



A Study on Impact of COVID 19 on Non-Performing Assets with Special Reference to State Bank of India

Dr. Shivika Bhatnagar^{1*} Dr. Shikha Soni² Dr. Rajat Kumar Kamboj³

¹Dr. Shivika Bhatnagar, IEF, Bundelkhand University, Jhansi, India

²Dr. Shikha Soni, IEF, Bundelkhand University, Jhansi, India

³Dr. Rajat Kumar Kamboj, IEF, Bundelkhand University, Jhansi, India

DOI: <https://doi.org/10.70333/ijeks-02-11-s-007>

*Corresponding Author: shivikabhatnagar@gmail.com

Article Info: - Received : 02 October 2023

Accepted : 25 November 2023

Published : 30 November 2023



The Covid-19 pandemic has had far-reaching implications on various sectors of the economy, and the banking industry is no exception. A nation's economy and its development are greatly influenced by the banking sector. Therefore, it is imperative that the banking system be strong. Nevertheless, banks are concerned about non-performing assets (NPAs) in recent years. An NPA has a negative impact on a bank's liquidity, solvency, profitability, and operational efficiency, resulting in a reduction of funds for the bank and eventually a reduction of lending capacity. This paper examines the impact of the Covid-19 pandemic on Non-Performing Assets (NPAs) in the context of the State Bank of India (SBI), one of India's largest and most significant banks. The research findings reveal a multi-faceted impact of Covid-19 on NPAs within SBI. Lockdown and economic disruptions triggered by the pandemic led to reduced business activity, income uncertainty, and job losses, contributing to a surge in NPAs. The Reserve Bank of India (RBI) implemented various relief measures, including loan moratoriums and restructuring schemes, which mitigated the NPA rise. In this study, secondary data is gathered from the official website of the State Bank of India. A study was conducted using SBI's annual reports. A descriptive statistics, regression analysis and correlation were used to analyze the data. A study has found that NPA has significantly decreased after covid because of a stringent bank policy formulation and effective recovery process.

Keywords: *Non-Performing Assets, Covid-19, Regression, Correlation*



© 2023 Dr. Shivika Bhatnagar et al., This is an open access article distributed under the Creative Commons Attribution License(<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made.

1. INCIDENCE OF NPAS ON THE STABILITY OF BANKS: EVIDENCES FROM LITERATURE

A bank is defined under the Banking Companies Act of India as a financial entity that

takes deposits from the general public and lends or invests the money, with the option to repay the funds on demand or withdraw them in other ways, such as by cheque, draught, order, or another

means. The two main tasks that every bank must complete are taking deposits and making loans while a bank gets deposits from depositors, it utilises those funds to make loans. As a result, banks must exercise caution while making loans because they are both the assets that bring in money for the bank and the sums that the bank must return its depositors. As a result, banks primarily make money from loans, hence the calibre of the assets they own is crucial. The profitability, earnings, cost, and asset quality of banks are all negatively impacted by nonperforming assets (NPAs). The quality of assets and credit management are negatively impacted by a rise in non-performing assets. Despite offering many options, including capital infusion and mergers, the government's proposals are only band-aid answers. More NonPerforming assets (NPAs) have the potential to hurt the economy, particularly the financial sector. They can prevent banks from receiving cash, increase capital expenses, and diminish their ability to lend money and their overall productivity. For these reasons, it is critical to address this issue as soon as possible. Increasing non-performing assets (NPAs) can have a severe impact on the economy, particularly the financial sector, as they can lead to bank funding blockages, increased capital costs, and decreased bank productivity and lending capacity. For these reasons, it is critical to address this issue as soon as possible.

A scarcity of funds in the market might lead to an increase in loan prices, which would affect investors, depositors, borrowers, and retail consumers who will have to pay higher interest rates. This is because banks are the main producers of capital and the key forces behind economic growth. These elements will all work together to cause slower growth and greater inflation.

1.1. Meaning Of Non-Performing Assets

Non-performing assets (NPA) according to the Reserve Bank of India as of 31 March 2001: The NPA shall be a loan or advance in which

- A term loan where the interest and/or principal has been overdue for more than 90 days,
- An overdraft / cash credit account remains 'out of order' for over 90 days
- When bills are discounted and purchased, they remain overdue for more than 90 days.
- An advance granted for agricultural purposes is overdue for two harvest seasons, but not more than two and a half years. 5. In all other accounts, the amount owing is overdue for more than 90 days.

Types of Non-Performing Assets Non-performing assets fall into two categories

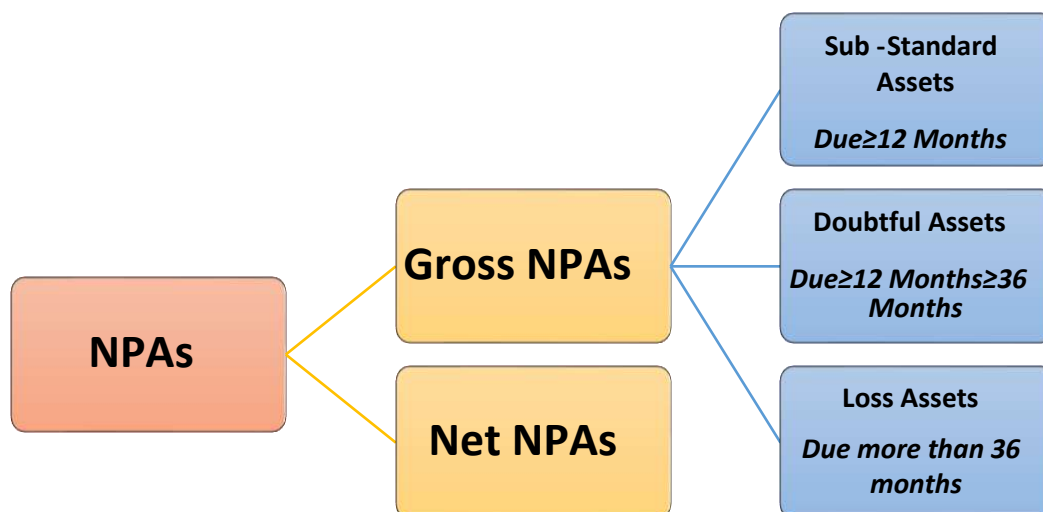


Figure-1: Indebtedness of Agricultural Households in India

A. Gross NPAs: Gross non-performing loans represent the sum of all loans made by the bank. Gross NPAs = Gross NPAs/ Gross Advances Gross NPAs can be classified into three categories:

- Sub-Standard Assets: After 31 March 2005, an asset will be considered a substandard asset if it remains non-performing for 12 months.
- Doubtful Assets: Any asset that has not generated income for the banks for more than 12 months.
- Loss Assets: An asset will become a loss asset if it is discovered by the internal auditor that the amount cannot be recovered.

B. Net NPAs: The NPAs that remain after banks deduct provision are known as Net NPAs. Net NPAs = Gross NPAs- Provisions / Gross Advances- Provisions

2. LITERATURE REVIEW

(Rathod 2018) A healthy banking system is a reflection of a healthy national economy. As a result, keeping a lid on growing NPAs is crucial for a sound banking system. Expanding nonperforming assets (NPAs) have a negative impact on the economy and can trigger a recession. They have a negative impact on the financial sector as well since they hinder money flow, decrease liquidity, and lower profitability. It is also critical that non-performing assets (NPAs) recover quickly.

(Ahmad 2017) According to the survey, some of the main causes of increased nonperforming assets (NPAs) include improper monitoring and follow-up, money diversion, willful defaults, and poor management. All of them have a negative impact on ROA and bank profitability. The study also showed that the credit deposit ratio significantly affects gross non-performing assets. The interest rate and additional collateral value are irrelevant to NPAs.

(ParminderKaur,2018) An essential component of the Indian financial system are public sector banks. The study is empirical in character. The information gathered for the study is secondary in character. Data research revealed that all PSBs' average nonperforming assets (NPAs) have been steadily rising, necessitating strict NPA control measures.

(Sah, 2017) According to the data, public sector units' (PSU) gross non-performing assets (NPAs) increased more quickly between 2003 and

2015. In 2003 it was 2% and in 2015 it was 5%. Banks' ability to make money from loans is reduced by NPAs. Banks have taken a number of actions to lower NPAs, such as amending the SARFAESI Act. Other recovery strategies include DRT and one-time settlement. More stringent laws are required.

(Kapil Singla, 2016) The subject of the current investigation is S.B.I. The paper's goal is to identify the factors contributing to rising non-performing assets (NPAs). SBI is mostly responsible for PSB NPAs. The main reasons for the increase in non-performing assets (NPAs) include depletion of funds, natural disasters, business bankruptcies, and fund diversion. These factors also lower the quality of banks' assets and lower their profit margins.

(Mr. Ajay Mendes, 2016) Growing non-performing assets (NPAs) are impacting bank profitability and liquidity since they are not only harming bank finances but also the financial stability of the economy as a whole. Even though the Indian government and RBI implemented a number of actions to lower and recover NPAs, the results have not been particularly encouraging. NPAs increased to 4% in 2014 from 3.3% in 2013. Banks' lax loan policies and borrowers' poor money management are major contributors to the rise of non-performing assets (NPAs).

(Mewada, 2016) Banks' ability to be productive is being impacted by rising NPAs. According to additional research, the state of the economy also reflects the quality of the assets held by banks. For this reason, it is critical to lower non-performing assets (NPAs) by implementing a range of preventive and corrective measures, including establishing goals for field officers to recover and lower NPAs, promptly identifying assets that may become NPAs, etc.

(Kumar G., 2014) The analysis demonstrates that even while banks have made enormous strides in technology and infrastructure, they are failing to control the rise in non-performing assets (NPAs), which is lowering their overall asset quality and raising their cost of capital. These factors are all lowering bank profits.

(Venkata V Vemula, 2012) Compared to prior years, NPA experienced an extraordinary 3% increase in 2012. The primary causes of this increase include financial misallocation, intentional defaults, and political pressure to

continue making loans to corporations with debt. Growing NPAs have a negative impact on the economy and banking operations. Banks and other financial organisations can drastically lower their non-performing assets (NPAs) if they follow appropriate credit evaluation and risk management procedures.

(Barakat, 2009) The study paper's goal is to determine the degree to which Jordanian banks have adopted Basel II standards. The study also demonstrates the connection between risk and capital. Forty people were included in the study, and 40 questions were used in its execution. The outcome demonstrates that local and foreign banks are not significantly different in how they are implementing the Basel standards.

3. OBJECTIVES OF THE STUDY

- ❖ To identify which sector is responsible for increasing NPAs.
- ❖ To identify the impact of Net NPAs on Net Profit.
- ❖ To understand the relation between NPA and advances.

4. HYPOTHESES

- **H1o:** There is no significant impact of Net NPAs on Net Profit.
- **H1a:** There is significant impact of Net NPAs on Net Profit.
- **H2o:** There is no significant relation between NPA and advances.
- **H2a:** There is significant relation between NPA and advances.

5. RESEARCH METHODOLOGY

Table-1: Research Methodology

Research Design	Descriptive and Analytical Study
Area of Study	India
Target Population	SBI
Sampling Technique	Convenience Sampling Technique
Data Collection Method	Secondary Data (From the official website of SBI)
Statistical Tool Used	Percentage method, Correlation and Regression

In the present study, convenience sampling is used and SBI is the bank selected for the study. It is a descriptive and analytical study. The secondary data for the study was collected from SBI's annual reports. The study was conducted using data from the last five years (2018-19 to 2022-2023). The purpose of the study is to examine SBI's NPA, profit, and advances.

Normality test has been done on the variable NPA to see whether data is normal or not. NPA distribution by sector and modes of recovery were determined using descriptive statistics. Regression analysis was used to determine the impact of net NPA on net profit, and correlation analysis was used to determine the relationship between net NPA and advances.

6. DATA ANALYSIS AND INTERPRETATION

Table-2: Tests of Normality Tests of Normality

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistics	df	Sig	Statistics	df	Sig
Net NPA	.183	6	.200*	.894	6	.339
Net Profit	.173	6	.200*	.951	6	.751

In the above table no 2 , the data appears to be normally distributed since the Shapiro-Wilk test has a p-value greater than 0.05. Therefore, we are using a parametric test to test the hypothesis.

6.1. Descriptive Study

Sector-wise NPA distribution
Table-3 : Sector-wise NPA distribution

	2017-18	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
Power	14%	14.66%	11%	10%	8%	5%
Telecom	4%	4.49%	6%	7%	8%	3%
Trading	4%	6.11%	7%	7%	8%	9%
Roads&Ports	4%	4.67%	5%	6%	7%	7%
Infrastructure	3%	3.33%	5%	5%	5%	6%
Engineering	4%	5.37%	3%	3%	3%	2%
Iron and Steel	22%	14.66%	4%	2%	2%	1%
Textiles	6%	3.89%	3%	2%	2%	25
Real State	0%	0%	0%	1%	1%	25
Automobiles/ Transport	0%	2.07%	0%	1%	1%	1%
Metal/Mines	0%	0%	2%	1%	1%	1%
Others	35%	40.75%	54%	55%	54%	61%
Food	44%	0%	0%	0%	0%	0%

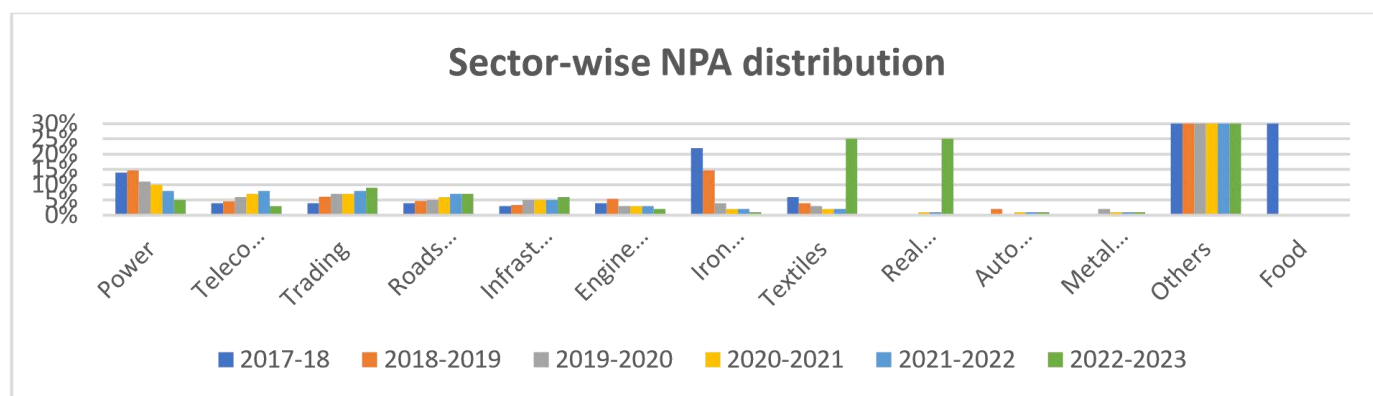


Figure-2: Sector-wise NPA distribution

According to the above graph no 2, six years of NPA data have been recorded by sector, with the power sector showing an upward trend between 2017 and 2023, followed by trading, infrastructure, real estate and other sectors. Contrary to this, Metals/Mines, Textiles, and Engineering all showed decreasing trends from 2017 to 2023 in terms of NPA.

Modes of Recovery of NPAs
Table-4: Modes of Recovery of NPAs

	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023
Misc Recovery	17.39%	17%	3%	2%	3%
Compromise	27.35%	26%	30%	29%	35%
SARFAESI	27%	4%	3%	6%	7%
DRT	0.11%	2%	0%	10%	1%

Sales to ARC	24.61%	3%	1%	6%	15%
NCLT	22.03 %	35%	2%	26%	14%
Normal Recovery		13%	61%	21%	25%

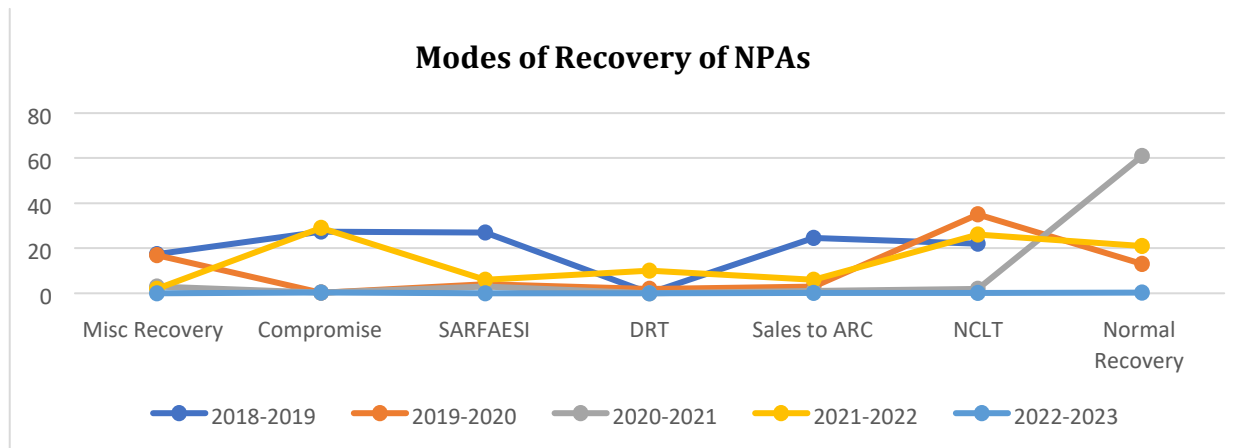


Figure-3: Modes of Recovery of NPA

The recovery of NPA has several methods including compromise, SARFAESI, DRT, NCLT, ARC, normal recovery, and miscellaneous. In the above figure no 3, 4 years of data is presented from 201819 to 2022-2023 in which compromise, SARFAESI, DRT, NCLT, ARC, Normal Recovery, and Miscellaneous are showing a fluctuating trend of recovery rate for NPA. At present, maximum recovery is accomplished through compromise, NCLT, ARC, and normal recovery.

6.2. Hypothesis Testing

- **H1o:** There is no significant impact of Net NPAs on Net Profit.
- **H1a:** There is significant impact of Net NPAs on Net Profit.

Table-5: Modes of Recovery of NPAs

	<i>Advances (₹) Amt in Crores</i>	<i>Net NPA (₹) Amt in Crores</i>	<i>Net Profit (₹) Amt in Crores</i>
2017-18	1934880	1,10,855	6,547
2018-19	2185877	65,895	862
2019-20	2325290	51,871	14,488
2020-21	2449498	36,810	20,410
2021-22	2733967	27,966	31,676
2022-23	3199269	21,467	50,232

Source: (Annual Report of State Bank of India)

Table-6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
1	.747	.558	.410	9238.27531	R Square Change	F Change	df1	df2	Sig. F Change
					.558	3.781	1	3	.000

Source: (Based on SPSS20)

Table-7: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig
Regression	322711423.136	1	322711423.136	3.781	.000 ^b
Residual	256037192.064	3	85345730.688		
Total	578748615.200	4			

Source: (Based on SPSS20)

Table-8: Coefficients

Model	Unstandardized Coefficients	Standardized Coefficients	Standardized Coefficients	t	Sig
	B	Std. Error	Beta		
Constant	30980.841	9291.946		3.334	.045
Net NPA	-.276	.142	-.747	-1.945	.147
a. Dependent Variable: Net Profit					

Source: (Based on SPSS20)

Table-9: Regression Equation used for Predication of Dependent variable

Regression Equation	Output
$Y=a+bx$	$Y= 30980.841+(-.276)$ (Net NPA)

This study examined the effect of Net NPA on Net Profit at State Bank of India through a linear regression model. The dependent variable was Net Profit, and the independent variable was Net NPA. In this equation Y is the Net Profit (dependent variable) and X is the Net NPA (independent variable). There is one unknown constants (fixed numerical values) in the equation that determine the position of the line. A highly negative correlation has been observed between Net NPAs and Net Profits. This indicates the statistical significance of the regression model that was run. Here, $p < 0.0005$, which is less than 0.05, and indicates that, overall, the regression model statistically significantly predicts the outcome variable (i.e., it is a good fit for the data).

Based on the data in table no 9, a regression equation is drawn with SPSS 20 above. With the help of this equation, we can predict Net Profit based on Net NPA. The p value for the regression coefficient in table no 7 is .000*, so the null hypothesis is rejected and the alternative hypothesis is accepted.

- **H2o:** There is no significant relation between NPA and advances
- **H2a:** There is significant relation between NPA and advances

Table-10

Correlation Between Net NPA and Advances		
	Net NPA	Advances
Pearson Correlation	1	-.945
Net NPA Sig. (2-tailed)		.01
N	5	5
Pearson Correlation	-.945	1
Advances Sig. (2-tailed)	.01	
N	5	5

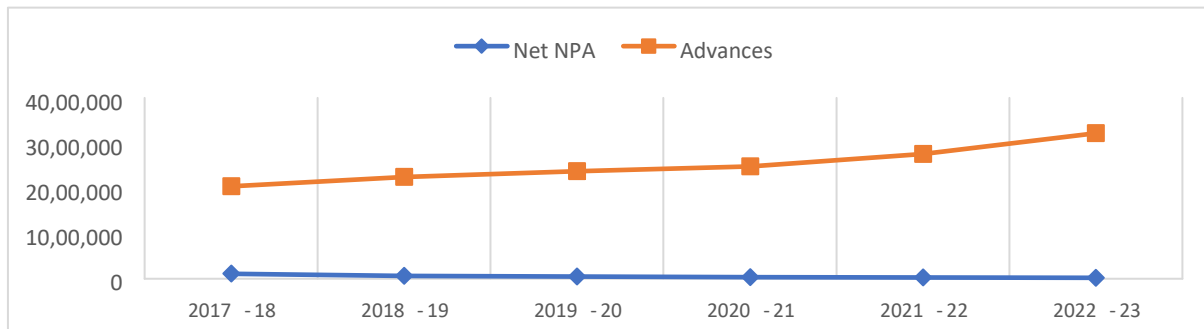


Figure-4

In order to determine the relationship between two variables, such as NPAs and advances, correlation is used. The null hypothesis should be accepted if p value is less than 0.05, and the alternative hypothesis should be rejected. Table no 10, 1exhibits correlation between advances and NPAs. The null hypothesis is rejected since Pearson correlation is -0.945, and $p = 0.01$ ($p > 0.05$) at confidence level of 0.05. Based on $r = -0.945$, NPAs and advances are negatively correlated, and NPA of banks decreases with an increase in advances.

6. CONCLUSION

In the financial year 2019-20, the Indian economy went through an economic downturn and Covid-19 are aggravate this problem. In spite of the fact that Covid 19 seriously affects the country's economy, SBI successfully manages its NPAs by establishing proper policies that result in a reduction in the bank's NPAs. In order to better manage the menacing NPA, SBI has adopted a variety of innovative methods. SBI has significantly reduced its NPA, as reflected in its balance sheet. NPAs have decreased due to increased profitability and write-offs of bad loans. It can be hoped that SBI's rising profitability will bring the NPA within an acceptable range for everyone.

REFERENCES

- Rathod, P. N. (2018). *Tools and Techniques of NPA Management*. *International Research Journal of Commerce Arts and Science*, 10-16.
- Ahmad, F. (2017). *Specific Determinants of Non-Performing Assets*. *International Journal of Research in Management, Economics and Commerce*, 64-70.
- Parminder Kaur, M. G. (2018). *A Comparative Analysis on NPAs in Public Sector Banks in India*. *The Research Journal of Social Science*, 5.
- Sah, D. P. (2017). *A Study on Non Performing Assets of the Indian Banks*. *International Journal of Advanced Research*, 1238- 1242.
- Kapil Singla, D. A. (2016). *Analyzing the impact of Non Performing Assets on Indian Banks*. *International Journal in Management and Social Science*, 805-811.
- Mr. Ajay Mendes, D. G. (2016). *A study of Non-Performing Assets of Public Banking Sectors with special reference to Pune district*. *International Research Journal of Management Sociology and Humanity*, 224-230.
- Mewada, D. J. (2016). *Indian Banking Sectors: Rising Trends and Preventive Measures of NPA*. *IOSR Journal of Business and*

Management, 2016.

Kumar, G. (2014). Non-Performing Assets. International Research Journal of Management Science and Technology, 246-251.

Venkata V Vemula, M. M. (2012). Non-Performing Assets: An Indian Perspective. Infosys Finacle: Thought Paper, 1-5.

Barakat, A. (2009). Bank Basel Norms II Requirement regarding Internal Control. 3548.

Cite this article as: Dr. Shivika Bhatnagar et al., (2023). A Study on Impact of COVID 19 on Non-Performing Assets with Special Reference to State Bank of India. International Journal of Emerging Knowledge Studies. 2(11), pp. 31-39.

<https://doi.org/10.70333/ijeks-02-11-s-007>