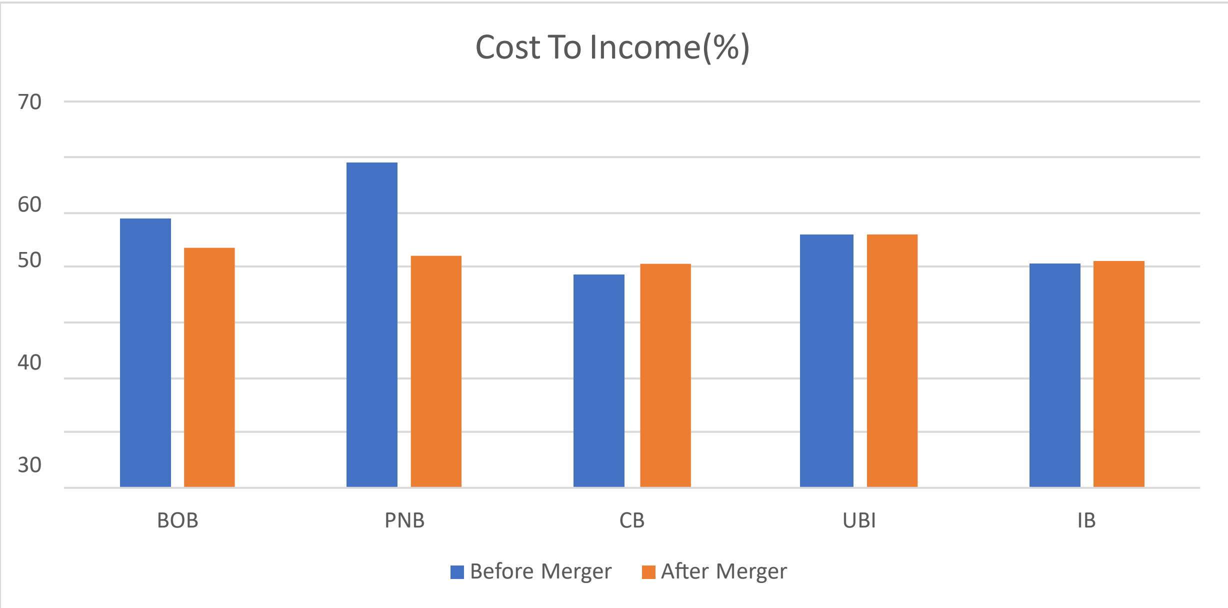
5. Cost to Income Ratio

- 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	58.80	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



- 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)**

  Their 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.

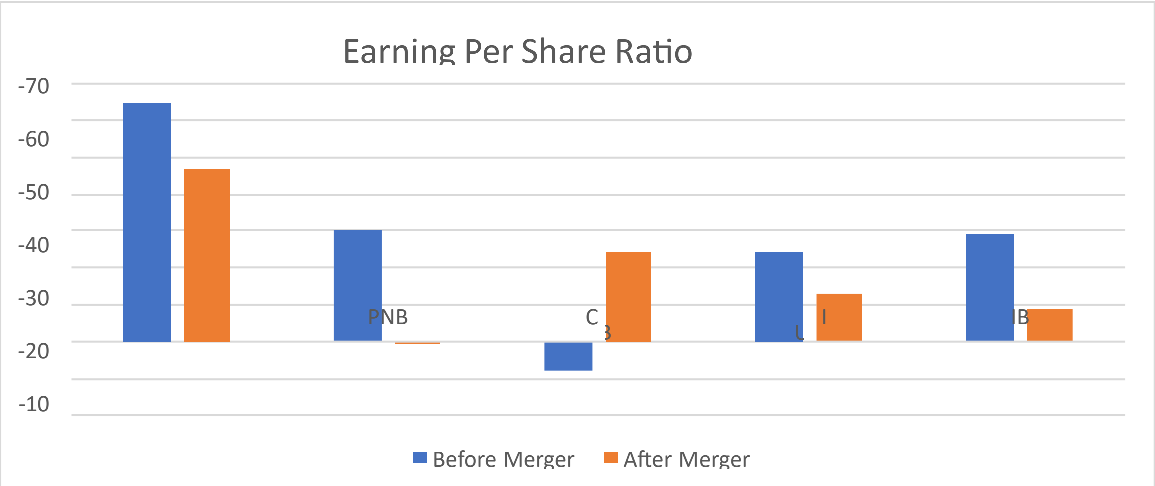
6. Earning Per Share

- 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 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



- 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)**

Their 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.

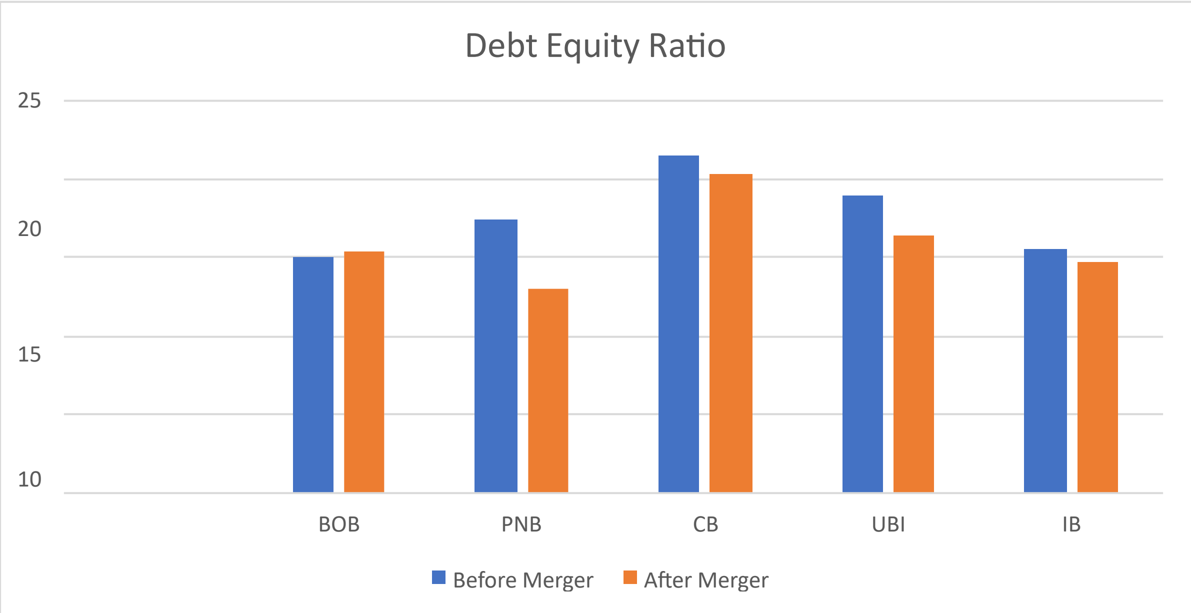
7. Debt Equity Ratio

- 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’s equity. By this it indicate that what is proportion of equity and debt of the company is using to its finance aassets.
- 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 as corporate ones.
- “Debt” is been involes borrowing money to be repaid, plus interest. “Equity” is been involues 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 the 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	18.23
CB	21.53	20.27	1.26	1.58
UBI	18.92	16.44	2.48	6.15
IB	15.60	14.71	0.89	0.792
		total	8.6	26.842



- **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.

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.

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 is leads to the financial gain and the increase in price of target banks . it is depends 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.