



Non-Performing Assets (NPA): Comparative Analysis on HDFC Bank, ICICI Bank and Axis Bank.

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ABSTRACT

Banking sector plays an important role in the development of an economy. Any problem in this sector will often extend to real sector. Assets quality was not a prime concern of the banks till 1991. Banks mainly focused on expansion, development of rural areas, priority sector lending etc. But now the prime challenge is mounting pressure of NPAs. NPAs engulf the public sector banks as well as private sector also. It not only affects the banking sector but the whole economy as well. Banks often lean into the risk-free investment that is not conducive for the growth of economy. This paper studies the trend of NPAs of leading private sector banks and suggests measures to minimize it.

Keywords:

Gross NPA's

Net NPA's

Advances

Provision,

Net profit

Private sector Banks

Karl Pearson's Correlation Coefficient

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1. INTRODUCTION

With the introduction of economic reforms on the recommendation of Narasimhan Committee the Indian financial and banking sector has undergone a significant conversion and transformation from a regulated environment to a deregulated market-based economy. The market players are now in a cut-throat competition and try to adopt international best practices of all their activities inter alia non-performing assets (NPAs) to restore financial health. The Indian banking sector did not bother about asset quality rather they focused on widening the network / branches, priority sector lending, employment generation etc. till 1991. As a result, the asset quality has been deteriorating day by day and the mounting pressure of NPAs becomes the major concern of the financial and banking sector.

2. Conceptual Background of NPA's

2.1 What is NPA:

Non-Performing Asset (NPA) refers to an asset, when it ceases to generate income for any bank or finance company for more than 90 days. With effect from 31st March 2004 a non-performing assets (NPAs) shall be a loan or an advance where:

- i. Interest and / or instalment of principal remain overdue for a period of more than 90 days in respect of a term loan,
- ii. The account remains out of order for a period of more than 90 days, in respect of an Overdraft/ Cash credit,
- iii. The bills remain overdue for a period of more than 90 days in the case of bills purchased and discounted,
- iv. Interest and / or instalment of principal remains overdue for two harvest seasons but for a period not exceeding two half years in the case of an advance granted for agricultural purposes and
- v. Any amount to be received remains overdue for a period of more than 90 days in respect of other accounts.

(Any amount due to the bank under any credit facility is 'overdue' if it is not paid on the due date fixed by the bank)

2.2 Assets Classification and provisioning norms:

Banks are required to classify their loan assets into the following four groups, viz.

- i. Standard Assets
- ii. Sub-standard Assets
- iii. Doubtful Assets and
- iv. Loss Assets

Standard Assets: Standard assets are those which do not disclose any problem and do not carry more than normal risk attached to the business. Such assets are considered as **Performing assets**. A general provision of 0.25% has to be provided on global loan portfolio basis.

All non-standard assets are **Non-Performing Assets**. These are:



Sub- standard Assets: An asset which has remained NPA for a period less than or equal to 12 months. The assets are characterized by distinct possibility that bank will sustain some loss. A provision of 10% on outstanding amount has to be provided on sub-standard assets.

Doubtful Assets: Doubtful assets are those which have remained NPAs for a period exceeding 12 months and which are not considered as loss assets. Banks must provide 100% of the unsecured portion of the outstanding advance after netting realized amount in respect of DICGC scheme (Deposit Insurance and Credit Guarantee Corporation) and realized/ realizable amount of guarantee cover under ECGC (Export Credit Guarantee Corporation) schemes.

Loss assets: A loss asset is one where loss has been identified by the bank or internal or external auditor or the RBI inspection, but the amount has not been written off wholly or partly. In other words, such an asset is considered uncollectible and of such little value that its continuance as bankable asset is not warranted although there may be some salvage or recovery value. However, only those advances are classifying as loss assets where no security is available. The accounts in relation to which some security/DICGC/ECGC cover is available cannot be treated as loss assets. Banks are to provide 100% provision regarding loss assets.

2.3 Types of NPAs:

NPAs may be classified into two groups, namely Gross NPA and Net NPA.

Gross NPA: Gross NPA is the advance which is considered irrecoverable, for which bank has made provisions and which are still held in bank's books of account. In other words, it is the sum total of all non-standard assets i.e. sub-standard assets, doubtful assets and loss assets.

Net NPA: Net NPA shows the actual burden of banks. The RBI defines net NPA as: $\text{Net NPA} = \text{Gross NPA} - (\text{Balance in Interest Suspense account} + \text{DICGC/ECGC claims received and held pending adjustment} + \text{Part payment received and kept in suspense account} + \text{Total provisions held})$.

2.4 Factors for rise in NPAs:

The factors behind the rising NPAs may be of two types, one internal factors and other external factors.

Internal factors:

- i. Poor credit appraisal selects those who are not able to repay the loan.
- ii. Absence of regular industrial visit decreases the collection of interest and principals.
- iii. Lack of post credit supervision
- iv. Absence of enough securities
- v. Socio-political pressure on credit decision
- vi. Compulsory lending to priority sectors
- vii. Re-loaning to defaulters
- viii. Lack of effective NPA management

External factors:

- i. Natural calamities
- ii. Adoption of obsolete technology by the borrowed firm
- iii. Labour problems of borrowed firm



- iv. Lack of demand of the product of borrowed firm
- v. Diversification of loans and not being used for the particular purpose
- vi. Wilful default / fraud
- vii. Political pronouncements like debt relief

2.5 Impacts of NPAs:

The growing NPAs have tremendous effect on the bank itself as well as the whole economy. The consequences are:

- ❖ Profitability of the banks hampered severely by the presence of NPAs. It's a two-way sword. Banks do not earn any income from it rather they have to provide for it.
- ❖ Rising NPAs change the banker's sentiment towards lending which may hinder the credit expansion to productive purpose.
- ❖ Banks may incline towards risk free investment which is not conducive for the growth of economy.
- ❖ Banks may increase rate of interest to compensate the loss on NPAs, which in turn affects the viability of many running units.
- ❖ NPAs will reduce the earning capacity of assets and badly affects the return on investment (ROI).
- ❖ Higher provisioning requirement on mounting NPAs adversely affects the Capital adequacy ratio (Capital to Risk Adjusted Assets Ratio).
- ❖ The Economic value addition (EVA) by banks gets upset because EVA is equal to the net operating profit minus cost of capital.
- ❖ NPAs cause to decrease the value of share sometimes even below their book value in the capital market.

3. Review of Literature:

There is a plethora of articles regarding non-performing assets. Many researchers have studied the issue considering its importance in the economy. A review of the relevant contemporary literature is done as follows:

Shah and Sharma (2016) suggest for setting up a special committee for the management of NPAs comprising of legal experts and persons having knowledge in finance sector. Sahoo (2015) opines that unless NPAs are managed effectively and quickly it will mar the financial inclusion as well as infrastructure development in the country.

Jana and Thakur (2015) suggest SLP principle in sanctioning and advancing loan. Principle of safety (S), principle of liquidity (L) of security and principle of profitability (P) are the three deciding factors to swim over the bulging tide of NPAs.

Mahajan (2014) thinks that top management of private and foreign banks is more professional and core competent than public sector bank in NPA management.

Shalini, H S (2013) in her study suggests for checking economic viability of the project before sanctioning loan to borrowers. **Selvarajan & Vadivalagan** (2013) call for special attention towards the NPA management. Appropriate steps should be taken to arrest the creation of new NPAs, besides making recoveries of the existing NPAs.



Kumar, P T (2013) gave importance to the quality of loan portfolio as it is very crucial for the health and existence of the bank. High level of NPAs affects the profitability, productivity, liquidity, capital adequacy and solvency of the bank.

Chatterjee, Mukherjee and Das (2012) have concluded that banks should find out the original reasons/purposes of the loan required by the borrower. Proper identification of the guarantor should be checked by banks including scrutiny of his / her wealth.

4. RESEARCH METHODOLOGY:

A. Topic of Research:

Comparative Analysis of NPA's on HDFC Bank, ICICI Bank and Axis Bank.

B. Aim of Research:

The present study is taken to analyze the comparative performance of the leading private sector banks regarding NPA's.

C. Objectives:

The objectives of the undertaken study are:

- i. To compare and highlight the trend of the Gross NPA and Net NPA of HDFC Bank, ICICI Bank and Axis Bank.
- ii. To study the correlation between Net profit and Net NPA.
- iii. To suggest measures for efficient management of NPAs.

D. Limitations:

Some of the limitations of the undertaken study are:

- i. The study is limited to the selected 3 private sector banks only.
- ii. The study covers a period of 5 years only from 2012-13 to 2016-17.
- iii. The study is based on secondary data and so its inherent limitations.

E. Profile of Banks:

i. HDFC Bank:

HDFC Bank is an Indian banking and financial services company incorporated in 1994 by Housing Development Finance Corporation (HDFC), India's largest housing finance company. The bank started its operations as a schedule commercial bank in January 1995. It is the largest bank in India by market capitalization as on February 2016.

ii. ICICI Bank:

ICICI Bank is an Indian multinational banking and financial services company established by the Industrial Credit and Investment Corporation of India (ICICI). The parent company was merged with the bank in 2001. In 2000, ICICI Bank became the first Indian bank to list on New York Stock Exchange with its 5 million American Depository Receipts shares issue generating a demand book 13 times the offer size. In 2014, it was the second largest bank in India in terms of assets and third in term of market capitalization.

iii. Axis Bank:

Axis Bank is the third largest of the private sector bank in India offering a comprehensive suite of financial products. The name has been officially changed to the Axis Bank Ltd with effect from 30th July 2007. The Bank was promoted in 1993 jointly by the Administrator of the Unit Trust of India (UTI-I), Life Insurance Corporation of India, General Insurance Corporation, National Insurance Company, The New India Assurance Company, The Oriental Insurance Corporation and United India Insurance Company.

F. Data Collection:

The study is based on Secondary data available from

- RBI website.
- Websites of concerned banks from their annual reports and other reports.
- Other published materials such as research papers, journals, books etc.

G. Data Analysis Tools:

- Ratio analysis has been used for analyzing the trend of NPAs.
- Bar diagram is used to show the comparative situation of the banks.
- Pearson's Correlation coefficient is used to explore the relationship between net profit and NPAs.

5. DATA ANALYSIS

Data has been collected from the annual reports of the respective private sector banks. The basis studying trend of NPAs is ratio of Gross Non- Performing Assets (GNPAs) and ratio of Net Non-Performing Assets (NNPAs). Both are shown in terms of percentage. Ratio of GNPAs = Gross NPAs / Gross advances. The following table shows the year wise Gross NPAs and ratio of Gross NPAs of the three selected banks.

GROSS NPA:

Table I: Gross NPA's

(Rs in Crores)

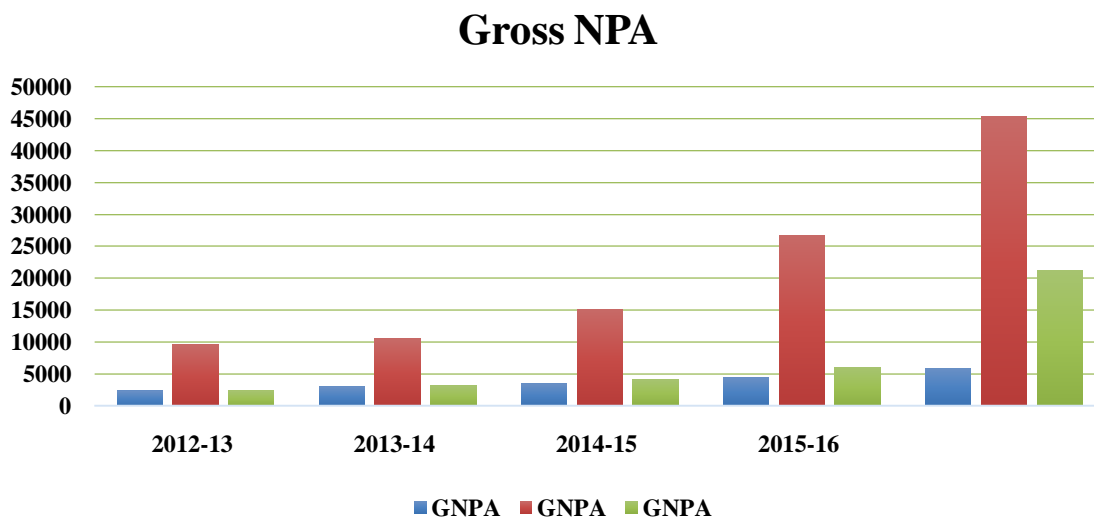
Year	HDFC		ICICI		AXIS	
	GNPA	GNPA %	GNPA	GNPA %	GNPA	GNPA%
2012-13	2334.64	0.97	9607.75	3.22	2393.42	1.06
2013-14	2989.28	1.00	10505.84	3.03	3146.41	1.22
2014-15	3438.38	0.90	15094.69	3.78	4110.19	1.34
2015-16	4392.83	0.94	26721.00	5.82	6087.51	1.67
2016-17	5885.66	1.05	45252.00	8.74	21280.50	5.21
Total	19040.79	4.86	107181.28	24.59	37018.03	10.5
Average	3808.15	0.97	21436.25	4.91	7403.60	2.1

From the Table 1, it is evident that the NPA problem is more acute in case of ICICI bank. The time series data shows an increase of NPAs in respect of all the banks. The GNPA of HDFC Bank is increased from Rs. 2334.64 crores to Rs. 5885.66 crores in 2016-17. On the other hand, in case of ICICI Bank, the GNPA is increased from Rs. 9607.75 crores in 2012-13 to Rs. 45,252 crores in 2016-17, which is the highest among 3 banks. The GNPA situation in Axis Bank is Rs.2393.42 crores in 2012-13 and increased to Rs. 6087.51crores in 2015-16, which



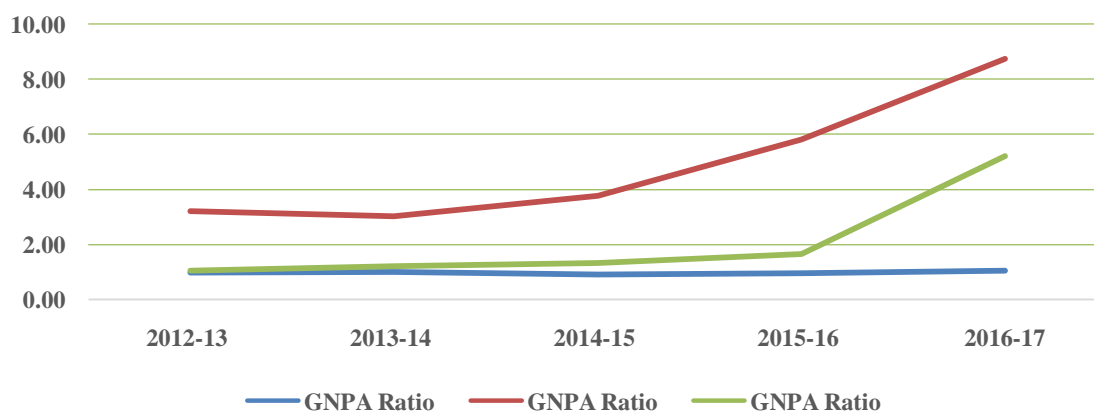
was increasing steadily but in 2016-17 it raised to Rs. 21280.5 crores. The top management of HDFC Bank has kept the ratio of NPAs under control and the average NPAs ratio is 0.97%. The increasing trend of GNPA's ratio is somehow reduced in 2012-13 and 2013-14 in case of ICICI Bank but from 2014-15 it is again uprising. The ratio of NPAs of Axis Bank is ever increasing. Although the NPAs ratio is not alarming one till 2015-16 but in 2016-17 it has raised in huge amounts.

Graph 1: Gross Net Performing Assets.



Graph 2: Gross Non-Performing Assets Ratio

GNPA Ratio



From the above Graphs, it is clear that the ratio of Gross NPAs in case of ICICI Bank is worst one among the three banks.

NET NPA:

The following paragraph shows the magnitude of net NPAs and ratio of net NPAs. Ratio of NNPA = Net NPAs / Net Advance. The following table shows the year wise Net NPAs and ratio of Net NPAs of selected banks.

TABLE II: Net NPA and Ratio of Net NPA of Banks

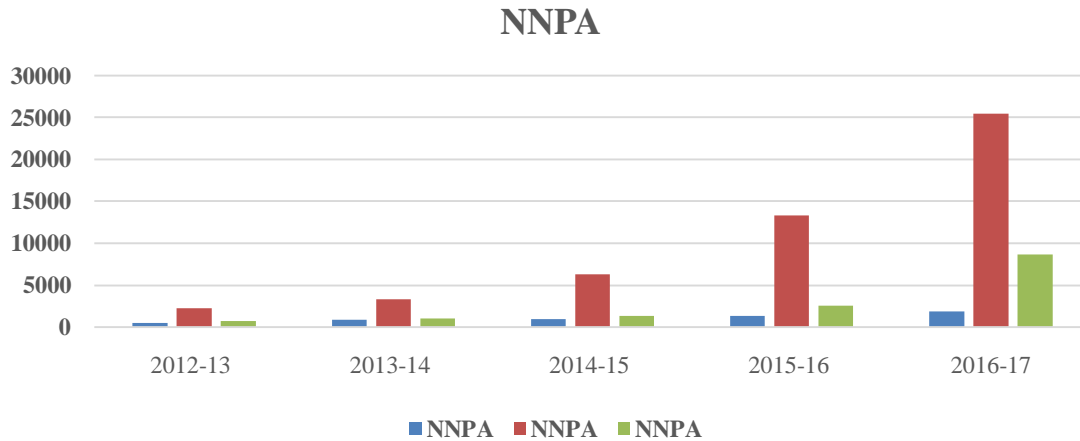
(Rs. In Crores)

Year	HDFC		ICICI		AXIS	
	NNPA	NNPA %	NNPA	NNPA %	NNPA	NNPA%
2012-13	468.95	0.20	2230.56	0.77	704.13	0.32
2013-14	820.03	0.30	3297.96	0.97	1024.62	0.40
2014-15	896.28	0.20	6255.53	1.61	1316.71	0.44
2015-16	1320.37	0.28	13297.00	2.98	2522.14	0.74
2016-17	1843.99	0.33	25451.00	5.43	8626.55	2.27
Total	5349.62	1.31	50532.05	11.76	14194.15	4.17
Average	1069.924	0.262	10106.41	2.352	2838.83	0.834

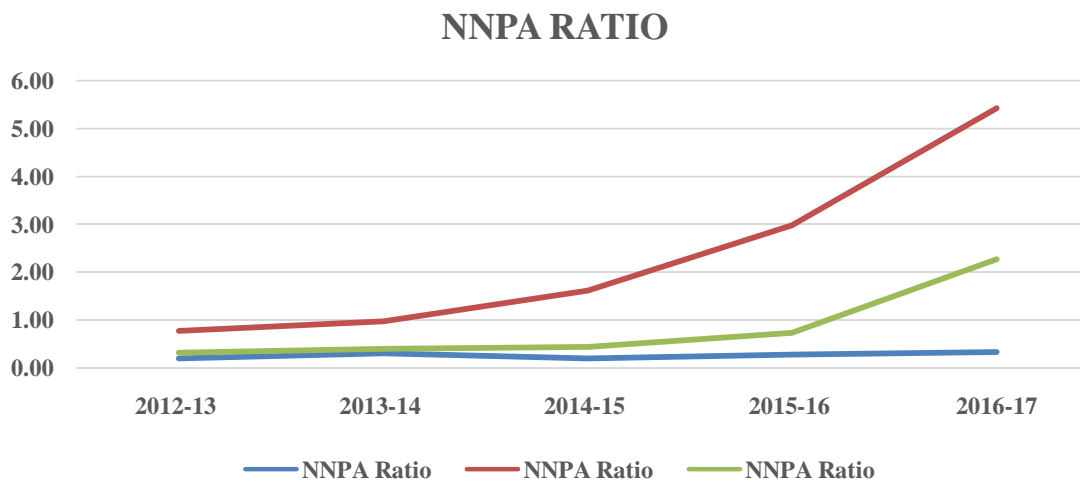
Table II shows that the magnitude of net NPAs of all the banks has been consistently increased during the years of study. In case of HDFC Bank net NPAs was Rs. 468.95 crores in the year 2012-13 and rose to Rs. 1843.99 in 2016-17. On the other hand, it increased from Rs. 2230.56 crores to Rs. 25451 crores in five years in case of ICICI Bank. The net NPAs of Axis Bank was

Rs. 704.13 crores in 2012-13 and it rose to Rs. 8626.55 crores in 2016-17. The average net NPAs of both HDFC Bank and Axis Bank are below 1% where as in case of ICICI Bank is more than 1%.

GRAPH 3: Net Non-Performing Assets.



Graph 4: Net Non-Performing Assets Ratio



We now try to examine whether the NPAs have any significant impact on the net profit of the respective banks. The following Table III shows the Pearson’s correlation coefficient between net profit and gross NPAs.

Table III: Correlation coefficient between Gross NPA and Net Profit

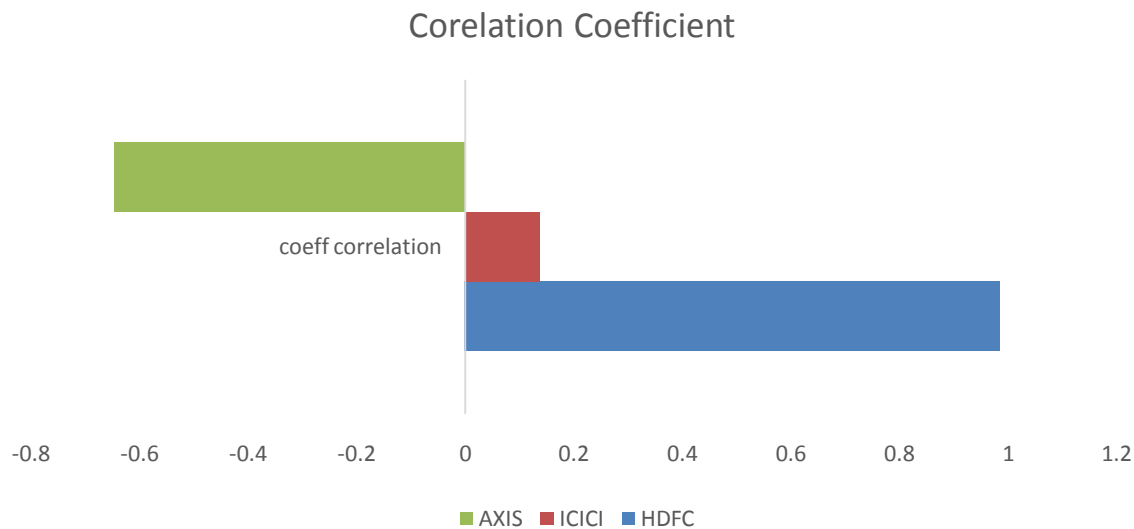
(Rs. in Crores)

Year	HDFC		ICICI		AXIS	
	GNPA	Net Profit	GNPA	Net Profit	GNPA	Net Profit
2012-13	2334.64	6726.28	9607.75	8325.47	2393.42	5179.43
2013-14	2989.28	8478.4	10505.84	9810.48	3146.41	6217.67
2014-15	3438.38	10215.92	15094.69	11175.35	4110.19	7357.82
2015-16	4392.83	12296.23	26221.25	9726.29	6087.5	8223.66
2016-17	5885.66	14549.64	45252	9801.09	21280.5	3679.28
Correlation coefficient	0.98500016		0.137371334		-0.645688199	

From the Table III it has been seen that the Pearson's Correlation Coefficients are 0.98500016, 0.137371334, -0.645688199 in case of HDFC Bank, ICICI Bank and Axis Bank respectively. The negative correlation coefficient between net profit and gross NPAs means an increase in GNPA's will decrease net profit of the bank. It is a logical conclusion because profitability of a bank depends upon the recovery of loans and existence of bad loan will jeopardize it. But in case of HDFC Bank and ICICI Bank, the correlation coefficients are positive. Does it indicate more NPAs lead to more profit? The answer is certainly not. The magnitude of gross advance is increased year after year and so the interest income and consequently profit of the bank also. Most of the borrower pays their instalments timely. Only a small portion failed to discharge their liability. If the NPAs were big enough the profit will decrease. So, it is seen that net profit as well as NPAs both are increased simultaneously, and a positive correlation exist between them. But it is the fact that absence of the NPAs will boost up the profit of the banks. Besides, income from a variety of financial services like stock broking services, investment banking, mutual funds, life and general insurance, custodian services, issue of credit cards etc. have a positive effect on net profit.

GRAPH 5: Correlation Coefficient

The following Figure 3 shows the correlation coefficient between net profit and gross NPAs. It has been seen that correlation coefficient is positive in case of HDFC Bank and ICICI Bank whereas in case of Axis Bank it is negative.



6. CONCLUSION AND SUGGESTIONS

We have an insight into the NPAs of the three leading private sector banks in India from the above study. Complete elimination of NPAs is perhaps impossible in banking business. The situation of HDFC Bank and Axis Bank regarding NPAs is praiseworthy but the situation of ICICI Bank is fearful as the ratio of net NPAs is increasing by leaps and bounds. The top management should look forward to check it. The management of NPAs is a very challenging task. It requires Preventive measures as well as Curative measures i.e. banks should not only take steps to reduce the present NPAs but also take precaution to avoid future NPAs.

Preventive measures include:

- Inculcating ethics in borrowers regarding the importance of timely repayment of credit,
- Adherence of proper credit appraisal techniques,
- Proper evaluation of projects,
- Timely sanction and disbursement of credit,
- Proper credit monitoring to restrict any misuse and diversion of fund,
- Assisting borrowers in developing entrepreneurial skill,
- Follow up of SLP (security, liquidity and profitability) principle etc.

On the other hand, curative measures may be as follows:

- Post sanction follow up,
- Banning political loan waiver scheme (sometimes an impression works that credit is a gift for political loyalty) and giving incentives for timely repayment



- Restructure of loan in case of reasons beyond control like natural calamities, global recession etc.,
- Effective implementation of existing acts like DTR Act / SARFAESI Act etc. (International rating agency FITCHIBCA observed that Indian legal system is sympathetic towards the borrowers and works against the banks interest),
- Visit to the borrowing units with regular interval,
- Circulation of information of defaulters among banks,
- Treating willful default as criminal offence and time bound strong penal measures against them.

NPAs affect the banks financially and psychologically. It affects interest income, profits of the banks and makes the credit costly and at the same time bankers will be reluctant to sanction loan. Thus, it is not just a problem for the banks but for the economy too and an all-out effort to be taken to keep it at its minimum level.

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