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# A Study on Management of Non-Performing Assets (NPAS) In New Generation Private Sector Commercial Banks in India

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Abstract: The banking industry has undergone a sea change after the first phase of economic liberalization in 1991 and hence credit management. While the primary function of banks is to lend funds as loans to various sectors such as agriculture, industry, personal loans, housing loans etc., in recent times the banks have become very cautious in extending loans. The reason being mounting Non-Performing Assets (NPAs). An NPA is defined as a loan asset, which has ceased to generate any income for a bank whether in the form of interest or principal repayment. As per the prudential norms suggested by the Reserve Bank of India (RBI), a bank cannot book interest on an NPA on accrual basis. In other words, such interests can be booked only when it has been actually received. Therefore, this has become what is called as a 'critical performance area' of the banking sector as the level of NPAs affects the profitability of a bank. An NPA account not only reduces profitability of banks by provisioning in the profit and loss account, but their carrying cost is also increased which results in excess & avoidable management attention. Apart from this, a high level of NPA also puts strain on a bank's net worth because banks are under pressure to maintain a desired level of Capital Adequacy and in the absence of comfortable profit level; banks eventually look towards their internal financial strength to fulfill the norms thereby slowly eroding the net worth. Today the Net NPAs of Indian PSBs (which account for around three-fourths of the total assets of Indian banking industry) are as low as 0.72 percent and gross NPAs are at 2.5 percent. However, Nitsure (2007) contends that once there is a slowdown in private expenditure and corporate earnings growth, companies on these banks' books will not be in a position to service their debts on time and there is a strong likelihood of generation of new NPAs. Moreover, he also suggests that with rising interest rates in the government bond market, the banks' treasury incomes have declined considerably. So banks will not have enough profits to make provisions for NPAs. Under these circumstances, management of NPAs is a difficult task. Therefore, my study focused on the problem of NPAs being faced by the public sector banks. Though industry-wise it is not a developed state yet, still it houses some of the best names in industry namely Tata Steel, HINDALCO of the AV Birla Group, BOC Gases, Uranium Corporation, SAIL, Heavy Engineering Corporation, Metallurgical Consultancy etc. Over a period of six years or so, there has been a spurt in credit demand in the entire sector like industry (mostly SMEs), personal, agriculture and other Small Scale Industries. With an objective of overall development of the country is very poor.

**Keywords:** Return on Advances (ROAD), Intermediation Cost to Total Assets(ICTA), Operating Profit to Total Assets(OPTA), Return on Net Worth(RONW), Net Profit to Total Income(NPTI) representing profitability ratios and Solvency Ratio (SR)

#### 1. Introduction

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The Non- Performing Asset (NPA) has emerged since over a decade as an alarming threat to the banking industry in our country sending distressing signals on the sustainability and endurability of the affected banks. A high level of NPAs suggests high probability of a large number of credit defaults that affect the profitability and not only affecting banks but also the whole economy. After nationalization, the initial mandate that banks were given was to expand their branch network, increase the savings rate and extend credit to the rural and SSI sector. This mandate has been achieved admirably. Since the early 180s the focus has shifted towards improving quality of assets and better risk management. The 'directed' lending approach has given way to more market driven practices. Classification of what an NPA is has changed with tightening of prudential norms. There have been noticeable improvements in the financial health of banks in terms of assets quality. Further, pre and post reform NPA levels are not strictly comparable as there has been a significant tightening of accounting norms. Banks were also required to classify all their loans and advances into four broad group

(a) Standard Assets (b) Sub-Standard Assets (c) Doubtful Assets (d) Loss Assets.

The usual practice in all banks was to recognize income from advances on "Actual basis" and take credit for interest accrued on all loans, over drafts etc., while closing books for an accounting year. This was the case even with advances doubtful of recovery because it was helpful in 'window dressing' of profits and was considered as a part of 'bottom Line Management'.

Reserve Bank of India (RBI) has given clear guidelines in determining when an asset becomes non performing which are briefly given below.

- a) Term Loans: when interest and /or installment of principal remains over due for more than 180 days, it should be considered as NPA.
- b) Cash Credit and Over Drafts: when the account remains 'out of order' for more than 180 days, they are to be considered as NPA. An account is out of order' if the outstanding balance is in excess of the sanctioned limit or drawing power or there are no credits for a continuous

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- period of 180days in the account or credits during the period are not enough to cover the interest debited.
- c) Bills Purchased and Discounted: if the bill remains over due for a period of more than 180days, it should be considered as NPA.
- d) Agriculture Advances: If advances to agricultural sector remain over due for two harvest seasons, not exceeding two half years, they are to be considered as NPA.
- e) Other Advances: when other advances remain over due for more than 180days, they are to be considered as NPA.

#### **Provision for NPA**

For the purpose of making provision for Non-Performing Assets, different advances of a bank are classified into four categories with variable provision, as explained in detail below.

- a) Standard Assets: it refers to those assets which do not pose any problems and which do not carry more than normal risk attached to the business. They are not Non-Performing Assets (NPA). Earlier no provisions was required on standard assets. However from the year ending 31.3.2003, banks are required to create a provision of 0.25% on standard assets also on global loan port folio basis and not on domestic advances alone.
- b) Sub-Standard Assets: with effect from 31.3.2001 a substandard assets is one which has been classified as NPA forNPAs are to be determined on 'Borrower basis' and not on the basis of each kind of advances separately. So, if an advance of one kind to a particular borrower becomes NPA, all other advances to him should be considered as NPAs. It is the usual practice to determine the status of different advances on the balance sheet date. The latest development regarding NPA is that RBI has instructed all commercial banks to classify from 1st April 1994, an advance as NPA if it is overdue or out of order etc.,(as mentioned in a, b, c, d and e above) for 90days instead of 180days. In fact, the 90days limit is the international practice. Period not exceeding 18 months. There is no promise of recovering the dues in full, having regard to the values of security or current net worth of the borrowing /guarantor, hence the possibility of loss in realizing such debts. Term loans in respect of which installments of principals are overdue for more than one year are treated as sub-standard assets. Also, the assets where terms of loans agreement regarding payment of interest and principal have been renegotiated, re-scheduled after commencement of production, should be treated as sub-standard assets. These assets may again be graded up to standard asset, if at least two years payments of principal and interest are made according to reshcheduled terms to the satisfaction of the banks. In the case of all substandard assets, a general provision of 10% is to be made on total outstanding amount.
- c) Doubtful assets: with effect from 31.3.2001. An asset is to be classified as doubtful, if it has remained NPA for a period exceeding 18 months. These assets are so weak that their collection or liquidation in full is considered highly improbable. A loan classified as doubtful has all the weakness, make collection or liquidation in full highly questionable and improbable on the basis of currently know facts, conditionals and values.

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There are two components for provision in respect of doubtful debts. They are as follows:

- 1) To the extent the debt is not covered by realizable value of the security, 100% provision is to be made.
- 2) in addition to the above (i) for the secured portion of the doubtful assets, provision is required to be made between 20% and 50% depending up on the period for which the asset has remained doubtful as given below:

Period for which the advances has been considered doubtful	Percentage of provision (%)
Up to one year	20
More than one year but up to three years	30
Above three years	50

d) Loss Assets: Loss assets are those which have been identified by the bank or internal auditors or the RBI inspection but the amount has not been written off wholly or partly. The committee on Banking Sector Reforms (Narasimhan committee II,1998) also emphasized this aspect and recommended gradual tightening of the prudential norms. RBI after examining the same and taking into account the performance of the banks, have further strengthened the prudential norms for commercial banks only, with a gradual time frame as follows: i) Provision for loans guaranteed by government and public financial institutions from 31.3 1999.ii) Income recognition and provisioning on government guaranteed advances on par with those on other advances with effect from 2000-2001.iii) Provision for standard assets @ 0.25% with effect from 31.3.2000. iv)The reduction of time frame from 24 months to 18 months for categorizing advances. To examine the growth of deposit and advances of selected banks. To ascertain the profitability of chosen banks.

#### 2. Review of Literature

Shahban Haneef and Tabassum Riaz(2012), under taken the study to investigate the inspect of risk management on non-performing loan and profitability of banking sectors of Pakistan. Five banks were selected for data collection and whole data was secondary in nature. The result of this study reveals that there is no proper mechanism for risk management in banking sectors of Pakistan. Study also concluded that non-performing loans are increasing due to lack of risk management which threatens the profitability of banks. This study provides suggestions that banking sector can avoid their non-performing loans by adopting methods suggested by state bank of Pakistan.

#### 2.1 Statement of the Problem

The present structure of commercial banks in India is characterized by a mix of public sector and private banks. The share of public sectors was around 2% in 1960. It increased to over 80% in 1987. A reverse trend is observed in respect of private sector banking. The share of private sector banks has declined from 98% in 1960 to less than 20% in 1987. The trend implies a reduction in the private sectors banks concentration of economic power in the hands of a few private individuals. The developing countries like

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India, still has a huge number of people who do not have access to banking services due to scattered and fragmented location. But the people who are availing banking services and their expectations are rising as the level of services is increasing due to the emergence of information technology and competition. While attempting the research questions are emerging:

How the NPA is managed by the private sector banks?

#### 2.2 Scope Of The Study

This study is undertaken to measure the financial performance of new generation private sectors commercial banks in India. The study will provide details about the NPA management of selected new generation private banks.

#### 2.3 Objectives Of The Study

The study based on above issues the main objectives framed for the present study are as follows:

- To study the growth of new generation private sectors bank like ICICI Bank, HDFC Bank, AXIS Bank, INDUSIND Bank.
- 2) To main focus the NPA management of selected new generation private sectors banks.

#### 2.4 Hypotheses

Keeping the above objectives and the data collected for this study in view, the following hypotheses were framed and tested.

- There is no significant linear relationship between NPA Ratio and selected ratios of AXIS Bank.
- There is no significant linear relationship between NPA Ratio and selected ratios of HDFC Bank.
- 3) There is no significant linear relationship between NPA Ratio and selected ratios of INDUSIND Bank.
- There is no significant linear relationship between NPA Ratio and selected ratios of ICICI Bank.

#### 2.5 Research Methodology

The present study is designed to analysis the NPA of new generation private sectors commercial banks in India banks are being segregated into three groups such as focus on deposit, borrowing, NPA's in this study only focus on NPA of new generation private sectors commercial banks. The study was selected lottery method. Then all the four banks which are based on new generation private sectors banks like AXIS Bank, HDFC Bank, INDUSIND Bank and ICICI Bank, and. The study comprises the secondary data pertaining to the study were collected from the head offices of selected banks, websites, journals, magazines, IFMR Library and various libraries of Tamilnadu universities.

#### 2.5.1 Data Collection

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The study comprises the secondary data only. The secondary data pertaining to the study were collected from the head offices of selected banks, websites, journals, magazines, IFMR library and various libraries of Tamilnadu universities.

#### 2.5.2 Statistical Tools Used

The collected data were codified, classified and then tabulated with the help of computer. Only one Statistical tool used such as person's correlation analysis were used.

#### 2.5.3 Period of Study

The secondary data were collected for the period of ten years from 2003-04 to 2012-13. Relationship of Gross NPA to Gross Advances Ratio (Npa Ratio) With Profitability And Solvancy Ratios- Correlation Analysis

The five profitability ratios and one solvency ratio have been tested for their association with NPA ratio to known the impact on NPA. The variables that have been chosen are Return on Advances (ROAD), Intermediation Cost to Total Assets(ICTA), Operating Profit to Total Assets(OPTA), Return on Net Worth(RONW), Net Profit to Total Income(NPTI) representing profitability ratios and Solvency Ratio (SR) representing solvency position of the banks. Pearson's correlation coefficient has been undertaken to know the relationship coefficient value of the selected variables.

#### a) Pearson's Correlation Analysis of Axis bank

The selected ratios of Axis Bank were analysed and the results are presented in Table.1

**Table 1:** Pearson's Correlation Analysis of Axis Bank

NPA ROAD (CICTA (OPTA	NPA 1.000	ROAD	ICTA	OPTA	DOMW	VIDTI	αD							
ROAD (CICTA (CICTA) (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA) (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA) (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA) (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA) (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA) (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA) (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA) (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA) (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA) (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA) (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA (CICTA)	1.000													
ICTA (OPTA														
OPTA														
DONIN														
RONW	RONW 0.099 0.080 0.525 -0.090 1.000													
NPTI -	NPTI -0.163 -0.142 -0.051 0.511 0.327 1.000													
SR -0.607 -0.659 -0.528 0.211 -0.403 0.337 1.000														
*. Correlation is Significant at the 0.05 level														
**. Correlat	**. Correlation is Significant at the 0.01 level													

Source: Compiled and calculated by using published RBI reports

Table.1 shows that the coefficient of correlation between NPA Ratio and ROAD Ratio is 0.986\*\*. It shows that there is a high degree of positive correlation between the two variables at 1% level of significance, the value of coefficient of correlation between NPA Ratio and ICTA is 0.647. It indicates that there is a moderate degree of positive correlation between these two variables. At 5 percent level of significance, the value of coefficient of correlation is found to be insignificant. Thirdly the coefficient of correlation between NPA Ratio and OPTA is 0.184. It reveals that there is a low degree of positive correlation between the two variables and it is significant at 5% level. Fourthly the coefficient of correlation between NPA Ratio and RONW is 0.099. It shows that there is a low degree of positive correlation between these two variables and it is insignificant at 5% level. Fifthly the coefficient of correlation between NPA Ratio is -0.163. At 5 percent level of significance the value of coefficient of correlation is found to be insignificance. Lastly, the coefficient of correlation between NPA Ratio and Solvency Ratio is -0.607. It shows that there is very low degree of negative correlation between these two variables. At 5 percent level

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of significance the value of coefficient of correlation is found to be insignificance.

#### b) Pearson's Correlation Analysis of HDFC Bank

The selected ratios of HDFC Bank were analysed and the results are presented in Table 2

**Table 2:** Pearson's Correlation Analysis of HDFC Bank

RATIOS													
NPA													
ICTA -0.832   0.962**   1.000													
OPTA -0.641   0.664*   0.588   1.000													
RONW 0.167 -0.174 0.028 -0.222 1.000													
NPTI 0.531 -0.730 -0.624 -0.598 0.306 1.000													
SR -0.647 0.671* 0.776** 0.129 0.112 -0.124 1.000													
*. Correlation is significant at the 0.05 level													
	**. Co	rrelation	is signif	icant at tl	he 0.01 le	vel							

Source: Compiled and calculated by using published RBI reports Table.2 reveals that the coefficient of correlation between NPA Ratio and ROAD is -0.890. It shows that there is a low degree of negative correlation between the two variables and it is insignificant at 5% significance level. The coefficient of correlation between NPA Ratio and ICTA is -0.832. At 5 percent level of significance, the value of coefficient of correlation is found to be insignificant.

#### c) Pearson's Correlation Analysis of INDUSIND Bank

The selected ratios of INDUSLND Bank were analysed and the results are presented in table.3

Table 3: Pearson's Correlation Analysis Of Indusind Bank

RATI	NPA	ROA	ICTA	OPTA	RONW	NPTI	SR
OS	NPA	D	ICIA	OPTA	RONW	NPII	SK
NPA	1.000						
ROA D	-0.810	1.000					
ICTA	-0.796	0.859	1.000				
OPTA	0.189	0.161	-0.317	1.000			
RON W	0.505	- 0.164	-0.549	0.880**	1.000		
NPTI	0.270	0.052	-0.416	0.977**	0.943**	1.00	
SR	0.891*	0.844	-0.740	-0.064	0.366	0.06 6	1.0 00
*. Corre	lation is	Signific	ant at the	0.05 lev	el		

\*\*. Correlation is Significant at the 0.01 level

Source: Compiled and calculated by using published RBI reports

Table .3 reveals that the coefficient of correlation between NPA Ratio and ROAD is -0.810. It shows that there is a low degree of negative correlation between the two variables and it is insignificant at 5% significance level. The coefficient of correlation between NPA Ratio and ICTA is -0.796 Ratio and RONW is 0.505. The value of coefficient of correlation is found to be significant.

#### d) Pearson's Correlation Analysis of ICICI Bank

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The selected ratios of ICICI Bank were analysed and the results are presented in table .4

**Table 4:** Pearson's Correlation Analysis of ICICI Bank

RATIOS NPA ROAD ICTA OPTA RONW NPTI SI											
NPA 1.000											
ROAD -0.394   1.000											
ICTA -0.116   0.865**   1.000											
OPTA   -0.697   0.585   0.147   1.000											
RONW 0.783** -0.164 0.001 -0.508 1.000											
NPTI 0.086 -0.449 -0.661 0.054 0.364 1.000											
SR 0.841** -0.346 0.033 -0.858 0.677* -0.198 1.000											
*. Correlation is significant at the 0.05 level .											
	**. Corr	elation is	signific	ant at th	ne 0.01 le	evel					

Source: Compiled and calculated by using published RBI reports

Table .4 reveals that the coefficient of correlation between NPA Ratio and ROAD is -0.394. It shows that there is a low degree of negative correlation between the two variables and it is insignificant at 5% significance level. The coefficient of correlation between NPA Ratio and ICTA is -0.116. It shows that there is a low degree of negative correlation between the two variables and it is insignificant at 5% significance level. Thirty, the coefficient of correlation between NPA Ratio and OPTA is -0.679. It shows that there is a high degree of positive correlation between these two variables.

# 3. Impact of Selected Ratios on NPA- Multiple Regression Analysis

In order to understand influence of selected ratios on NPA, a Liner Multiple Regression Analysis Model was used. Multiple regression techniques have been applied and impact of selected ratios on NPA of the bank, the regression coefficient has been tested with the assistance of the most popular, t test. In this analysis, the selected ratios, namely ROAD, ICTA, OPTA, RONW, NPTI and SR have been taken as an independent variables and NPA Ratio has been used as the dependent variables. The Regression is estimated using the linear multiple regression methods. The model which is applied is as follows.

NPA = $\beta_0 + \beta_1$  ROAD +  $\beta_2$  ICTA+  $\beta_3$  OPTA +  $\beta_4$  RONW +  $\beta_5$  NPTI +  $\beta_6$  SR+  $\in$ 

Where, NPA = Gross NPA to Gross Advances

 $\beta_0\!=Interest$ 

 $\beta_1$ ,  $\beta_2$ ,  $\beta_3$ ,  $\beta_4$ ,  $\beta_5$  and  $\beta_6$  = Regression coefficient

ROAD = Return on Advances

ICTA= Intermediation Cost to Total Assets

OPTA = Operating Profit to Total Assets

RONW = Return on Net Worth

NPTI= Net Profit to Total Income

SR = Solvency Ratio

€ = Error Term (Residual)

#### a) Multiple Regression Analysis of AXIS Bank

A null hypothesis is constructed to analyse the impact of selected ratios on NPA Ratio of AXIS Bank.

Ho: There is no significant liner relationship between NPA Ratio and selected Ratios of AXIS Bank

The selected ratios of AXIS Bank are analysed for the period from 2003-04 to 2012-13. The results are shown in Table.5. The regression coefficient are estimated for selected independent variables (ROAD,ICTA,OPTA,RONW,NPTI,SR).

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<b>Table 5:</b> Multiple Regression Analysis Of Axis Bank
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MODEL SUMN			AN	OVA					
Multiple R	0.9360	Sources	Sources Sum of Squares df Mean Square		F	Sig			
R Square	0.8770	Regression	1.314	6	0.219	3.551	0.163		
Adjusted R Square	0.6300	Residual	0.185	3	0.62				
Std. Error	0.2483	Total	1.499	1.499 9					
NPA Ratio	Regression Coefficient		Std. Error		t		Sig		
CONSTAND	-2.4313		4.8131		-0.5051	0.0	5482		
ROAD	0.6136		0.7120		0.8617	0.4522			
ICTA	-1.3	-1.3362		0.7520		0.1737			
OPTA	1.1	1.1676		1.8992		0.5822			
RONW	-0.1	-0.1376		0.2094		-0.6573 0.5			
NPTI	-0.3	-0.3821		0.3973		0.4	4071		
SR	0.2075		0.2087		0.9943	0	3934		
* Significant at the 0.0	5 level								
** Significant at the 0.05 level									

Source: Compiled and calculated by using published RBI reports

Table.5 represents the statistical significance of the mode. The R Square,. Here constant is -2.4313. This analysis given the following equation. NPA = -2.4313+ 0.6136 ROAD-1.3362 ICTA1+.1676 OPTA -0.1376 RONW -0.3821 NPTI +0.2075SR.. Hence, the null hypothesis is accepted.

#### b) Multiple Regression Analysis of HDFC Bank

A null hypothesis is constructed to analyse the impact of selected ratios on NPA Ratio of HDFC Bank.Ho: There is no significant liner relationship between NPA Ratio and selected Ratios of HDFC Bank

**Table 6:** Multiple Regression Analysis Of Hdfc Bank

MODEL SUI	MMARY	A	NOVA							
Multiple R	0.9410	Sources Sum of Squares Df			Mean Square	F	Sig			
R Square	0.8863	Regression	Regression 1.3285 6		0.2214	3.8989	0.1460			
Adjusted R Square	0.6590	Residual	0.1704	3	0.0568					
Std. Error	0.2383	Total	Total 1.4989 9							
NPA Ratio Regression Coefficient			Std. Error	•	t		Sig			
CONSTAND	5.782	5.7820		2.7204		0.1235				
ROAD	-0.442	28	0.2534		-1.7475	0.1789				
ICTA	ICTA 0.5870			0.5188		0.3402				
OPTA	A -0.5624			0.7907		0.5282				
RONW	-0.0469		0.0683		-0.6874	0.5412				
NPTI	-0.0387		0.0973	0.0973		0	.7177			
SR	-0.042	21	0.0637	0.0637		0	.5564			
	* Significant at the 0.05 level									
		* * S	ignificant at the 0.0.	5 level		•				

Source: Compiled and calculated by using published RBI reports

Table.6 represents the statistical significance of the mode. The R Square,. Here constant is 5.7820, This analysis given the following equation. NPA = 5.7820- 0.4428 ROAD+0.5870 ICTA -0.5624 OPTA -0.0469 RONW -0.0387 NPTI -0.0421SRThe result of this regression model shown in Table 5.15 that all the six independent variables (ROAD, ICTA, OPTA, RONW, NPTI, SR) have insignificant influence on NPA Ratio. Hence, the null hypothesis is accepted.

A null hypothesis is constructed to analyse the impact of selected ratios on NPA Ratio of **INDUSIND** Bank.

Ho: There is no significant liner relationship between NPA Ratio and selected Ratios of **INDUSIND** Bank

The selected ratios of **INDUSIND** Bank are analysed for the period from 2003-04 to 2012-13. The results are shown in Table 5.16. The regression coefficients are estimated for selected independent variables (ROAD, ICTA, OPTA, RONW, NPTI, SR).

# c) Multiple Regression Analysis of INDUSIND Bank

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Table 7: Multiple Regression Analysis of Indusind Bank

MODELSUMMARY		ANOVA						
Multiple R	0.9760	Sources	Sum of Squares	df	Mean Square	F	Sig	
R Square	0.9519	Regression	1.4268	6	0.2378	9.8995	0.04 40	
Adjusted R Square	0.8558	Residual	0.0721 3		0.0240			
Std. Error	0.1550	Total	1.4989	9				
NPA Ratio	Regression Coefficient		Std. Error		T	Sig		
CONSTAND	-10.1222		6.1833		-1.6370	0.200	1	
ROAD	-0.460	6	0.2508		-1.8368	0.1636	5	
ICTA	0.6044	1	0.3792		1.5939	0.2092	2	

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OPTA 0.6212 0.3797 1.6359 0.2004									
RONW	NW -0.1213 0.0966 -1.2552 0.2983								
NPTI 0.1587 0.1785 0.8889 0.4395									
SR 0.1376 0.0684 2.0134 0.1375									
* Significant at the 0.05 level									
** Significant at the 0	** Significant at the 0.05 level								

Source: Compiled and calculated by using published RBI reports

Table.7 represents the statistical significance of the mode. The R Square, also called the coefficient of multiple determinants, is the percent of variance in the dependent explained uniquely or jointly by the independent variable and is 95.19%. The constant, where the regression intercepts the Y axis, representing the value of the dependent Y will be when all the independent variables are 0. Here constant is -10.1222. This analysis gives the following equation. NPA = -10.1222 -0.4606 ROAD+0.6044 ICTA+0.6212 OPTA -0.1213 RONW +0.1587 NPTI+0.1376 SRThe result of this regression model shown in Table 5.16 is clear that all the six independent variables (ROAD, ICTA, OPTA, RONW, NPTI, SR) have significant influence on NPA Ratio. Hence, the null hypothesis is rejected.

#### d) Multiple Regression Analysis of ICICI Bank

A null hypothesis is constructed to analyse the impact of selected ratios on NPA Ratio of **ICICI** Bank.

Ho: There is no significant liner relationship between NPA Ratio and selected Ratios of ICICI Bank

The selected ratios of **ICICI** Bank are analysed for the period from 2003-04 to 2012-13. The results are shown in Table.8 The regression coefficients are estimated for selected independent variables (ROAD, ICTA, OPTA, RONW, NPTI, SR).

Table 8: Multiple Regression Analysis of ICICI Bank

Model Summe	ary		I	ANOVA	1		
Multiple R	0.9120	Sources	Sum of Squares	Df	Mean Square	F	Sig
R Square	0.8322 Regression		1.2474	6	0.2079	2.480	0.2440
Adjusted R Square	0.4967	Residual	0.2515	3	0.0838		
Std.Error	0.2895	Total	1.4989	9			
NPA Ratio	Regression Coefficient		Std.Error		T	S	ig
CONSTAND	-2.7793		10.9165		-0.2546	0.8	155
ROAD	-0.2363		0.4982		-0.4744	0.6	676
ICTA	A 0.1386				0.2007	0.8	538
OPTA	1.1887		0.3916	0.7	215		
RONW	0.0657		0.0953		0.6896 0.5400		400
NPTI	-0.0	0275	0.1396	0.1396		0.8	564
SR 0.0521			0.1180		0.4415	0.6	887
* Significant at the 0.05	level .			•	•	•	
** Significant at the 0.0	)5 level .			•	•	•	

Source: Compiled and calculated by using published RBI reports

Table.8 represents the statistical significance of the mode. The R Square, also called the coefficient of multiple determinants, is the percent of variance in the dependent explained uniquely or jointly by the independent variable and is 83.22%. The constant, where the regression intercepts the Y axis, representing the value of the dependent Y will be when all the independent variables are 0. Here constant is -2.7793 The trend over the ten years period from 2003-04 to 2012-13 shows that ICICI Bank was performed well and INDUSIND Bank was the poor in NPA Management.

#### 4. Conclusion

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The Private Sector Banks have done well as far as lending to the priority sector is concerned. However, it is not enough to make lending to this sector mandatory; it must be made profitable by sharply reducing the transaction costs. This entails faster embracing of technology and minimizing documentation. The private sectors Commercial Banks should be allowed to come up with their own measures to address the problem of NPAs. This may include waiving and reducing the principal and interest on such loans, or extending the loans, or settling the loan accounts. They

should be fully authorized and they should be able to apply all the preferential policies granted to the asset management companies. Another way to manage the NPAs by the banks is Compromise Settlement Schemes or One Time Settlement Schemes. However, under such schemes the banks keep the actual amount recovered.

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