



# IMPACT OF MERGERS AND ACQUISITION ON THE STRESSED ASSETS IN BANKING SECTOR: A CASE STUDY OF PUNJAB NATIONAL BANK

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**Abstract:** *The rise in stressed assets is one of the causes for mergers and acquisition in banking sector which shows negative impact on the quality of assets, profitability and liquidity and overall financial position in banking sector. Therefore, present study analyzed the impact of merges on the stresses assets of PNB bank for the period of 2017-2024. The study measured the stressed assets in the parameters of GNPA to gross advances ratio, NNPA to Net advances ratio, provision coverage ratio and CRAR. The study examined the impact through t-test and revealed the significant impact of mergers on the three GNPA, NNPA and PCR, but, insignificant impact on CRAR of PNB.*

**Key Words:** *Stressed assets, GNPA, NNPA, mergers in banking sector.*

## 1. INTRODUCTION :

The mergers and acquisitions are part of corporate strategies which gives an option to small profit or loss making companies to stay and survive in the competitive markets. In general, both words used interchangeably, but, in practices both are non-similar and have different forms where in mergers two firms become one firm but in acquisition one organization purchase the outright in the another organization (Muhammad Faizan Malik et al (2014)<sup>1</sup>. The reasons behind the mergers and acquisitions are economics of scale, rise in revenue & market share, cross selling, synergy, taxes, diversification, expansion, competitiveness, addition of management capabilities, change in technology and industry, cost reduction, obtaining new customer base, etc (Jaykumar Ashokbhai Sathavara (2014)<sup>2</sup> & Eglė Duksaitė & Rima Tamošiūnienė (2009).

In banking sector, the quality of assets is measured in the terms of Non-performing assets which is also called as stressed assets. The non-performing assets refer to the loan or advance amount (principal & interest) remains overdue for 90 days since its maturity. The non-performing assets are classified as sub-standard, doubtful and loss assets. The stressed assets in banking arise due to default of borrower (individual or corporate) in repayment of loan or advance. The non-performing assets is major concern in banking sector which should be tackle effectively and shows negative effect on the profitability and liquidity of the bank. The stressed assets is major concern in public sector than private sector banks due to heavy political influence, delay in decision making in project completion, inefficient management, bribe etc.

The RBI being regulatory of banking sector issued many directions towards effective management of stressed assets which encompasses of both quantitative and qualitative in nature. Indian banking sector included, public sector banks, private sector banks, foreign banks, regional rural banks, co-operative banks, payment banks and small finance banks. Therefore, present study has focused on the measuring the assets quality of banking sector through tacking the non-performing assets in the selected public sector banks in India.



## 2. REVIEW OF LITERATURE:

Aditya Kumar (2023) examined the effect of mergers on the efficiency, stability and competitiveness of public sector banks for the period of 2009-21. The study applied panel data model. In the efficiency is measured by NPA, bank's stability measured by CRAR and ROI, competitiveness is measured by the three variables such as Credit-Deposits Ratio, Investment-Deposit Ratio, and Total Asset to Total Income Ratio. The study found improvement in efficiency of banks post-merger period evidence by decline in stressed assets.

Aditya Pratap Singh (2024), study analyzed the impact of mergers and acquisition on the profitability of banking sector in India for the period of two years pre and two year post mergers and acquisition. The selected banks are BOB, PNB and Canara bank. The profitability is measure in terms of operating profit, net profit margin, NIM, ROE, ROA, ROCE and EPS. The study found significant impact of mergers and acquisition on the parameters of all selected profitability parameters during the study period. The study examined the hypothesis by using t-test.

Sachin B. Bhurase (2023), analyzed the trend in NPA of ICICI bank during pre and post merges (2005-2010 and 2010 to 2015). The selected parameters are GNPA and NNPA ratios. The study found negative correlation between non-performing assets and profitability of ICICI bank. The study explored the reasons for NPA rise as both internal and external. The internal factors included defective lending process, inappropriate technology, improper SWOT analysis, poor credit appraisal system and re-lending process. The external factors comprise of wilful default, industrial sickness, lack of demand, exchange rate fluctuations and natural calamities.

Sumitha, S., & Valarmathi, B. (2024) India is one of the nations whose economy is expanding globally at a rapid pace. However, the high costs associated with branch development make it challenging for commercial banks to expand their operational areas. Additionally, financial analysts often assess the performance of public banks based on the price of their shares. Currently, public banks are fierce competitors to commercial banks in terms of profitability, low operating expenses, growing non-performing assets (NPAs), and high share values.

Singhal, J. (2022) study revealed that In the modern economy, the importance of banks cannot be overstated. The banking sector plays a crucial role in the economic development of a country. Banks, as financial institutions, perform various functions such as accepting deposits and lending loans to agricultural and industrial sectors. To understand the long-term implications of mergers, this research examines the mergers and acquisitions (M&As) that have occurred in Indian banking.

3. **RESEARCH METHODOOLOGY:** Assessment of assets quality of banks is crucial concept in understanding its effect on profitability, liquidity and solvency in the long run. The banks suffer with huge stressed assets led to be merged with the large banks for its survival. This is common and regular phenomenon in banking sector which gives advantage to the large banks also. Therefore, present study examined the impact of mergers on the stressed assets of large banks in which weak bank merged, particularly PNB banks in which oriented bank of India and united bank of India are merged.

### RESEARCH OBJECTIES:

- To assess the impact of merges on GNPA to Gross advances of PNB
- To examine the impact of merges on NNPA to Net advances of PNB
- To evaluate the impact of merges on Provision Coverage Ratio of PNB
- To analyze the impact of merges on Capital to Risk weighted Assets Ratio of PNB

**Hypothesis:** The study formulated and examined the following alternative hypotheses where null hypothesis is implied

*H<sub>1</sub>: There is significant impact of mergers on the GNPA to gross advances of PNB*

*H<sub>2</sub>: There is significant impact of mergers on the NNPA to net advances of PNB*

*H<sub>3</sub>: There is significant impact of mergers on the Provision Coverage Ratio of PNB*

*H<sub>4</sub>: There is significant impact of mergers on the Capital to Risk weighted Assets Ratio of PNB*

**RESEARCH METHODOLOGY:** The present study is empirical in nature and purely based on the secondary data. The data is collected from the PNB annual reports published in its website. In the study stressed assets is measured in four parameters such as GNPA to Gross Advances, NNPA to Net advances, PCR and CRAR. The study period comprises of



five years from 2016-17 to 2023-24. The study applied the financial ratios and Independent t-test assuming equal variance.

#### 4. DATA ANALYSIS:

**4.1 Gross NPA to Gross Advances Ratio:** The ratio indicates the proportion of gross non-performing assets in total advances of the bank in a specific period of time. This is a broad indicator used to measure the asset quality of the banks. The lower percentage indicates high quality of assets and higher percentage indicates lower asset quality. The rise in GNPA indicates the rise in credit risk, potential loan losses and pressure on profitability (provisions), liquidity and capital adequacy of the banks.

<b>TABLE 01: GNPA TO GROSS ADVANCES OF PNB</b>			
<b>PRE-MERGER</b>		<b>POST MERGER</b>	
<b>YEAR</b>	<b>RATIO</b>	<b>YEAR</b>	<b>RATIO</b>
2019-20	14.21	2023-24	5.73
2018-19	15.50	2022-23	8.74
2017-18	18.38	2021-22	11.78
2016-17	12.53	2020-21	14.12
<b>AVG</b>	<b>15.16</b>	<b>AVG</b>	<b>10.09</b>

SOURCE: PNB ANNUAL REPORTS 2017-2024

**4.2 Net NPA to Net Advances Ratio:** NNPA to Net advances refers to the proportion of NNPA in total advances during a specific period of time. NNPA is out of GNPA after adjustment of provisions. The periodical drop in NNPA indicates rise in assets quality and shows positive effect on asset quality, profitability, liquidity and solvency.

<b>TABLE 02: NNPA To NET ADVANCES OF PNB</b>			
<b>PRE--MERGER</b>		<b>POST MERGER</b>	
<b>YEAR</b>	<b>RATIO</b>	<b>YEAR</b>	<b>RATIO</b>
2019-20	5.78	2023-24	0.73
2018-19	6.56	2022-23	2.72
2017-18	11.24	2021-22	4.80
2016-17	7.81	2020-21	5.73
<b>AVG</b>	<b>7.85</b>	<b>AVG</b>	<b>3.50</b>

SOURCE: PNB ANNUAL REPORTS 2017-2024

**4.3 Provision Coverage Ratio:** The Provision Coverage Ratio (PCR) is a financial ratio that measures a bank's ability to cover potential losses from bad loans, also known as Non-Performing Assets (NPAs). It's calculated by dividing the total provisions by the gross non-performing assets: A higher PCR is generally better for banks because it indicates that they have enough capital to withstand asset quality pressures. The Reserve Bank of India (RBI) has set a benchmark PCR of 70 percentage, meaning that banks should set aside 70 percentage of their loans as a provisional buffer. A higher PCR indicates that the bank has enough capital to withstand asset quality pressures. A lower PCR indicates that the bank is more vulnerable to defaults.

<b>TABLE 03: PROVISION COVERAGE RATIO OF PNB</b>			
<b>PRE-MERGER</b>		<b>POST MERGER</b>	
<b>YEAR</b>	<b>RATIO</b>	<b>YEAR</b>	<b>RATIO</b>
2019-20	77.79	2023-24	95.39



2018-19	74.50	2022-23	86.90
2017-18	58.42	2021-22	81.60
2016-17	58.57	2020-21	80.10
<b>AVG</b>	<b>67.32</b>	<b>AVG</b>	<b>86.00</b>
SOURCE: PNB ANNUAL REPORTS2017-2024			

**4.4 CAPITAL TO RISK WEIGHTED ASSETS RATIO:** The capital-to-risk weighted assets ratio (CRAR), also known as the capital adequacy ratio (CAR), is a financial ratio that measures a bank's financial stability and ability to meet its obligations. It's calculated by dividing a bank's eligible capital by its risk-weighted assets (RWA). **Protect depositors.** Regulators monitor the CRAR to ensure banks have enough capital to absorb losses and comply with capital requirements. As per the RBI minimum CRAR ratio is not less than ten percentage.

<b>TABLE 04: CAPITAL TO RISK WEIGHTED ASSETS RATIO OF PNB</b>			
<b>PRE-MERGER</b>		<b>POST MERGER</b>	
<b>YEAR</b>	<b>RATIO</b>	<b>YEAR</b>	<b>RATIO</b>
2019-20	14.14	2023-24	15.97
2018-19	15.50	2022-23	15.50
2017-18	18.38	2021-22	14.50
2016-17	12.53	2020-21	14.32
<b>AVG</b>	<b>15.14</b>	<b>AVG</b>	<b>15.07</b>
SOURCE: PNB ANNUAL REPORTS2017-2024			

TABLE 4.5 RESULT OF T-TEST ASSUMING EQUAL VARIANCE

	Pooled Variance	DF	t-stat	P-value (two- tail)	Outcome(impact)
GNPA to Gross Advances Ratio	9.705396	6	2.298124	0.041258	Significant
NNPA to Net Advances	5.397796	6	2.649388	0.038060	Significant
PCR	76.68298	6	-3.01637	0.023507	Significant
CRAR	3.386925	6	0.049949	0.961784	Insignificant

**5. DISCUSSION ON RESULT:**

**GNPA TO GROSS ADVANCES RATIO:** The Study found that, the mean value of GNPA to Gross advances of PNB bank during pre-merger was 15.16 percentage which drop to an average of 10.09 percentage during post-merger period. The drop in the ratio is very positive sign for banks assets quality, profitability and liquidity. The t-test result evidence that p-value is 0.041 which is lower than the standard of .05, mergers and acquisition have shown significant impact on the gross non-performing assets to gross advances of the Punjab national bank.

**NNPA TO NET ADVANCES RATIO:** The Study found that, the mean value of NNPA to net advances of PNB bank during pre-merger was 7.85 percentage which was substantially drop to an average of 3.50 percentage during post-merger period. The drop in the ratio is very positive sign for banks assets quality, profitability and liquidity. The t-test result evidence that p-value is 0.038 which is lower than the standard of .05, mergers and acquisition has shown significant impact on the net non-performing assets to net advances of the Punjab national bank



**PROVISION COVERAGE RATIO:** The Study found that, the mean value of PCR of PNB bank during pre-merger was 67.32 percentage which was substantially rose to an average of 86 percentage during post-merger period. The rise in the ratio is very positive sign for banks assets quality, profitability and liquidity. The t-test result evidence that p-value is 0.0235 which is lower than the standard of .05, mergers and acquisition have shown significant impact on the PCR of the Punjab national bank.

**CAPITAL TO RISK WEIGHTED ASSETS RATIO:** The Study found that, the mean value of CRAR of PNB bank during pre-merger was 15.14 percentage which also most remains stable at an average of 15.07 percentage during post-merger period. The CRAR of bank above 10 percentage of RBI norms indicates very positive sign for loss absorption capability of banks. The t-test result evidence that p-value is 0.9617 which is higher than the standard of .05, mergers and acquisition has shown insignificant impact on the CRAR of the Punjab national bank.

## 6. CONCLUSION:

The rise in stressed assets is one of the causes for mergers and acquisition in banking sector which shows negative impact on the quality of assets, profitability and liquidity and overall financial position in banking sector. Therefore, present study analyzed the impact of merges on the stresses assets of PNB bank for the period of 2017-2024. The study measured the stressed assets in the parameters of GNPA to gross advances ratio, NNPA to Net advances ratio, provision coverage ratio and CRAR. The study examined the impact through t-test and revealed the significant impact of mergers on the three GNPA, NNPA and PCR, but, insignificant impact on CRAR of PNB.

## REFERENCES :

1. Malik, Faizan & Anuar, Melati & Khan, Shehzad & Khan, Faisal. (2014). Mergers and Acquisitions: A Conceptual Review. *International Journal of Accounting and Financial Reporting*. 1. 520. 10.5296/ijafr.v4i2.6623.
2. Jaykumar Ashokbhai Sathavara (2014), Reasons and Motives for Amalgamation, Merger and Acquisitions, *International Journal for Research in Management and Pharmacy (IJRMP)* ISSN: 2320-0901 Vol. 3, Issue 5,
3. Eglė Duksaitė, Rima Tamošiūnienė (2009) Why Companies Decide To Participate In Mergers And Acquisition Transactions, *Mokslas – Lietuvos Ateitis 2009*, 1 tomas, Nr. 3 Science – Future Of Lithuania, ISSN 2029-2341(print)/ISSN 2029-2252 Business in XXI Century Vol. 1, No 3
4. Aditya Kumar (2023), Impact of Merger on Efficiency, Stability, and Competitiveness of Public Sector Banks, *Competition Commission of India Journal on Competition Law and Policy*, Vol. 4, No. 2, Doi: 10.54425/ccijoclp.v4.136
5. Aditya Pratap Singh (2024) Impact of Merger and Acquisition in Banking Sector: An Empirical Study, *Journal of Informatics Education and Research* ISSN: 1526-4726 Vol 4 Issue 2, p.p. 3416-3426
6. Bhurase, Sachin. (2023). Study on Impact of Mergers & Acquisitions on Non- Performing Assets (NPA) of Banks: with reference to selected cases of ICICI Bank Limited. 4. 50-56.
7. Sachin B. Bhurase (2023), Study on Impact of Mergers & Acquisitions on Non Performing Assets (NPA) of Banks: with reference to selected cases of ICICI Bank Limited, *International Journal of Advance and Applied Research*, ISSN – 2347-7075, Vol.4 No.19,P.P 50-56