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IMPACT OF NON PERFORMING ASSETS (NPAS) IN THE PERFORMANCE OF PUBLIC SECTOR BANKS

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ABSTRACT
India's banking sector holds significant importance in the nation's economy, serving as a fundamental driving force. Numerous risks pose challenges to Indian banks, encompassing substantial amounts of non-performing assets, operational inefficiencies, and limited expertise in credit approval processes. Modern banks are increasingly diversifying their business streams beyond traditional banking, aiming to mitigate risk and optimize resource allocation. Within this context, non-performing assets (NPAs) refer to assets that do not generate income for the bank. Loans issued to customers constitute valuable assets for banks, but when customers fail to pay either the interest or the principal, these loans transform into bad loans or non-performing assets. The objective of this study is to examine the influence of NPAs on profitability and performance. The findings indicate a notable adverse impact of NPAs on both total loans and operating expenses.

KEYWORDS: Non-Performing Asset, Risk portfolio, Profitability, Performance

1. INTRODUCTION

The Indian banking industry serves as the foundation of the country's economy, comprising 12 public sector banks (following recent mergers) and 21 private banks. Its significance cannot be overstated. The Reserve Bank of India acts as the regulatory authority for the banking sector. Presently, banks are prioritizing risk management as a key focus area. Indian banks have successfully adhered to the international banking supervision standards outlined by "Basel II," and a majority have also met the capital requirements of Basel III. These banks play a crucial role in the Indian economy. However, they face multiple challenges such as a substantial accumulation of non-performing assets, operational inefficiencies, and limited experience in credit approval processes. The assets of a bank encompass the loans sanctioned and disbursed to borrowers. If the principal and interest payments are not received continuously for a period of three months or 90 days, the loans are classified as non-performing assets. This term is also used to describe assets that do not generate any income for the bank.

2. CAUSES FOR THE INCREASE IN NPA IN INDIA

The occurrence of non-performing assets (NPAs) has a negative impact on the profit margins of banks, creating stress within the banking sector and limiting the availability of funds for other projects. In the case of public sector banks, NPAs lead to poor returns for the government, subsequently reducing funding for social and infrastructural development initiatives in the country. The pressure to generate business often results in the fabrication of documents with inflated asset values. Consequently, loans are sanctioned based on manipulated data, leading to higher loan amounts. This practice allows even ineligible individuals to obtain substantial loans, which eventually contribute to the rise in NPAs. The negligence of bankers, whether intentional or due to a lack of credit knowledge, can also contribute to accounts turning into NPAs.

3. REQUIREMENT FOR THE STUDY

Non-performing assets, commonly referred to as NPAs, have emerged as a persistent threat to the stability of India's banking system. This issue is not unique to India but poses a significant challenge for banks worldwide. The consequences of escalating NPA levels extend beyond damaging the credit ratings and credibility of banks. These NPAs erode the profit margins that banks rely on to sustain their operations. Managing NPAs has become an increasingly arduous task for banks, as it directly impacts profitability and overall return on equity (ROE). Nonetheless, certain banks are exploring alternative avenues to generate revenue in an attempt to maintain profitability despite the presence of NPAs. Prioritizing the containment and recovery of delinquent loans has become essential for sustaining profitability. This study aims to examine the impact of NPAs on profitability and assess their effects on banking performance. Due to the dynamic nature of the topic and the need for regular evaluation of its impact, this study will identify the implications and consequences of NPAs on banking performance.

4. LITERATURE REVIEW

Nataraja (2018) conducted research on bank performance, examining it from three perspectives: internal performance, market performance, and equity return to shareholders. Internal performance was assessed using the profitability or productivity ratio known as return on assets (ROA), which serves as a useful tool for banks to measure progress against internal goals. Siraj (2020) found that performance metrics can influence the relationship between advances and NPAs, indicating the need for policy changes in evaluating credit risk management efficiency. The study highlighted the significant impact of bank performance indicators on the nonperforming assets of public sector banks, which are crucial in the Indian banking system. Manisha (2018) concluded that non-performing assets pose major challenges for ICICI Bank and State Bank of India, leading to liquidity imbalances and bad debts, ultimately affecting profitability. Dudhe (2018) emphasized the crisis faced by the Indian banking industry due to NPAs and suggested a focus on NPA management, particularly for public sector banks, to enhance profitability. Goyal et al. (2016) discussed the reforms in the Indian banking sector and the increased competition following the opening of the financial sector, with private banks playing a significant role. Bikker (2010) highlighted the importance of assessing performance beyond profits, considering the contribution of financial institutions to the overall welfare of consumers and businesses. EFSI (2018) defined key performance indicators (KPIs) capturing various aspects of the European Fund for Strategic Investments

(EFSI), including value-added operations, risk profile, macroeconomic impact, total investment, and mobilization of private finance. These KPIs provide an aggregated picture of the performance of the EIB Group regarding EFSI.

5. OBJECTIVES

1. To study the impact of NPA on banking performance indicators.
2. To suggest various strategies based on research findings.

6. RESEARCH METHODOLOGY

The study is based on empirical research. The sample for the study consists of the top two Indian banks in terms of market capitalization as of October 1, 2019. The data utilized in the study covers the period from FY 2017-18 to FY 2021-22.

7. DATA COLLECTION

The study utilized secondary data obtained from the financial reports of the top two banks in India, as determined by market capitalization. Additionally, data was collected from the official websites of the banks. The study focused on five specific cities for data collection purposes.

8. PERFORMANCE INDICATORS IN THE BANKING INDUSTRY

1. NPA (non-performing assets)
2. Operating expense as a percentage of assets
3. Total loan outstanding
4. Total deposits

9. TOOL USED FOR ANALYSIS

The study employs regression analysis as a statistical tool to analyze the collected data. Regression models are utilized for prediction purposes, enabling the estimation of trends in the dependent variable based on the observed patterns in the independent variables. Regression analysis is considered suitable for this study as it takes into account both internal and external factors in predicting trends. Simple linear regression (SLR) is not suitable in this case since it only considers one independent variable to predict the dependent variable, whereas NPA is influenced by multiple factors. Therefore, the use of regression models is essential for obtaining satisfactory results in predicting NPA based on various factors.

10. RESULT AND DISCUSSION

HO1: THERE IS NO SIGNIFICANT IMPACT OF NPA ON THE OPERATING EXPENSES OF PUNJAB NATIONAL BANK (PNB). Table 1 in Annexure shows a high correlation between NPA and operating expenses, indicated by an R-squared value of 0.97. This suggests that regression analysis is suitable for examining the impact of NPA on operating expenses. The null hypothesis is rejected since the p-value is less than 0.05, indicating a significant impact of NPA on the operating expenses of PNB Bank. It is evident that NPA reduces profitability, forcing banks to reduce their operating expenditures. Due to lower profitability, banks may have to cut expenses that are crucial for development, subsequently affecting future profitability and growth. These circumstances can lead to salary reductions and employee layoffs.

HO2: THERE IS NO SIGNIFICANT IMPACT OF NPA ON TOTAL LOAN DISBURSEMENT OF PUNJAB NATIONAL BANK (PNB). Table-1 in Annexure indicates a high correlation between NPA and total loan, as evidenced by an R-squared value of 0.96. This suggests that regression analysis is appropriate for assessing the impact of NPA on total loan disbursement. The null hypothesis is rejected based on the p-value being less than 0.05, indicating a significant impact of NPA on the total loan disbursement of PNB Bank. It is evident that NPA negatively affects profitability, leaving banks with fewer funds available for disbursing loans. The high level of NPA impairs the liquidity of banks, resulting in reduced cash flow. This situation can lead to a vicious cycle and, in the long run, may even result in insolvency for the banks.

HO3: THERE IS NO SIGNIFICANT IMPACT OF NPA ON THE TOTAL DEPOSIT OF PUNJAB NATIONAL BANK (PNB). According to the results presented in Table 1 in Annexure, there is a high correlation between NPA and total deposits, as indicated by an R-squared value of 0.96. This suggests that regression analysis can be employed to assess the impact of NPA on total deposits in HDFC Bank. The null hypothesis is rejected based on a p-value less than 0.05, indicating a significant impact of NPA on total deposits. It is evident that a higher NPA level raises concerns about the creditworthiness of banks. This negatively affects their reputation and profitability. Investors tend to be cautious about such banks due to the increased probability of financial losses resulting from high NPA levels. The deposit levels of the bank are also influenced, reducing the available funds for loan disbursement and impacting the overall business turnover of the banks. Ultimately, these factors adversely affect profitability and cash flow. Although PNB is currently one of the largest banks with a good credit rating, there may be adverse effects in the long run if NPA levels are not managed effectively.

HO4: THERE IS NO SIGNIFICANT IMPACT OF NPA ON OPERATING EXPENSES OF STATE BANK OF INDIA (SBI). According to the results presented in Annexure, the R-squared value is 0.83, indicating a high correlation between NPA and operating expenses. This suggests that regression analysis is suitable for analyzing the impact of NPA on operating expenses. The null hypothesis is rejected based on a p-value less than 0.05, indicating a significant impact of NPA on the operating expenses of SBI Bank. Being a nationalized bank, SBI already grants loans at lower interest rates compared to private banks. However, having a high NPA level will result in reduced profitability, forcing the bank to cut operating expenses. This reduction in operating expenses can have implications for the bank's future growth. Nevertheless, SBI Bank, being a top nationalized bank, may be able to sustain the impact of NPA on its profitability in the long run, although it will be adversely affected.

HO5: THERE IS NO SIGNIFICANT IMPACT OF NPA ON THE TOTAL LOAN DISBURSEMENT OF STATE BANK OF INDIA (SBI) . According to the results presented in Table 1 in Annexure, there is a high correlation between NPA and total loan disbursement, as indicated by an R-squared value of 0.83. This suggests that regression analysis is suitable for analyzing the impact of NPA on total loan disbursement. The null hypothesis is rejected based on a p-value less than 0.05, indicating a significant impact of NPA on the total loan disbursement of SBI Bank. It is evident that NPA reduces profitability, resulting in banks having less funds available for loan disbursement. The high NPA level also affects the liquidity of banks and reduces their cash flow, leading to a vicious circle that can potentially result in insolvency in the long run. However, SBI Bank, being a top-notch bank, may not be immediately affected. Nevertheless, if necessary steps are not taken to address the NPA issue, it can have adverse effects on the bank's long-term stability.

HO6: THERE IS NO SIGNIFICANT IMPACT OF NPA ON THE TOTAL DEPOSIT OF STATE BANK OF INDIA (SBI) The results presented in Table 1 in Annexure indicate a high correlation between NPA and total deposits, as evidenced by an R-squared value of 0.93. This suggests that regression analysis is suitable for analyzing the impact of NPA on total deposits. The null hypothesis is rejected based on a p-value less than 0.05, indicating a significant impact of NPA on the total deposits of SBI Bank. NPA raises concerns regarding the credit analysis of banks, affecting their goodwill and reducing profitability. As investors lose confidence in such banks, the total deposits decrease. Consequently, banks reduce loan disbursement, which in turn affects their overall business turnover, profitability, and cash flow. Although SBI Bank has a good credit rating, the impact of NPA can be adverse in the long run.

11. SUGGESTIONS

The Indian banking industry has witnessed overall positive performance; however, there is recognition of the need for reforms across both public sector and private banks. These reforms aim to address various challenges and further strengthen the banking sector.

In the public sector, reforms are necessary to improve operational efficiency, reduce non-performing assets (NPAs), and enhance credit approval processes. Steps such as strengthening risk management practices, implementing stricter governance standards, and enhancing transparency can contribute to the overall improvement of public sector banks.

Similarly, private banks also need to undergo reforms to ensure they remain competitive and resilient. These reforms may include enhancing risk management frameworks, adopting advanced technology solutions, and implementing robust internal control systems. Additionally, promoting ethical practices, strengthening customer-centricity, and focusing on sustainable growth are areas that can benefit from reforms in private banks.

Overall, the reforms in the banking industry aim to enhance the stability, efficiency, and transparency of the sector. By addressing challenges such as NPAs, improving governance, and adopting innovative practices, the Indian banking industry can continue to thrive and contribute significantly to the country's economic growth.

11.1 SUGGESTIONS FOR BANKS

Below are highlighted several important measures that can contribute to reducing the incidence of NPAs and improving the overall loan sanctioning process in banks:

a. Employee Targets and Accountability: Banks should avoid pressurizing employees to achieve loan targets, as this can lead to undue risk-taking and compromise credit quality. Instead, a balanced approach should be adopted, where employees are incentivized for maintaining loan quality and customer satisfaction. Additionally, linking the responsibility of employees involved in the loan sanctioning process and implementing penalties for non-compliance can promote greater caution and accountability.

b. Proactive Credit Department: The credit department plays a crucial role in the loan approval process. Being proactive before and after approving loan applications ensures that proper due diligence is conducted, and borrowers' financial positions are continuously monitored. This can help identify potential risks and take timely actions to mitigate them.

c. Multi-layer Credit Sanctioning Process: Implementing a multi-layer credit sanctioning process helps in independent verification of borrowers' profiles at different levels. This reduces the likelihood of biased or compromised decision-making and enhances the overall credit risk assessment process.

d. Dynamic Collateral Valuation: Evaluating collateral securities based on market fluctuations can help banks adapt to changing market conditions and determine appropriate haircuts. This ensures that the collateral's value remains aligned with market realities and facilitates easier liquidation if required.

e. Regular Meetings with Borrowers: Conducting annual meetings with borrowers helps banks stay informed about their financial positions, industry updates, and challenges they may be facing. This enables better monitoring of loan utilization and early identification of potential issues.

f. Detailed Fund Usage Descriptions: Banks should encourage borrowers to provide detailed descriptions of how the funds will be utilized. This level of transparency allows banks to ensure that funds are being used for productive purposes and reduces the likelihood of misuse.

g. Qualitative Parameters: In addition to quantitative criteria, banks should consider qualitative parameters like the borrower's goodwill, past track record, and any criminal offenses. These factors provide a more comprehensive assessment of a borrower's creditworthiness and risk profile.

Implementing these measures can contribute to a more robust and responsible loan sanctioning process, reducing the risk of NPAs and enhancing the overall stability and efficiency of the banking sector.

11.2 SUGGESTIONS FOR REGULATORY AUTHORITIES

Implementing strict regulatory measures to address high levels of NPAs is a valid approach to ensure the stability and soundness of the banking system. Cancelling the license of banks that consistently exceed the defined threshold level of NPAs can serve as a strong deterrent for banks to manage their loan portfolios effectively and maintain healthy asset quality.

Banning the deposit acceptance right for banks with high NPA levels can also be considered as a preventive measure. By limiting their ability to accept new deposits, banks with high NPAs are discouraged from taking on additional risks and can focus on resolving existing NPA issues. This not only protects the banks' profitability but also safeguards the interests of depositors who rely on the banks' financial stability.

Regulatory authorities play a crucial role in overseeing the banking sector and ensuring compliance with prudent lending practices. By taking a firm stance on NPA management and imposing consequences for banks that fail to maintain acceptable levels, regulators can instill discipline and promote responsible lending behavior.

It's important to note that while stringent measures can be effective in addressing the NPA problem, it's also necessary to provide support and guidance to banks to help them improve their risk management practices and strengthen their loan recovery mechanisms. A comprehensive approach that combines regulatory measures, capacity building, and industry-wide collaboration can lead to a more resilient and sustainable banking sector.

12. LIMITATION

Taking NPA of different categories can provide valuable insights into the specific areas or sectors that are experiencing higher levels of non-performing assets. Categorizing NPAs can help identify patterns and trends, enabling banks to implement targeted measures to address the underlying issues causing NPAs in each category.

Using a sample of two banks for the study is a limitation in terms of generalizability. To obtain a more comprehensive understanding of the impact of NPA, it would be beneficial to include a larger sample size that represents a broader range of banks. This would increase the robustness and reliability of the findings.

Expanding the analysis to include additional indicators such as return on investment, return on assets, and asset turnover ratios would provide a more comprehensive picture of the relationship between NPA and various financial performance metrics. These indicators can offer insights into the overall profitability, efficiency, and asset management effectiveness of banks. Including these additional indicators would enhance the understanding of the impact of NPA on banks' financial performance.

Indeed, further research and studies can explore other relevant aspects related to NPA and its impact on banks. The field of banking and finance offers a wide range of potential research avenues, including the examination of different variables, methodologies, and approaches to analyzing the dynamics of NPA and its implications for banking performance.

13. CONCLUSION

The results of the study indicate that NPA has a significant impact on banking performance and profitability. This highlights the need for banks to improve their credit policies and loan sanctioning processes to mitigate the risks associated with NPA.

The study also highlights that NPA not only affects profitability but also hampers operational efficiency. The increase in operating costs and the reduced ability to sanction loans due to liquidity and cash flow mismatches contribute to the negative impact on banking performance. Specifically, the study highlights the poor performance of SBI, a public sector bank, in managing NPA. This suggests that public sector banks may face additional challenges in effectively managing NPA compared to private sector banks.

It is noteworthy that private sector banks seem to have better control over managing NPA compared to public sector banks. The study suggests that this may be attributed, at least in part, to the lower government pressure on private sector banks for loan sanctioning. This difference in external influences could contribute to the disparity in NPA levels between the two sectors.

Overall, the study emphasizes the significance of NPA as a major problem affecting banking performance. It underscores the importance of improving credit risk management, loan sanctioning processes, and operational efficiency to address the NPA challenge and enhance overall banking performance.

REFERENCES

[1] Agarwala, V., & Agarwala, N. (2019). A critical review of non-performing assets in the Indian banking industry. Rajagiri Management Journal, 13(2), 12–23.

[2] Goyal, S. et al. (2016). Analysis of financial ratios for measuring performance of Indian public sector banks. International Journal of Engineering and Management Research Page, 6(2, March–April), 152–162.

[3] Das, S. K., & Uppal, K. (2021). NPAs and profitability in Indian banks: An empirical analysis. Future Business Journal, 7(1), article no.: 53.

[4] Sensarma, R., & Ghosh, S. (2004). Net interest margin: Does ownership matter? Vikalpa: The Journal for Decision Makers, 29(1), 41–48.

[5] Dudhe, C. (2018). Impact of non- performing assets on the profitability of banks-A selective study, 1(1) (pp. 307–314).

[6] Bikker De, J. A. (2010). Measuring performance of banks: An assessment, Netherlands Bank and Utrecht University. Journal of Applied Business and Economics, 11(4), 141–159.

[7] Staikouras, C. K., & Wood, G. E. (2004). The determinants of European bank profitability. International Business and Economics Research Journal, 3(6), 57–68.
[8] Limbore, N. V. (2014). A study of banking sector in India and overview of performance of Indian banks with reference to net interest margin and market capitalization of banks, Review of research, 679, 1–11.
[9] Raj, M. et al. (2018). Non-performing assets: A comparative study of SBI&ICICI bank from 2014–2017. IOSR Journal of Business and Management (IOSR-JBM), VII(20 (9)), 78–84.
[10] Siraj, K. K. (2013). The moderating role of bank performance indicators on credit risk of Indian public sector banks. International Journal of Finance and Accounting, 4(17), 219–226.
[11] Nataraja N et.al.(2018).Financial Performance of Private Commercial Banks in India: Multiple Regression Analysis by Research Article: 2018 Vol: 22 Issue: 2, Academy of Accounting and Financial Studies Journal (Print ISSN: 1096-3685; Online ISSN: 1528-2635)

ANNEXURE

TABLE-1: REGRESSION ANALYSES

NULL HYPOTHESES "	"R SQUARE" "	P VALUE
HO1 There is no significant impact of NPA on operating expenses of **PNB.**	0.978429051	0.005583
HO2 There is no significant impact of NPA on total loan disbursement of **PNB.**	0.966491043	0.012115
HO3 There is no significant impact of NPA on total deposit of **PNB.**	0.969339339	0.008146
HO4 There is no significant impact of NPA on operating expenses of **SBI**	0.83120414	0.028417
HO5 There is no significant impact of NPA on total loan disbursement of **SBI**	0.830386043	0.00642095
HO6 There is no significant impact of NPA on total deposit of **SBI**.	0.937560868	0.00531

TABLE 2: OPERATING EXPENSES, TOTAL LOAN & TOTAL DEPOSIT IN RELATION WITH NPA OF PNB (₹ IN CR.)

FY	**NPA**	**CHG**	**OP EXP**	**CH**	**TOTAL LOAN**	**CHG**	**TOTAL DEPOSIT**	**CHG**
2017-18	820.03	0.43	12959	5.39	365495.03	0.21	367337.48	0.19
2018-19	896.28	0.09	15407	0.16	464593.96	0.27	450795.64	0.19
2019-20	1320.37	0.32	18999	0.19	554568.2	0.19	546424.19	0.18
2020-21	1843.99	0.28	22464	0.15	658333.09	0.19	643639.66	0.15
2021-22	2601.02	0.29	27712	0.19	819401.22	0.24	788770.64	0.18

TABLE 3: OPERATING EXPENSES, TOTAL LOAN & TOTAL DEPOSIT IN RELATION WITH NPA OF SBI (₹ IN CR.)

FY	NPA	CHG	OP EXP	CHG	TOTAL LOAN	CHG	TOTAL DEPOSIT	CHG
2017-18	820.03	0.43	12959	5.39	365495.03	0.21	367337.48	0.19
2018-19	896.28	0.09	15407	0.16	464593.96	0.27	450795.64	0.19
2019-20	1320.37	0.32	18999	0.19	554568.2	0.19	546424.19	0.18
2020-21	1843.99	0.28	22464	0.15	658333.09	0.19	643639.66	0.15
2021-22	2601.02	0.29	27712	0.19	819401.22	0.24	788770.64	0.18