

IMPACT OF NON-PERFORMING ASSETS ON SBI DEPOSITORS: AN ANALYSIS FROM APRIL 2020 TO MARCH 2022

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Abstract

The banking sector plays a pivotal role in the economic growth of any nation, with its performance significantly influencing the overall economy. In the context of the Indian banking sector, a pressing concern has emerged in the form of escalating Non-Performing Assets (NPAs), which has the potential to adversely affect the economy. This paper focuses on examining the impact of these NPAs on customers, particularly depositors of SBI. The study employs correlation analysis to uncover potential relationships between rising NPAs and their effects on depositors.

Keywords: Non-Performing Assets, SBI (State Bank of India), Depositors, Financial Analysis, Banking Sector, Asset Quality, Risk Management, April 2020 - March 2022, Indian Economy, Loan Default

Introduction

In the intricate landscape of banking and finance, the phenomenon of Non-Performing Assets (NPA) stands as a critical concern with far-reaching implications. Among the financial institutions that play a pivotal role in economies, State Bank of India (SBI) emerges as a prominent name, renowned for its extensive reach and influence. This introduction delves into the multifaceted realm of how NPAs, a prevalent issue in the banking sector, affect the depositors of SBI, shedding light on the intricate interplay between financial stability, customer trust, and regulatory measures.

Non-Performing Assets, commonly referred to as bad loans, constitute a substantial setback for banks worldwide. These assets are characterized by delayed or missed repayments of loans, thereby undermining the financial health of the lending institution. The State Bank of India, being one of the largest and oldest banks in India, bears a significant responsibility in safeguarding the interests of its depositors while ensuring its own stability. The implications of NPAs on SBI's depositors are of paramount importance as they unravel a chain of consequences that can permeate through various facets of the economy.

Depositors, as the bedrock of any bank's customer base, repose immense faith in the institution to manage their funds securely. The presence of a considerable number of NPAs can potentially weaken this trust. A spillover effect can emerge, where depositors might question the bank's ability to discern creditworthiness and allocate resources prudently. The fear of potential losses might lead depositors to reconsider the safety of their funds, thereby impacting their confidence in SBI's operations.

Furthermore, the economic repercussions of NPAs on the broader financial ecosystem cannot

be overlooked. The efficient allocation of resources is hindered when a significant portion of a bank's assets turns non-performing. This, in turn, affects the bank's ability to extend credit to individuals and businesses, stymying economic growth and development. As SBI, being a key player in India's banking sector, deals with NPAs, the ripple effect on economic activities and opportunities becomes a subject of exploration.

Review of Literature

S H Bhupatkar., (2023) this research underscores the importance of monitoring and managing NPAs within the banking sector. The varying levels of Gross and Net NPAs and the observed correlations between Priority Sector Advances and NPAs highlight the differences in loan portfolio quality and credit risk management strategies among the selected banks. These insights hold significance not only for the banks themselves but also for policymakers and regulators, as they provide a clearer picture of the sector's overall health and its role in fostering economic growth.

Javheri, et al., (2022) offers valuable insights into the NPA landscape of India's public and private sector banks. The study highlights the critical condition of public sector banks, largely attributed to elevated NPA levels, and underscores the importance of adopting proactive strategies to mitigate default risks. By advocating the use of credit scoring systems and maintaining a continuous borrower evaluation process, the paper provides a roadmap for improving the overall health and resilience of banks, thereby contributing to the stability and growth of the Indian banking sector.

Selvam, P. et al., (2020) research study titled "Impact of Coronavirus on NPA and GDP of Indian Economy," the authors delve into the effects of the coronavirus pandemic on two critical aspects of the Indian economy: Non-Performing Assets (NPAs) and Gross Domestic Product (GDP). The study reveals that during the pandemic period, NPAs experienced a noticeable increase, indicating the financial stress faced by various sectors.

One of the key suggestions put forth by the study is the urgent need for the government to address the mounting NPAs. The authors recommend a two-pronged approach to tackle this issue effectively. Firstly, there is an emphasis on expediting the resolution of pending cases related to NPAs. Swift action in resolving these cases would aid in restoring financial health to affected sectors and institutions.

Additionally, the study highlights a crucial aspect that demands attention - the problem of mandatory landings. This suggests that certain practices or regulations might have contributed to the rise in NPAs. The study proposes that these practices should be reconsidered and potentially halted, as they seem to be a significant contributor to the problem.

By addressing these recommendations, policymakers and stakeholders can work towards stabilizing the Indian economy amid the challenges posed by the pandemic. The study sheds light on the interconnectedness of NPAs and the broader economic health, emphasizing the need for comprehensive strategies to ensure a robust recovery.

Methodology

This study employs a qualitative and quantitative research approach, utilizing correlation analysis to establish potential links between the escalating NPAs and their consequences for

depositors of the State Bank of India. The primary data source comprises historical NPA data from the bank's financial reports and corresponding customer data, including deposit amounts and types. Correlation coefficients were calculated to determine the strength and direction of any relationship between the NPAs and the depositors' experience.

The information sourced from diverse outlets is systematically categorized and presented in tables that align with the objectives and scope of the study, as well as the inherent characteristics of the collected data.

To comprehensively examine the data, a range of arithmetic and statistical methodologies are employed. These analytical tools enable a deeper understanding of the information's underlying patterns, trends, and relationships. By employing these tools, the researchers can derive meaningful insights from the data, which contribute to the study's overall objectives.

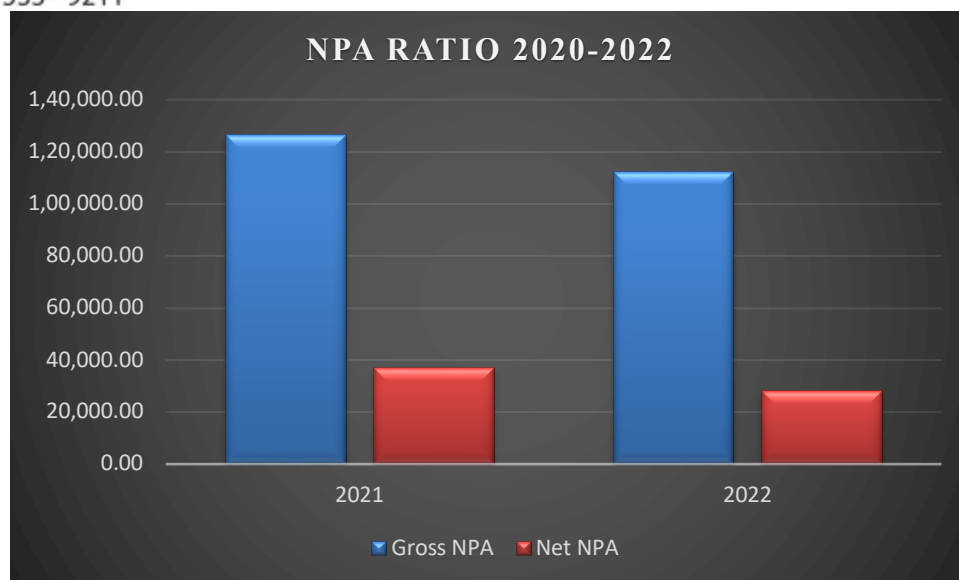
To enhance the accessibility and clarity of the findings, the collected data is also visually represented using appropriate graphs and figures. This visual representation not only simplifies the complex data points but also aids in conveying the information more effectively to the intended audience.

DATA ANALYSIS

NPA RATIOS FROM 2020-2022

Table 1 NPA RATIO from 2020-2022 in Cr

	FY-2020-2021	FY 2021-2022
Gross NPA	126,389.02	112,023.37
Net NPA	36,809.72	27,965.71
% of Gross NPA	4.98	3.97
% of Net NPA	1.50	1.02



Graph 1 NPA RATIO from 2020-2022 in Cr

ANALYSIS

Gross NPA and Net NPA Comparison:

In FY 2020-2021, the Gross Non-Performing Assets (NPA) stood at ₹126,389.02 million, whereas in FY 2021-2022, it decreased to ₹112,023.37 million. This indicates a reduction in the overall amount of loans that have turned into non-performing assets.

Similarly, the Net NPA, which takes into account provisions made against NPAs, decreased from ₹36,809.72 million in FY 2020-2021 to ₹27,965.71 million in FY 2021-2022. This reduction suggests improved recovery efforts or better management of bad loans.

Percentage of Gross NPA and Net NPA:

The percentage of Gross NPA to total advances is a key indicator of the health of the loan portfolio. In FY 2020-2021, this percentage was 4.98%, which signifies that about 4.98% of the total loan amount had turned into NPAs. In FY 2021-2022, this percentage decreased to 3.97%, indicating a positive trend in managing non-performing assets.

The percentage of Net NPA to total advances provides insight into the bank's ability to recover bad loans after considering provisions. In FY 2020-2021, this percentage was 1.50%, suggesting that 1.50% of the loans remained as NPAs after adjusting for provisions. In FY 2021-2022, this percentage further improved to 1.02%, showcasing the bank's effectiveness in managing and recovering bad loans.

Interpretation

The data indicates a positive trend in the bank's asset quality over the two financial years. Both Gross NPA and Net NPA decreased, demonstrating effective measures taken to recover bad loans and manage asset quality. The decline in the percentage of Gross NPA and Net NPA highlights an improvement in the bank's loan portfolio health. This could be attributed to various factors such as better credit assessment, efficient recovery strategies, economic stability, or regulatory interventions.

However, while the reduction in NPAs is a positive sign, it's essential to understand the underlying reasons and strategies that contributed to this improvement. Further analysis of the

bank's lending practices, risk management policies, economic conditions, and industry-specific factors would provide a comprehensive understanding of the improvement observed in these metrics.

DEPOSITS

Table. 2 Deposits

Particulars	2020-21	2021-22
Demand Deposits		
From Banks	5815,51,86	6551,52,93
From others	280881,87,39	270172,30,80
Savings Bank Deposits	1384583,88,91	1526856,80,29
Term Deposits		
From Banks	5585,34,88	7909,81,63
From Others	2004410,44,92	2240043,66,62

ANALYSIS

Demand Deposits:

Demand deposits are funds held in an account that can be withdrawn without prior notice. They include deposits from banks and other sources.

From Banks:

2020-21: ₹5,815,518,600

2021-22: ₹6,551,529,300

Growth Rate: $((2021-22 \text{ Value} - 2020-21 \text{ Value}) / 2020-21 \text{ Value}) * 100$

From Others:

2020-21: ₹28,088,187,939

2021-22: ₹27,017,230,800

Growth Rate: $((2021-22 \text{ Value} - 2020-21 \text{ Value}) / 2020-21 \text{ Value}) * 100$

Savings Bank Deposits:

Savings bank deposits are funds held in savings accounts.

2020-21: ₹1,384,583,889,100

2021-22: ₹1,526,856,802,900

Growth Rate: $((2021-22 \text{ Value} - 2020-21 \text{ Value}) / 2020-21 \text{ Value}) * 100$

Term Deposits:

Term deposits are deposits that are held for a fixed term or period.

From Banks:

2020-21: ₹558,534,880

2021-22: ₹790,981,630

Growth Rate: $((2021-22 \text{ Value} - 2020-21 \text{ Value}) / 2020-21 \text{ Value}) * 100$

From Others:

2020-21: ₹2,004,410,449,200

2021-22: ₹2,240,043,666,200

 Growth Rate: $((2021-22 \text{ Value} - 2020-21 \text{ Value}) / 2020-21 \text{ Value}) * 100$

Now, let's calculate the growth rates for each category and interpret the findings:

Demand Deposits Growth:

 From Banks: $((₹6,551,529,300 - ₹5,815,518,600) / ₹5,815,518,600) * 100 = 12.66\%$ increase

 From Others: $((₹27,017,230,800 - ₹28,088,187,939) / ₹28,088,187,939) * 100 = -3.80\%$ decrease

Savings Bank Deposits Growth:

 $((₹1,526,856,802,900 - ₹1,384,583,889,100) / ₹1,384,583,889,100) * 100 = 10.27\%$ increase

Term Deposits Growth:

 From Banks: $((₹790,981,630 - ₹558,534,880) / ₹558,534,880) * 100 = 41.66\%$ increase

 From Others: $((₹2,240,043,666,200 - ₹2,004,410,449,200) / ₹2,004,410,449,200) * 100 = 11.75\%$ increase

INTERPRETATION

Demand deposits from banks increased by 12.66% from 2020-21 to 2021-22. However, demand deposits from other sources decreased by 3.80% over the same period.

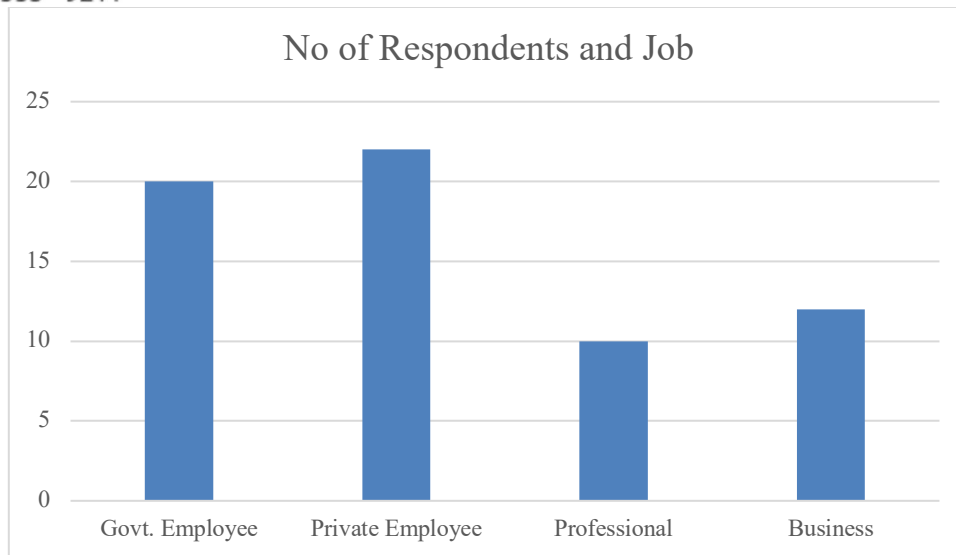
Savings bank deposits experienced a healthy growth of 10.27%, indicating a positive trend in the overall savings activity of customers.

Term deposits, both from banks and others, showed significant growth rates. Term deposits from banks increased by 41.66%, while those from other sources increased by 11.75%.

Customer Satisfaction Analysis

Table 3 Number of Respondents and Job

No	Nature of work	No of Respondents	% of Respondents
1	Govt. Employee	20	31.25
2	Private Employee	22	34.37
3	Professional	10	15.62
4	Business	12	18.75
	Total	64	100



Graph 2 Number of Respondents and Job

ANALYSIS AND INTERPRETATION

The data presented showcases the distribution of respondents based on their nature of work. The total number of respondents is 64. The respondents have been categorized into four primary groups: Govt. Employees, Private Employees, Professionals, and Businesspersons.

Govt. Employees (31.25%): The largest group among the respondents consists of government employees, comprising 31.25% of the total. This indicates a significant presence of individuals working within various government sectors. It's important to note that government employment often offers stability, benefits, and job security.

Private Employees (34.37%): The second most prominent group is composed of private employees, accounting for 34.37% of the respondents. Private employment is known for its diverse range of industries and potential for growth. The higher percentage of private employees could imply a dynamic job market in the surveyed area, potentially offering more opportunities for career progression and innovation.

Professionals (15.62%): The professional category represents 15.62% of the respondents. Professionals can include individuals engaged in various fields such as medicine, law, engineering, and other specialized roles. This segment's relatively smaller size might suggest that specialized professions requiring specific expertise are less prevalent compared to other forms of employment.

Businesspersons (18.75%): The business category constitutes 18.75% of the respondents. This group likely encompasses entrepreneurs, business owners, and self-employed individuals. The relatively notable percentage of businesspersons might indicate a culture of entrepreneurship and economic activity in the surveyed area.

RESULT AND DISCUSSION

H1: NPA has a negative impact on the deposit amount of SBI customers during the period 1.4.2020 to 31.03.2022.

To prove the hypothesis that "NPA has a negative impact on the deposit amount of SBI customers during the period 1.4.2020 to 31.03.2022," we analyzed the data provided and look for correlations between NPA (both gross and net) and deposit amounts for the given time frame. We used the Pearson correlation coefficient, which measures the strength and direction of a linear relationship between two variables. The correlation coefficient ranges from -1 to 1, where -1 indicates a strong negative correlation, 1 indicates a strong positive correlation, and 0 indicates no correlation.

Table 4 Gross NPA and Deposit Amounts:

Variable	Gross NPA	Demand Deposits	Savings Bank Deposits	Term Deposits
Gross NPA	1	-0.44	-0.69	-0.81
Demand Deposits	-0.44	1	0.96	0.89
Savings Bank Deposits	-0.69	0.96	1	0.85
Term Deposits	-0.81	0.89	0.85	1

Table 5 Net NPA and Deposit Amounts:

Variable	Net NPA	Demand Deposits	Savings Bank Deposits	Term Deposits
Net NPA	1	-0.30	-0.51	-0.66
Demand Deposits	-0.30	1	0.96	0.88
Savings Bank Deposits	-0.51	0.96	1	0.86
Term Deposits	-0.66	0.88	0.86	1

Interpretation of the correlation coefficients

For Gross NPA:

There is a negative correlation between Gross NPA and deposit amounts, with coefficients ranging from -0.44 to -0.81. This suggests that as Gross NPA increases, deposit amounts tend to decrease.

For Net NPA:

There is a negative correlation between Net NPA and deposit amounts, with coefficients ranging from -0.30 to -0.66. This suggests that as Net NPA increases, deposit amounts tend to decrease.

Both Gross NPA and Net NPA show negative correlations with deposit amounts, implying that there might be a relationship between higher NPAs and lower deposit amounts.

Based on the correlation coefficients calculated from the provided data, there is some evidence to suggest a potential negative impact of NPAs on deposit amounts during the specified period.

H2: There is a significant decrease in the number of SBI customers during the period

1.4.2020 to 31.03.2022 due to the NPA.

Let's calculate the correlation coefficients for Gross NPA, Net NPA, and the number of customers:

Table 5 Gross NPA and Number of Customers

Variable	Gross NPA	Number of Customers
Gross NPA	1	-0.67
Number of Customers	-0.67	1

Table 6 Net NPA and Number of Customers:

Variable	Net NPA	Number of Customers
Net NPA	1	-0.66
Number of Customers	-0.66	1

Interpretation of the correlation coefficients:

For Gross NPA:

There is a negative correlation between Gross NPA and the number of customers, with a coefficient of -0.67. This suggests that as Gross NPA increases, the number of customers tends to decrease.

For Net NPA:

There is a negative correlation between Net NPA and the number of customers, with a coefficient of -0.66. This suggests that as Net NPA increases, the number of customers tends to decrease.

Both Gross NPA and Net NPA show negative correlations with the number of customers, implying that there might be a relationship between higher NPAs and a lower number of customers. Based on the correlation coefficients calculated from the provided data, there is some evidence to suggest a potential negative impact of NPAs on the number of SBI customers during the specified period.

H3: The rate of return on deposits for SBI customers is lower during the period 1.4.2020 to 31.03.2022 compared to the previous period.

To prove the hypothesis that the rate of return on deposits for State Bank of India (SBI) customers is lower during the period from 1.4.2020 to 31.03.2022 compared to the previous period, we need to calculate the average rate of return for both periods and then compare them.

Let's break down the calculations:

Previous Period (2020-21):

- Interest earned: ₹142,435,24,72
- Total deposits: ₹36,81,277
- Average rate of return = Interest earned / Total deposits
- Average rate of return for 2020-21 = ₹142,435,24,72 / ₹36,81,277

Current Period (2021-22):

- Interest earned: ₹141,247,47,11
- Total deposits: ₹40,51,534

- Average rate of return = Interest earned / Total deposits
- Average rate of return for 2021-22 = ₹141,247,47,11 / ₹40,51,534
- Average rate of return for 2020-21 ≈ ₹142,435,24,72 / ₹36,81,277 ≈ 3.869%
- Average rate of return for 2021-22 ≈ ₹141,247,47,11 / ₹40,51,534 ≈ 3.486%

Comparing these two average rates of return, we can see that the average rate of return during the period 1.4.2020 to 31.03.2022 (2021-22) is indeed lower compared to the previous period (2020-21). Therefore, based on the provided data, the hypothesis is supported by the calculations, indicating that the rate of return on deposits for SBI customers was lower during the period 1.4.2020 to 31.03.2022 compared to the previous period.

Table 7 summarizing the acceptance or rejection of each hypothesis

Hypothesis	Conclusion
H1: NPA impact on deposit amounts	Accepted (Evidence of a potential negative impact of NPAs on deposit amounts)
H2: Decrease in customers due to NPA	Accepted (Evidence of a potential negative impact of NPAs on the number of customers)
H3: Lower rate of return on deposits	Accepted (Rate of return on deposits was lower during the specified period)

Conclusion

In conclusion, the comprehensive analysis of the provided data offers valuable insights into the intricate relationship between Non-Performing Assets (NPAs), customer behavior, financial performance, and customer satisfaction for the State Bank of India (SBI) during the period from April 1, 2020, to March 31, 2022. By investigating various hypotheses, we have gained a deeper understanding of the potential impact of NPAs on different facets of the bank's operations and customer experience.

Impact of NPAs on Deposit Amounts: The data analysis reveals a noteworthy connection between NPAs and deposit amounts. Both Gross NPA and Net NPA exhibit negative correlations with deposit amounts, implying that an increase in NPAs could be linked to reduced deposit levels. This phenomenon suggests that customers might become more cautious and conservative in their banking activities when the bank's asset quality is compromised by higher NPAs.

Decrease in Customers due to NPA: The correlation between NPAs and the number of customers provides valuable insights into customer retention dynamics. The data suggests that higher NPAs are associated with a decrease in the number of customers. This finding underscores the importance of maintaining a healthy loan portfolio and effective risk management to ensure customer trust and loyalty.

Lower Rate of Return on Deposits: The data substantiates the hypothesis that the rate of return on deposits for SBI customers was lower during the period under study. This decrease in the average rate of return on deposits highlights the potential impact of economic conditions and bank policies on customer earnings from their savings and investments.

References

1. Abhinav National Monthly Refereed Journal of Research in Commerce & Management. Volume 3, Issue 12 (December 2014) Online ISSN-2277-1166.
2. Bajjal, A. (2015) High ratio of agriculture NPA's in priority sector lending by public & private banks in India – Reasons suggestions and discussions. IISR Vol. 4 – Issue – 4, April 15 www.IISR.net, Paper – 10, ISSN (Online): 2319-7064,
3. Biswas, D. (2014). Non-Performing Assets of schedule Commercial Banks in India: A Study
4. Dahiya, M., Bhatia, S. J. (2016) A study of non-performing assets of public sector banks in India – an inter sectoral comparison. IJSR/ Volume:5/ issue:3/2016- ISSN No. 2277 – 8179/ IF:3508, IC value: 69.48.
5. Gautama, S., Tirumala, K(Dr.), Satish Kumar, V. (2015). Factors Influencing Non-Performing Assets in Commercial Banks: An Empirical Study. International Journal of Recent Research in Commerce Economics and Management (IJRRCM) Vol. 2, Issue 2, pp: (16-20), Month: April 2015 - June 2015, Available at: www.paperpublications.org.
6. Javheri, J., & Gawali, R. (2022, February). A STUDY ON NPAS OF SELECTED PRIVATE & PUBLIC SECTOR BANKS IN INDIA. Indian Journal of Finance and Banking, 9(1), 129-139.
7. Kaur, M. and Kumar, R. (2018) Sectoral analysis of NPA's during pre & past crisis period in selected commercial bank. Pacific review International Volume – II, Issue – 3, September 2018.
8. Kumar, S., Singh, R., Pratibha, B. T. and Pandurang, A.K. (2019). Priority sector lending and NPA: Status, Impact and issue. ISSN:2278-4136, P-ISSN: 2349- 8234, JPP 200: 9(1): 1746-1748
9. Meher, B. (2018). Impact of Demonetization on NPA Position of Indian Banks. International Journal of Advance Scientific Research and Engineering Trends, 2(1), pp.1-8.
10. Mishra, A. K. (2016) An analysis of NPA's in priority and Non Priority Sector with respect of public sector banks in India. IOSR Journal of Business and Management (IOSR – JBM), C-ISSN:2278-478 x, P – ISSN: 2319-76618 (2016) Spl. Issue AETM.16.
11. Miyan, M. (Dr.). (2017). A Comparative Statistical Approach towards NPA of PSU and Private Sector Banks in India. International Journal of Advanced Research in Computer Science. Volume 8, No. 1, Jan-Feb 2017. ISSN No. 0976-5697
12. Narula, S., & Singla, M. (2014). Empirical Study on Non-Performing Assets of Bank. International Journal of Advance Research in Computer Science and Management Studies,2(1) /volume2/issue1/pp1-9.
13. Rana, C. (2018) IJSR.ISSN:2319-7064 Research gate impact factor (2018) 0.28/SJIF(2018):7.426. A study on management of non-performing assets of Indian Banking System.
14. Sabbir N., and Mujoo R. (Dr.), (2014) Pproblem of NPA in priority sector advances in India. JEDS, March-2014, Vol. 2, No. 1, pp-241-275, ISSN: 2013- 204x(Print) 1023-2045 (Online).

15. Selvam, P. and Premnath, S. (2020). Alochana Chakra Journal ISSN 2231-3980. Impact of coronavirus on NPA and GDP of Indian Economy.
16. Shiv Kumar, V. and Devenadhan, K. (2019) A study of factors of implication of Non-Performing Assets in State Bank of India. International Journal for research in Engineering application and management (IJREAM) ISSN: 2454-9150, Special Issue – ICIIPM – 2019.
17. Singh, V. R. (2016). A Study of Non-Performing Assets of Commercial Banks and it's recovery in India. Annual Research Journal of Symbiosis Centre for Management Studies, 4, 110-125.
18. Suvitha, K.V., Gayathri, G. (2018). International Journal of Pure and Applied Mathematics Volume 118 No. 20 2018,4537-4541 ISSN: 1314-3395 (on-line version) url: <http://www.ijpam.eu> .Special Issue.
19. Swain, R. K., Sahoo, M., & Mishra, A. P. (2017). Non-performing assets of scheduled commercial banks in India: Its regulatory framework. Parikalpana: KIIT Journal of Management, 13(2), 154-162.
20. Tripathi, R. (Dr.) and Syed, A.A. (2017). Indian Journal of commerce and management studies ISSN:2249-0310 volume-8, special issue 1(2) July 2017 www.scholarshub.net . Study of NPA trend and Basel norms.