

## Non-Performing Asset is the Mirror Image of Profitability of Indian Banking Industry

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### ABSTRACT

The performance and stability of banking industry affects the economy growth. The size of NPA of banking industries reflects the financial health. Non-Performing Assets directly affects the profitability of the banks. This study attempts to study how the NPA is the mirror image of profitability of banking industry. This study has used secondary data regarding Net Profit and GNPA of different public and private sector banks. This study found that there is continuous increase in NPAs from 2010-11 to 2017-18, thereafter it has been reducing in case of public sector banks. But there is continuous increase in NPA till 2019-20 in case of private sector banks except ICICI Bank Ltd. So, banks should take effective control on their NPA to enhance their profitability

**Keywords:-** Non-performing Assets, Net Profit, GNPA, Banks

### INTRODUCTION

The banking industry is the building block of any financial system. The stable state of the entire economy is maintained by the smooth running of banking industry. Banks create credit by accepting deposits and lending loans. The funds earned from borrowers by interest on loans and principal repayments are recycled for the purpose of raising resources. In the current era the banking industry is facing a high NPA problem which leads to down trend of profitability. After all, this credit flow is disrupted by the build-up of non-performing assets (NPAs). It restricts credit growth and also affects banks' efficiency. The lending benchmarks for judging the efficiency of the banking sector are NPAs. Banks' primary source of revenue is the interest received on loans and advances, and the principal is repaid. If these assets do not yield revenue, they are known as non-performing assets (NPAs). The NPA concept is introduced by RBI as per the recommendations of Narasimham committee on Financial System (Chairman Shri M. Narasimham) to reflect the financial health of bank in its balance sheet. NPA therefore plays an important role in the banking system, since it significantly affects banks' profitability. As per RBI a 'non-performing asset (NPA)' is a credit facility in respect of which the interest and/or installment of principal has remained 'past due' for a specific period of time. The NPA will usually be Gross NPA and Net NPA. Gross NPA refers to the quality of the banks' loans, but NPA refers to the banks' actual burden.

Banks classify their assets into performing and Non-Performing assets. Performing assets are standard assets whereas non-performing assets are classified as sub-standard assets, doubtful assets, and loss assets.

With effect from March 31, 2005 an asset would be classified as

**Sub-standard**, if it remained NPA for a duration of 12 months or lesser.

An asset is classified as **Doubtful**, if it has remained NPA for a period of 12 months or longer.

A **Loss asset** is one where loss has been identified by the bank or internal or external auditors or by the Co-operation department or by the RBI inspection but the amount has not been written off, wholly or partly.

The global economic crisis has resulted in a spike because of defaults and bad loans. The coronavirus pandemic has had a serious impact on banks and financial institutions around the world. The situation is particularly severe for Indian banks that are already struggling to cope with rising bad loans. Resolving the inflating non-performing assets (NPA) will be the biggest obstacle for banks in India in 2021 as loan defaults in Covid-hit 2020 have to increase significantly. Many small and medium-scale enterprises are now struggling to repay banks' dues.

**LITERATURE REVIEW**

<b>Tyagi, Rai and Sharma (2020)</b>	They attempted to analyze the impact of NPA on the profitability of private and public sector banks. They found that banks need to control their NPA effectively to increase their efficiency and profitability.
<b>Sharma, Rathore and Prasad (2019)</b>	They had examined the management of NPA in public and private sector banks and suggested that close monitoring of NPAs is important. Shrinkage of accounts in the NPA group should also be reviewed.
<b>Agarwala and Agarwala (2019)</b>	They studied the contribution of different banks to the NPA by its growth pattern. They found that private sector banks reveals the growth rate of NPAs is low as compared to public sector banks.
<b>Singh(2018)</b>	He analyzed the relationship of the selected four banks' (SBI, Nationalized bank, Private Bank and Foreign Bank) Gross NPA and Net Profit. The result of the study indicated that there was a negative correlation between Gross NPA and Net Profit for all the banks.
<b>Miyan(2017)</b>	He had studied the comparative statistical analysis of NPAs of Public and Private Sector Banks in India. He had concluded that NPAs of public sector banks was higher in comparison to private sector banks. So, the performance of public sector banks was poor than private sector banks.

**OBJECTIVES OF THE STUDY**

- To investigate the connection between Gross NPA and Banks' Profitability.
- To understand the success of selected public and private sector banks with respect to Gross NPA.
- To discover the model that best fit to the profitability with banks' Gross NPA

**HYPOTHESIS OF THE STUDY**

H0- No statistical significant between GNPA and Net Profit of Banks

H1- Statistical significant between GNPA and Net Profit of Banks

**RESEARCH METHODOLOGY**

The present study is a casual analysis to study the relationship between the Gross NPA and net Profit of bank. The sample consists of five public sector banks such as State Bank of India, Canara Bank, Indian Overseas bank, Union Bank and Punjab National Bank and five private sector banks i.e. ICICI Bank Ltd., Axis Bank Ltd., HDFC Bank Ltd., Yes Bank Ltd., and Kotak Mahindra Bank Ltd. Secondary data are used for the period of 10 years from 2010-11 to 2019-20.

The main objective of this study is to study the effect of Non-Performing Assets on profitability of Public and Private Sector Banks.

Regression Equation

$$Y = a + bX + e$$

Y is the Net Profits of Banks

X is Non-Performing Assets

B is regression coefficient

e is Error term

**ANALYSIS AND INTERPRETATION OF DATA**

Table 1 show the Gross NPA of Public sector banks and Table 2 shows the Net Profit of these banks. Table 3 and Table 4 shows the Gross NPA and Net Profit of private sector banks respectively

**Table: - 1 Gross NPA of Public Sector Banks Rupees in Crores)**

Year	State Bank of India	Canara Bank	Indian Overseas Bank	Union Bank of India	Punjab National Bank
2010-11	25326.29	3089.21	3089	3622.82	4379.39
2011-12	39676.46	4031.75	3920	5449.86	8719.62
2012-13	51189.39	6260.16	6607	6313.83	13465.79
2013-14	61605.35	7570.21	9020	9563.72	18880.06
2014-15	56725.34	13039.96	14922	13030.87	25694.86
2015-16	98172.80	31637.83	30048	24170.89	55818.33
2016-17	112342.99	34202.04	35098.25	33712.28	55370.45
2017-18	223427.46	47468.47	38180.15	49369.93	86620.05
2018-19	172750.36	39224.12	33398.12	48729.15	78472.70
2019-20	149091.85	37041.15	19912.70	49085.30	73478.76

Source:- [www.moneycontrol.com](http://www.moneycontrol.com)

**Table 2:- Net Profit of Public Sector Banks (Rupees in Crores)**

Year	State bank of India	Canara Bank	Indian Overseas Bank	Union Bank of India	Punjab National Bank
2010-11	7370.35	4025.89	4433.5	2081.95	577.33
2011-12	11707.29	3282.72	4884.2	1787.13	802.61
2012-13	14104.98	2872.10	4747.67	2157.93	1061.18
2013-14	10891.17	2438.19	3342.58	1696.25	1408.02
2014-15	13101.57	2702.63	3061.58	1781.64	1793.72
2015-16	9950.65	-2812.82	-3974.40	1351.60	2286.45
2016-17	10484.1	1121.92	1324.8	555.21	2867.89
2017-18	-6547.00	-4222.24	-12283	-5247.37	3605.99
2018-19	862.23	347.02	-3737.88	-2947.45	-9975.49
2019-20	14488.11	-2235.72	-8527.40	-2897.78	336.20

Source:- [www.moneycontrol.com](http://www.moneycontrol.com)

**Table 3:- Gross NPA of Private Sector Banks (Rupees in Crores)**

Year	ICICI Bank Ltd.	HDFC Bank Ltd.	Kotak Mahindra Bank Ltd.	Axis Bank Ltd.	Yes Bank Ltd.
2010-11	10034.26	1694.34	603.49	159.94	80.52
2011-12	9475.33	1999.39	614.19	1806.30	83.86
2012-13	9607.75	2334.64	758.11	2393.42	94.32
2013-14	10505.84	2989.28	1059.44	3146.41	174.93
2014-15	15094.69	3438.38	1237.23	4110.19	313.40
2015-16	26720.93	4392.83	2838.11	6087.51	748.98
2016-17	42551.54	5885.66	3578.61	21280.48	2018.56
2017-18	54062.51	8606.97	3825.38	34248.64	2626.80
2018-19	46291.63	11224.16	4467.94	29789.44	7882.56
2019-20	41409.16	12649.97	5026.89	30233.82	32877.59

Source:- [www.moneycontrol.com](http://www.moneycontrol.com)

**Table 4:- Net Profit of Private Sector Banks (Rupees in Crores)**

Year	ICICI Bank Ltd.	HDFC Bank Ltd.	Kotak Mahindra Bank Ltd.	Axis Bank Ltd.	Yes Bank Ltd.
2010-11	5151.38	3926.39	818.18	3388.49	727.13
2011-12	6465.26	5167.07	1085.05	4242.21	976.99
2012-13	8325.47	6726.28	1360.72	5179.43	1300.68
2013-14	9810.48	8478.40	1502.52	6217.67	1617.78
2014-15	11175.35	10215.92	1865.98	7357.82	2005.36
2015-16	9726.29	12296.23	2089.78	8223.66	2539.45
2016-17	9801.08	14349.66	3411.50	3679.28	3330.09
2017-18	6777.42	17486.75	4084.30	275.68	4224.56
2018-19	3363.30	21078.14	4865.33	4676.61	1720.27
2019-20	7930.81	26257.32	5947.18	1627.22	-16418.02

Source:- [www.moneycontrol.com](http://www.moneycontrol.com)**Table -5 Descriptive Statistics of Gross NPA and Net Profit of all Banks**

Banks		Mean	Std. Deviation	Coefficient of Variation
State Bank of India	GNPA	99030.829	65002.28293	65.63
	Net Profit	8641.345	6635.90582	76.79
Canara Bank	GNPA	22356.49	17090.52977	76.45
	Net Profit	751.969	2885.67811	383.74
Indian Overseas Bank	GNPA	19419.522	13767.32	70.89
	Net Profit	-672.835	6120.839	-909.70
Union Bank	GNPA	24304.86	19375.61	79.71
	Net Profit	31.91	2687.02	8420.62
Punjab National Bank	GNPA	42090	31303.5	74.37
	Net Profit	476.3	3816.82	801.34
ICICI Bank Ltd.	GNPA	26575.36	17837.32	67.11
	Net Profit	7852.68	2425.37	30.88
HDFC Bank Ltd	GNPA	5521.5	3975.22	71.99
	Net Profit	12598.21	7250.18	57.54
Kotak Mahindra Bank Ltd	GNPA	2400.93	1733.69	72.20
	Net Profit	2703.05	1766.98	65.36
Axis Bank Ltd	GNPA	13325.61	13842.24	103.87
	Net Profit	4486.8	2439.20	54.36
Yes Bank Ltd	GNPA	4690.15	10191.4	217.29
	Net Profit	202.42	5937.6	2933.30

Source: - Researcher's Output

From the above descriptive statistic table, the mean of Net Profit of State Bank of India (Rs. 8641.345) is highest and the lowest mean of Net Profit is Indian Overseas Bank (Rs. -672.835) among the five public sector banks. Among five private sector banks, the mean of Net profit is highest in HDFC Bank Ltd (Rs.12598.21) and lowest mean Net Profit in Yes Bank Ltd (Rs. 202.42).

The Coefficient of Variation of net Profit of Indian Overseas Bank is negative because the net profit is negative. So, the bank requires efforts to recover the NPA for increasing the profitability. The CV of State Bank of India's Net Profit is lowest (76.79) among the public sector banks and the CV of ICICI Bank's Net Profit is lowest (30.88) among the private sector banks, which shows that these banks are managing its profit consistently through better control.

The Coefficient variation of GNPA is highest in Union Bank (79.71) and Yes Bank Ltd (217.29), which shows that there is no consistency in the recovery of NPA. The CV of GNPA is lowest in State Bank of India(65.63) and ICICI Bank Ltd (67.11), which shows that these banks are maintaining consistency in the recovery of NPA.

**Table-6 Regression and Correlation results**

<b>Banks</b>	<b>Correlation</b>	<b>p-value</b>	<b>Sig. / Not Sig.</b>	<b>R value</b>	<b>R square</b>	<b>Adjusted R Square</b>
State Bank of India	-.713	.021	Significant *	0.713	0.316	0.230
Canara Bank	-.881	.001	Significant *	0.881	0.776	0.748
Indian Overseas Bank	-.746	.013	Significant *	0.746	0.557	0.501
Union Bank	-.920	.000	Significant **	0.920	0.846	0.827
Punjab National Bank	-.245	.495	Not significant	0.245	0.060	-0.058
ICICI Bank Ltd.	-.243	.498	Not significant	.243	.059	-.058
HDFC Bank Ltd	.984	.000	Significant **	.984	.968	.964
Kotak Mahindra Bank Ltd	.964	.000	Significant **	.964	.930	.921
Axis Bank Ltd	-.662	.037	Significant *	.662	.438	.368
Yes Bank Ltd	-.945	.000	Significant *	.945	.894	.880

\*significant at .05 level    \*\* significant at .01 level

**Source:- Researcher’s Output**

Recovery of loans on time is the most vital component of profitability of the banking industry. Performance of banking industry is measured through its effective management. The above correlation analysis shows in table-6 that except Punjab National Bank and ICICI Bank Ltd., all other banks show significant correlation between net profit and NPA. Only the correlation analysis provides the cause and effect analysis of GNPA and Net Profit. So, the regression analysis between net profit and GNPA is done by using SPSS. R values of various public and private sector banks are showing positive correlation between Net Profit and NPA. In case of Union Bank, R-square value is 0.846 which shows that 84.6% variation in the profit of Union Bank is explained by the NPA. Likewise, the R-square value of HDFC Bank Ltd is 0.968 which shows that 96.8% variation in the net profit of HDFC Bank Ltd is being explained by the NPA. The regression analysis is done only on the banks which show significant correlation between net profit and GNPA.

**Regression Model of Net Profit and GNPA of Public and Private sector Banks**

- State Bank of India Net Profit = 15853.17 -.073(GNPA)
- Canara Bank Net Profit = 4077.3-.149(GNPA)
- Indian Overseas Bank Net Profit = 5768.58 -.332(GNPA)
- Union Bank Net Profit = 3131.9 -.128(GNPA)
- HDFC Bank Ltd Net Profit = 2688.18+1.795(GNPA)
- Kotak Mahindra Bank Ltd Net Profit=342.97+.983(GNPA)
- Axis Bank Ltd Net Profit = 6041.37 -.117(GNPA)
- Yes Bank Ltd Net Profit = 2785.49 -.551(GNPA)

From the above regression model of public and private sector banks, the constant value of State Bank of India is 15853.17, which shows that the performance of State Bank of India is better than other public sector banks. Likewise Axis bank Ltd. has highest constant value among five private sector banks. The co-efficient of beta also less in State Bank of India (.073) and in Axis Bank Ltd. The effect of NPA on Net Profits is less in case of state Bank of India and Axis Bank Ltd. In comparison to other public and private sector banks.

## FINDINGS

- There is continuous increase in NPAs from 2010-11 to 2017-18, thereafter it has been reducing in case of public sector banks. But there is continuous increase in NPA till 2019-20 in case of private sector banks except ICICI Bank Ltd.
- The doubtful or loss assets were not shown under NPA category, so that the profits shown by banks were not real.

## CONCLUSION AND SUGGESTION

This study has gathered data regarding GNPA and Net Profit of various public and private sector banks to study how NPA is the mirror image of profitability of banking industry. This study finds that there is significant relationship between GNPA and Net Profit. So, it rejects the null hypothesis. It is concluded that, NPA affects adversely on profitability of public and private sector banks. Our financial system affects the economic growth. NPA not only affects financial performance of banking industry but also affects the economic growth. Therefore, banking industry should focus on the management of NPA to enhance the profitability. The banking industry should take stringent measures to handle the NPA problems.

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