

A Study on Comparative Analysis of Non-Performing Assets in Selected Private Sector Bankst

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DOI: 10.29322/IJSRP.9.04.2019.p8843

<http://dx.doi.org/10.29322/IJSRP.9.04.2019.p8843>

Abstract- Banking is the fastest growing economy in India. A major consequence faced by banks nowadays is Non – Performing Assets. A high level of NPA in banks will increase the credit values and affects the profit of banks. Thus, the banks will lose their investment for the long turn. The main objective of the study is to highlight the NPA trend growth of each banks and the Correlation Analysis of Net Profit and Net NPAs of each bank. The study is descriptive in nature and secondary data are collected and analyzed using Trend Ratio, Current Ratio, Assets on Equity Ratio and Pearson Correlation Co-efficient Analysis to examining NPAs, Net Profit and Assets quality of banks. The study is observed for the financial years from 2013-14 to 2017-18, Annual Reports of Selected Private Sector Banks such as Axis Bank, Federal Bank, IndusInd Bank. The trend analysis is used to understand the increasing profitability and bad loans structures in the banks and Correlation Analysis is used to compare the Net NPA and Net Profit. Through the study, it was concluded that IndusInd Bank is having positive growth in Net Profit as well as growth in NPAs which is not affecting the banking performance when comparing with other two banks.

Index Terms- NPA, Trend Ratio, Current Ratio, Correlation Co-efficient, Net Profit, Performance

I. INTRODUCTION

N1.1.Overview of the Study on-Performing Assets

Non-Performing Assets are meant by the uncovered funds which is lender by the banks to individuals or a companies. The amount which is lender to individual or companies have to be written by 90 days or recover within 90 days of the cash received. In case, the amount which is not recovered within 90 days it is termed as Non-Performing Assets (NPA). The NPAs are sources in credit risk and the cas to be received are mentioned as “out of order” account.

The Non-Performing Assets are variously classified by doubtful assets, substandard assets. The doubtful assets are to recovered within 12 months and the substandard assets are amount considered as the doubtful assets which are not received by the bank.

Why Private Sector banks?

The role of private sector banks is increasing nowadays as many individuals and companies are interested in getting loans for

their needs. Private Sector Banks are considering as fastest provider in India Banking Sectors. While the public sector banks are facing major NPAs and it is easy to find a solution to NPA effects and their nature of affecting the banks’ performance. In Private Sector Banks, Axis Bank, Federal Bank, IndusInd Bank is selected for analysis as per the sales value in profit & loss account and goodwill among the customers.

1.2 Industry Profile

- ❖ The Indian banking system consists of 27 public sector banks, 21 private sector banks, 49 foreign banks, 56 regional rural banks, 1,562 urban cooperative banks and 94,384 rural cooperative banks, in addition to cooperative credit institutions.
- ❖ As of Q2 FY2019, total credit extended by commercial banks surged to ₹90,579.89 billion and deposits grew to ₹118,501.82 billion.
- ❖ Indian banks are increasingly focusing on adopting integrated approach to risk management. Banks have already embraced the international banking supervision accord of Basel II, and majority of the banks already meet capital requirements of Basel III, which has a deadline of March 31, 2019.
- ❖ Reserve Bank of India (RBI) has decided to set up Public Credit Registry (PCR) an extensive database of credit information which is accessible to all stakeholders. The Insolvency and Bankruptcy Code (Amendment) Ordinance, 2017 Bill has been passed and is expected to strengthen the banking sector.
- ❖ Deposits under Pradhan Mantri Jan Dhan Yojana (PMJDY) increased to ₹863.21 billion were deposited and 336.6 million accounts were opened in India. In May 2018, the Government of India provided ₹6 trillion loans to 120 million beneficiaries under Mudra scheme. In May 2018, the total number of subscribers was 11 million, under Atal Pension Yojna.
- ❖ Rising incomes are expected to enhance the need for banking services in rural areas and therefore drive the growth of the sector. As of September 2018, Department of Financial Services (DFS), Ministry of Finance and National Informatics Centre (NIC) launched Jan Dhan Darshak as a part of financial inclusion initiative. It is a mobile app to help people locate financial services in India.

❖ The digital payments revolution will trigger massive changes in the way credit is disbursed in India. Debit cards have radically replaced credit cards as the preferred payment mode in India, after demonetization. Debit cards

garnered a share of 87.14 per cent of the total card spending.

List of Public Sector Banks and Private Sector Banks in India

Public Sector Banks	Private Sector Banks
1. Allahabad Bank	1. Catholic Syrian Bank
2. Andhra Bank	2. City Union Bank
3. Bank of Baroda	3. Dhanlaxmi Bank
4. Bank of India	4. Federal Bank
5. Bank of Maharashtra	5. Jammu and Kashmir Bank
6. Canara Bank	6. Karnataka Bank
7. Central Bank of India	7. Karur Vysya Bank
8. Corporation Bank	8. Lakshmi Vilas Bank
9. Dena Bank	9. Nainital Bank
10. Indian Bank	10. Ratnakar Bank
11. Indian Overseas Bank	11. South Indian Bank
12. Oriental Bank of Commerce	12. Tamilnad Mercantile Bank
13. Punjab National Bank	13. Axis Bank
14. Punjab & Sind Bank	14. Development Credit Bank
15. State Bank of India	15. HDFC Bank
16. Syndicate Bank	16. ICICI Bank
17. UCO Bank	17. IndusInd Bank
18. Union Bank of India	18. Kotak Mahindra Bank
19. United Bank of India	19. Yes Bank
20. Vijaya Bank	20. IDFC
21. IDBI Bank Ltd	21. Bandhan Bank
22. Bharatiya Mahila Bank	

For the study, Three Banks from Private Sector is selected namely Axis Bank, Federal Bank and IndusInd Bank.

1.3 Company Profile

1.3.1 Axis Bank



It is India's third largest private sector bank, which is offering the sources and funds to the business operations in various sectors of the industrial units and the public. The Bank has 59,600 employees with its 3,882 domestic branches and 12,660 ATMs across the country. The network of Axis Bank spreads across 2,211 cities and towns, enabling the Bank to reach out to a large cross-section of customers with an array of products and services.

Vision

To be the preferred financial solutions provider excelling in customer delivery through insight, empowered employees and smart use of technology.

Values

Company's Core Values,

- ❖ Customer Centricity
- ❖ Ethics
- ❖ Transparency
- ❖ Teamwork
- ❖ Ownership

Chief Executive Officer



Amitabh Chaudhry

Industry Type : Private Limited Bank

Operating Profit : ₹15,594 Crores

Net Profit : ₹ 276 Crores

Gross NPA% : 6.77%

Net NPA% : 3.40%

Corporate Social Responsibility

Amount of Corporate Social Responsibility expenses spent during the year - 126.50 crores

- ❖ Infrastructure Development
- ❖ Environmental
- ❖ Healthcare
- ❖ Education

1.3.2 Federal Bank



The ancient development of federal bank is brought by the year 1931 and avil the first facility of banking resources for the people in pre-independence era. The founder and the visionary of federal bank, Late K.P Hormis is the main coin for the bank to be developed in this particular modern times of India. Federal Bank is originated from its ancient name as Nationwide Institutions. Now the bank is developed and placed its leg in 25 states and makes its best part of BSE and NSE stock prices.

Vision

- ❖ To be the 'Most Admired Bank' which is digitally enabled with a sharp focus on Micro, Medium and Middle market enterprises.

Mission

- ❖ Achieve a consistent annual post-tax return of 18% per month.
- ❖ Develop in every employee a high degree of pride and loyalty in serving the bank.

Chief Executive Officer



Shyam Srinivasan

Industry Type : Private Limited Bank

Operating Profit : ₹ 5,692 Crores

Net Profit : ₹ 2,297 Crores

Gross NPA% : 3%

Net NPA% : 1.69%

Corporate Social Responsibility

The bank has spent 14.43 crores on various social and environment activities, in the areas follow as,

- ❖ Education and Skill
- ❖ Healthcare & Safety
- ❖ Rural Development
- ❖ Welfare & Poverty
- ❖
- ❖

1.3.3 IndusInd Bank

IndusInd Bank

IndusInd Bank Limited is a Mumbai based Indian new generation bank, established in 1994. IndusInd Bank was inaugurated in April 1994 by then Union Finance Minister Manmohan Singh. IndusInd Bank is the first among the new-generation private banks in India. As on June 30, 2016, IndusInd Bank has 1,004 branches, and 1885 ATMs spread across 625 geographical locations of the country. Mumbai has the maximum number of bank branches followed by New Delhi and Chennai. The bank has also proposed to double the branches count to 1200 by March 2019.

Vision

IndusInd Bank will be,

- ❖ A relevant business and banking partner to its clients.
- ❖ Customer Responsive, striving at all times to collaborate with clients in providing solutions for their banking needs.
- ❖ A forerunner in the marketplace in terms of profitability, productivity and efficiency.
- ❖ Engaged with all our stakeholders and will deliver sustainable and compliant returns.

Mission

- ❖ They will consistently add value to all our stakeholders and emerge as India's most convenient Bank with Best-in-Banking financial parameters together with the doubling of loan book, clients and profits within the next 3 years.



Chief Executive Officer



Romesh Sobti

Type Of Industry : Private Bank Limited

❖ To measure the effect of NPA in Selected Private Sector Banks Performance.

Operating Profit : ₹ 6,656 Crores

Net Profit : ₹ 3,606 Crores

Gross NPA% : 1.34%

Net NPA% : 0.54%

Corporate Social Responsibility

The Bank has spent 20.47 crores on various social and environmental activities, in the areas follows as,

- ❖ Rural Development & Inclusiveness
- ❖ Environmental
- ❖ Sustainability
- ❖ Preventive
- ❖ Healthcare
- ❖ Education & Sports

1.4 Need for the Study

Banking is the fastest growing economy in India. A major consequence faced by banks now a days is Non – Performing Assets. A high level of NPA in banks will increase the credit values and affects the profit of banks. Thus, the banks will lose their investment for long turn. The article titled “Banks NPAs touch 12.2% by March 2019” is showing the current NPAs rising from 11.6% to 12.2% by March 2019. This shows that Banks and its sector are having more capitalization in investing money and affects the entire economy of the country. It is necessary to trim the NPAs to protect the country’s economy and to increase Bank’s efficiency.

1.5 Objectives of the Study

Primary Objective

- ❖ To Study on comparative analysis of Non – Performing Assets in Selected Private Sector Banks in India.

Secondary Objectives

- ❖ To study the trend of Gross NPA and Net NPA of Selected Private Sector Banks in India.

1.6 Scope of the Study

The scope of the study is to understand the comparative analysis of Non-Performing Assets based on secondary collected from Annual Reports of the Banks. The empirical research is used to analyse the data and variables. The Pearson Correlation Co-efficient tool is used to find the relationship between two variables and analyse the trend factors in GNPA and NNPA. The process of disbursement is used to evaluate the loans disbursement in various sectors and analysing the NPAs in the Geographical distributions.

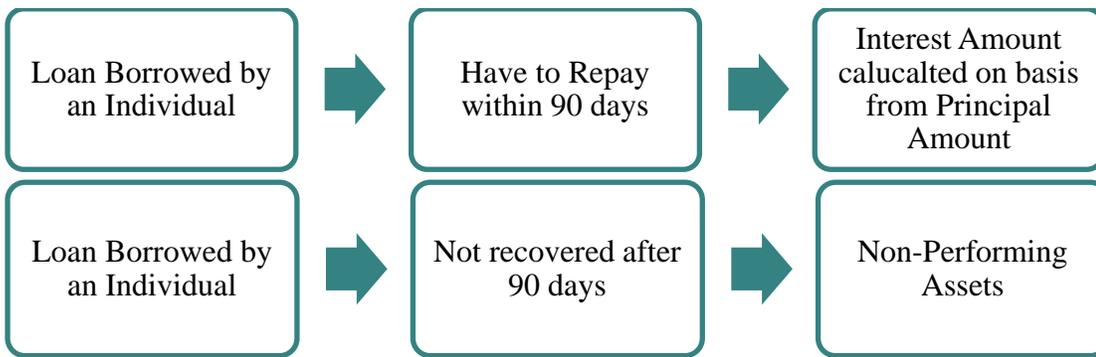
1.7 Limitations of the Study

- ❖ The study is observed from the financial year FY2013-FY2014 to FY2017-FY2018.
- ❖ The data is only based on the secondary data set and focused only on the limited financial statement.
- ❖ The study is focused only on three banks such as Axis Bank, Federal Bank, IndusInd Bank only.

II. LITERATURE REVIEW

2.1 Theoretical Concepts

Comparative analysis is used to compare two or more factors to find the positive relationship in each category of the financial statements or business reports of an individual or company based on its market share value, sales report, financial strategy and net operating revenue. The Bank performance is maintained by the Net Profit and Net Sales acquired through the financial years. In this case, Loans are marking up the important structures in creating the performance of banks as low or high in market structure. The loans paying to customer or an individual is to repay or recover by bank from the customer within 90 days and should be considered as interest amount collected on the basis of principal amount provided. When the loans provided to the customer or an individual is become non recoverable funds in future (after 90 days) is considered as Non-Performing Loans or Bad Loans. The Non-Performing Loans are playing major role in bank performance for creating the net profit and analyse the growth of the company for each year. The non-recovered funds are disbursed among various sectors and the NPAs in top five sectors is increasing each financial years. The study is Analytical in nature and analyse the secondary data using various tools like Trend Analysis and Pearson Correlation Co-efficient Ratio in each sectors. Trend Analysis is used to understand the growth of each year and used to analyse to collected data as positive and negative trend growth. Trend analysis can be allowed to each bank and promotes the future trending values in the Profit of Banks.



2.2 Review of Literature

1. **Kanika Goyal (2010), an article on “Empirical Study on Non-Performing Assets and Management of Indian Public Sector Banks”.** The analysis is based on trend ratio of GNPA, NNPA and Assets quality. The data is analyzed using Percentage analysis and statistical tools approaching tools like regression analysis, and coefficient approach on ANOVA test and Post Low-Key HSD Procedures.
2. **Bhawna Sethi (2013) had studied “The Comparative Analysis of NPAs in Punjab National Bank and State Bank of India”.** The methodology is based on conceptual framework, population and sample selection, collection of data, analysis of data. Tools use for the analysis is based on Mean, Standard Deviation, Standard Error, T-Test, ANOVA Test.
3. **Samir (June 2013) had studied a “Comparative Analysis of Non-Performing Assets of Selected Commercial Banks in India.** Its objective is to prevent or delays recycling of funds and erodes profit by way of provisions. The methodology is analytical in nature to understand the trend in Gross NPA and Net NPAs as percentage of total Assets respectively. This Paper is based on trend analysis of NPA and evaluates the financial health of banks.
4. **Krishna Murari (Aug 2014) had studied “Comparative Analysis of Non-Performing Assets of Indian Banks: A Study of Public and Private Sector Banks”.** The Data is analyzed using Percentage and ratio method of trend projection and one-way ANOVA. The main objective of banking reforms was to improve efficiency, productivity and profitability of banks.
5. **Ankur Bhushan (Dec. 2016) had studied “The comparative study on NPA in HDFC Bank and OBC Bank”** and screens in the nature of bank’s credit portfolio. The Objective on study is impact on NPA. The methodology is based on Auxiliary data and wellsprings of Data. The ratio analysis of NPA is based on limited resources of NPAs.
6. **Ayub Ahamed KS (Dec.2016) had studied a “Comparative Study of Non-Performing Assets in Private Sectors Banks and Public Sector Banks in India”.** The objectives are to study NPA trend in last 5 years of Private and private sector banks to measure and suggest the proper management of NPA in Banks.
7. **Nithin Gupta (2016) had studied on “Non-Performing Assets of Public and Private Sector Banks in India”.** The data is based on secondary data and analyzed using ratio analysis. The objective on sector wise distribution of NPAs in Public Sector Banks and Private Sector Banks. The ratio helps in finding out the decision on capital funds and the replacement opportunities in the Loans providing Sectors.
8. **Payel Roy (2016) had studied “The Analysis of Non-Performing Assets in Public Sector Banks of India”.** The banks advancing loans should be cautious enough to consider the backgrounds of loan receiver. The secondary data are used on study and analyzed using the secondary data to find the loans distributions and tools used like ANOVA, Regression Analysis for the secondary objectives of the study.
9. **Vivek Rajbahadur Singh (2016) had studied “The Non-Performing Assets of Commercial Banks and its recovery in India”.** The objectives are based on avoid future distractions in NPAs. The methodology based on secondary Data. Highlights the trend analysis and status in impacts in NPA. The NPAs are based on the commercial uses in the recovering process.
10. **Dr. Biswanath Sukul (Jan. 2017) had studied on “Non-Performing Assets: A comparative analysis of selected private sector banks”.** The objectives is to find the comparative analysis on NPA in HDFC Bank, Axis Bank, ICICI Bank. The methodology based on analytical nature and finding the trend ratio in NPAs. The Pearson Correlation Co-Efficient is used to explore the relationship between Net Profit and NPAs.
11. **Rajkumar Mittal (July 2017) had studied “The problem of raising Non-Performing Assets in Banking Sector in India: Comparative Analysis of Public Sector Banks and Private Sector Banks”.** The objectives are used to find the quantum of NPAs in Public Sector Banks and Private Sector Banks in India. The study is primarily analytical and descriptive based on secondary data collected from RBI Publications, Journals, Reports, and website annual report of the Public and Private Sector Banks. Compound Annual Growth is

calculated to identify the percentage increase in NPAs over the selected period.

III. RESEARCH METHODOLOGY

3.1 Research Design

Analytical Research Design is used for the study. The research is based on secondary data source available and collected from various external sources like annual reports, articles, journals and internet. The Secondary Data are analysed by using various statistical tools and find the solutions to understand the hypothesis in each concept of the values.

Analytical Research Design is mainly involves in facts, figures and variables which can be interpreted and results can be shown in graphs and diagrams for the future purpose of the institutions.

3.2 Sources of Data

Data can be defined as the quantitative or qualitative values of a variable. Data is plural of datum which literally means to give or something given. Data is thought to be the lowest unit of information from which other measurements and analysis can be done. Data can be numbers, images, words, figures, facts or ideas. Data in itself cannot be understood and to get information from the data one must interpret it into meaningful information.

There are two types of Data one is Primary data which is fetched directly from the respondents, collected specially for the purpose of the study, and also is the original source and is first handed information. And the other type is Secondary Data are those data collected by someone else other than the user of those data, common sources of secondary data for social science include censuses information collected and published by the government of India departments, organisational records and data that was originally collected for other research purposes.

In this study the data is fetched from secondary sources for the study. Such as the published annual reports, journals, web portals of the Axis Bank, Federal Bank, IndusInd Bank is used for the study.

3.3 Tools for Analysis

3.3.1 Trend Analysis

A trend analysis is an aspect of technical analysis that tries to predict the future movement of a stock based on past data. Trend analysis is based on the idea that what has happened in the past gives traders an idea of what will happen in the future. There are three main types of trends: short-, intermediate- and long-term.

$$TREND ANALYSIS RATIO = \left(\frac{COMPARED VALUE}{BASE VALUE} \right) * 100$$

In Trend Analysis, base value is starts from 100.00% and have to calculated with Compared Value.

3.3.2 Current Ratio

The current ratio is a liquidity ratio that measures a company's ability to pay short-term obligations or those due within one year. It tells investors and analysts how a company can

maximize the current assets on its balance sheet to satisfy its current debt and other payables.

$$CURRENT RATIO = \left(\frac{CURRENT ASSETS}{CURRENT LIABILITIES} \right)$$

A ratio under 1 indicates that the company's debts due in a year or less are greater than its assets.

3.3.3 Return on Assets

Return on assets (ROA) is the measure of efficiency and the profitable a company is relative to its total assets. The Return on Assets will be used to the financial managers to account the next year.

$$RETURN ON ASSETS = \left(\frac{NET INCOME}{TOTAL ASSETS} \right) * 100$$

3.3.4 Pearson Correlation Co-Efficient Ratio

Pearson Correlation Co-efficient is used to study the relationship between Net Profit and Net NPA to understand the positive growth among the three selected banks. Co-efficient Values are used to predict the present values and future value based on two variables. The variables are based on dependent in one condition and independent in another condition of the financial years.

$$r = \frac{N\sum xy - (\sum x)(\sum y)}{\sqrt{(N\sum x^2 - (\sum x)^2)(N\sum y^2 - (\sum y)^2)}}$$

N – Number of values

$\sum xy$ – Sum of two multiplied variables

$\sum x$ – Sum of total x variable

$\sum y$ – Sum of total y variable

$\sum x^2$ - Sum of total squared x variable

$\sum y^2$ - Sum of total squared y variable

Pearson Correlation Co-efficient is a statistical tool that calculates the strength of the relationship between the relative movements of the two variables. The range of values for the correlation coefficient bounded by 1.0 on an absolute value basis or between -1.0 to 1.0. If the correlation coefficient is greater than 1.0 or less than -1.0, the correlation measurement is incorrect. A correlation of -1.0 shows a perfect negative correlation, while a correlation of 1.0 shows a perfect positive correlation. A correlation of 0.0 shows zero or no relationship between the movement of the two variables.

IV. ANALYSIS AND DISCUSSION

4.1 Trend Analysis

4.1.1 To Study the trend of Gross NPA and Net NPA

Table 4.1.1 Bank wise GNPA

Bank Name	2013-14 ₹ Crore	2014-15 ₹ Crore	2015-16 ₹ Crore	2016-17 ₹ Crore	2018-17 ₹ Crore
Axis Bank	3,146.41	4,110.19	6,087.51	21,280.48	34,248.64
IndusInd Bank	620.79	562.92	776.82	1,054.87	1,704.91
Federal Bank	1,087.41	1,057.73	1,667.77	1,727.05	2,975.62

Interpretation

- ❖ The value of GNPA is increasing continuously in each financial year and the GNPA is used to predict the Net Profit in future values.

Table 4.1.2 Trend GNPA % (in Percentage)

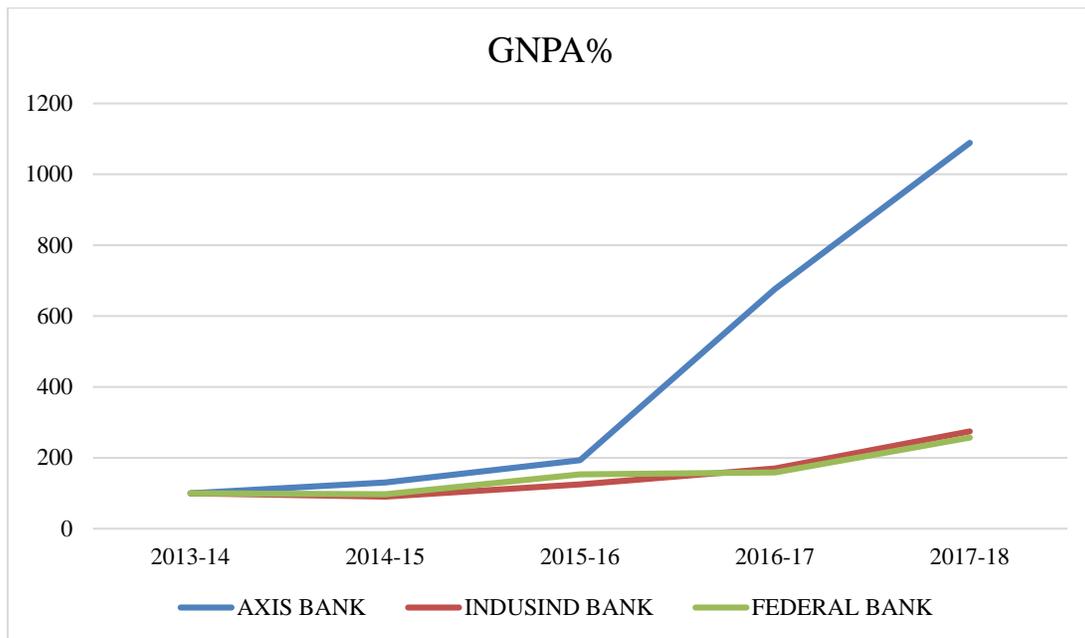
Bank Name	2013-14	2014-15	2015-16	2016-17	2017-18
Axis Bank	100	130.63	193.47	676.34	1088.49
IndusInd Bank	100	90.67	125.13	169.92	274.63
Federal Bank	100	97.27	153.37	158.82	257.08

Axis Bank	100	130.63	193.47	676.34	1088.49
IndusInd Bank	100	90.67	125.13	169.92	274.63
Federal Bank	100	97.27	153.37	158.82	257.08

Interpretation

- ❖ Trend Analysis of GNPA in IndusInd Bank and Federal Bank is showing that the banks are facing trouble on FY2014-FY2015 is decreased 10% form base year value and promoting the factors for decrease in Net Profit in IndusInd Bank and Federal Bank is decreased by 3% from base year.
- ❖ On 2015-16, GNPA values are increased by 25% and 40% in IndusInd Bank and Federal Bank respectively. It shows that the banks are facing higher Profitability and less risk return in credit wise transactions.
- ❖ In five years, Axis Bank is having more GNPA% of 1088.4% and shows the higher risk in crediting the future money. And comparing 2017-18 with base year, the ratio is trending towards 100% increase and having less profitability.

Chart 4.1.1 Trend GNPA%



Interpretation

- ❖ The base year trend analysis percentage is always 100.00%. If the percentage is decreased below 100.00%

it shows that the company is indeed in higher net profit of that particular year. If it is above 100.00%, then the company is positively growing in generating net profit.

Table 4.1.3 Bank wise Net NPA

Bank Name	2013-14 ₹ Crore	2014-15 ₹ Crore	2015-16 ₹ Crore	2016-17 ₹ Crore	2018-17 ₹ Crore
Axis Bank	1,024.62	1,316.71	2,522.14	8,626.60	16,592.00
IndusInd Bank	184.5	210.48	321.75	438.90	745.67
Federal Bank	321.56	373.27	950.01	941.20	1,551.96

Interpretation

- ❖ In Federal Bank, the FY2016-FY2017 is showing the Net NPA ₹941.20 Crores is decreased from the previous year FY2015-FY2016. It shows that the company is relaxed at the financial year and decreased their risk of returns to promotes more profitability.

Table 4.1.4 Trend NNPA%

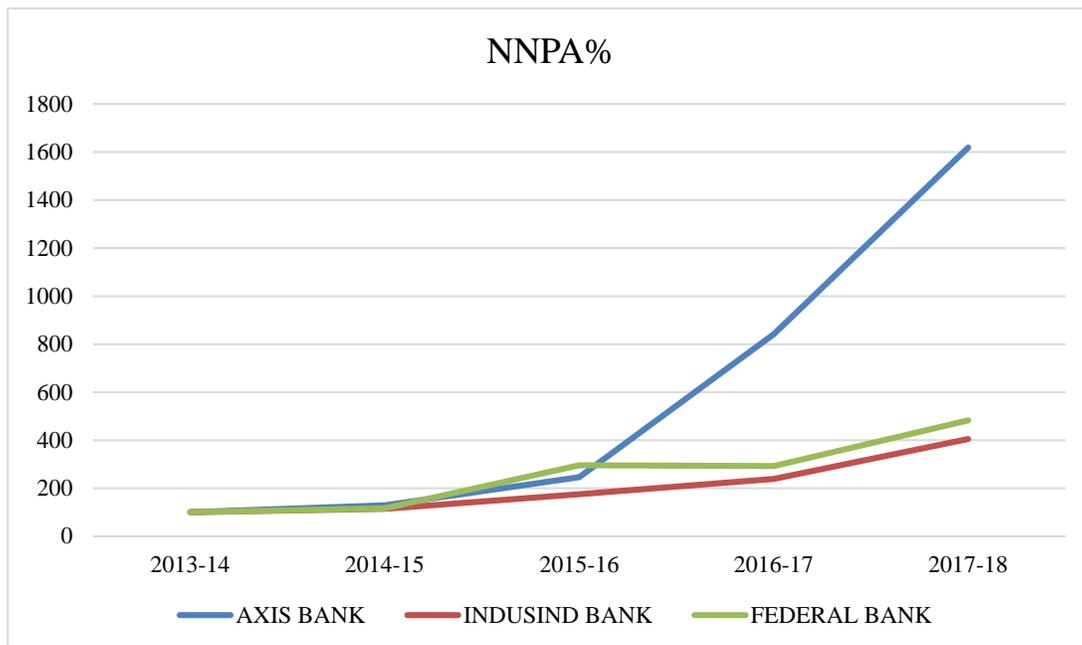
Bank	2013-14	2014-15	2015-16	2016-17	2017-18
Axis Bank	100	128.50	246.15	841.93	1619.33
IndusInd Bank	100	114.36	174.81	238.46	405.14
Federal Bank	100	116.08	295.43	292.69	482.63

Axis Bank	100	128.50	246.15	841.93	1619.33
IndusInd Bank	100	114.36	174.81	238.46	405.14
Federal Bank	100	116.08	295.43	292.69	482.63

Interpretation

- ❖ FY2016-FY2017 is analyzed as 3% decrease from FY2015-FY2016 and shows the value ₹9 crores approximately decreased from ₹950 crores and having more profitability in the current year.
- ❖ In FY2017-FY2018 shows that Axis Bank is having more Net NPA has highest value ₹16,592 Crores and with trend ratio of 1619.33% and shows the tremendous growth when compared to previous year and in higher risks factors.
- ❖ Among three banks, IndusInd Bank is rapidly growing in NNPA% by 14%, 60%, 60%, 200% from the base financial year. The 200% growth in NNPA ratio is shows the NPA values are dominating the current Net Profit Value of the Bank.

Chart 4.1.2 Trend of NNPA%



Interpretation

- ❖ On comparing three banks Trend Ratio of FY2017- FY2018 is shows that IndusInd Bank is having lesser ratio 405.1% and next to Federal Bank, 482.6% and Axis

Bank is placing more trend ratio value of 1619.3% and having more NPA values in five years.

4.1.2 Current Ratio

Table 4.1.5 Current Ratio

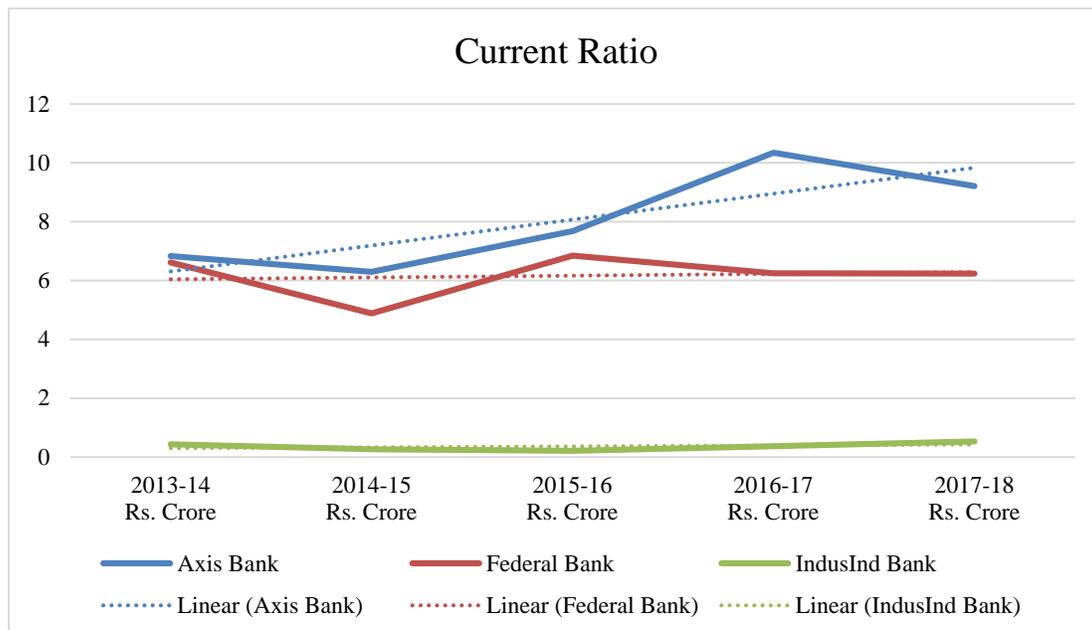
Bank Name	2013-14 ₹ Crore	2014-15 ₹ Crore	2015-16 ₹ Crore	2016-17 ₹ Crore	2017-18 ₹ Crore
Axis Bank	6.82	6.29	7.68	10.34	9.21
IndusInd Bank	0.43	0.26	0.21	0.36	0.53
Federal Bank	6.61	4.88	6.84	6.24	6.23

Interpretation

- ❖ In Five Financial years, IndusInd Bank is facing the major issues in distributing the current assets in each year and the bank is incapable in organizing the assets when to compared to other provisions. The ratio rate below 1 is considered for the major disturbance in the financial years.
- ❖ The negative balance in the current ratio is showing that IndusInd Bank have to prepared for less liability in all consecutive years.

- ❖ Axis Bank, shows the ratio of 10.34 in 2016-17 as a positive one and company is good in maintaining the assets and other provisions in all years Axis Bank is stable in current ratio as the company is strengthened in five financial years and the ratio rates are higher than 6.
- ❖ Federal Bank is also good in maintaining the current ratio of each five consecutive years. The ratio resembles on Axis Bank and Federal Bank is good for the organization and may provide the internal funds to the organization.

Chart 4.1.3 Current Ratio



Interpretation

- ❖ Linear Trend is used in the current ratio to describe the bank’s short-term obligations in meeting their needs in each consecutive financial year.
- ❖ Trend Line of Axis Bank is showing the continuous increase in associating the company assets and their short-term debt paying in year ended. Axis Bank is over the trend line in 2016-17 and their assets value is highly increased, and liabilities of that year is decreased and can

increase internal provisions for the next working capital 2017-18.

- ❖ Trend Line of IndusInd Bank is straight in organizing the assets and liabilities without any increased in the current ratio and the bank can do the moderate changes in the financial years.
- ❖ Federal Bank is also associating the same trend line in current ratio and the bank is stable in solvent among the assets and liabilities in each year.

4.1.3 Return on Assets

Table 4.1.6 Return On Assets (ROA) %

Bank Name	2013-14	2014-15	2015-16	2016-17	2017-18
Axis Bank	1.62	1.59	1.56	0.61	0.03
IndusInd Bank	1.61	1.64	1.63	1.6	1.62
Federal Bank	1.12	1.21	0.52	0.72	0.63

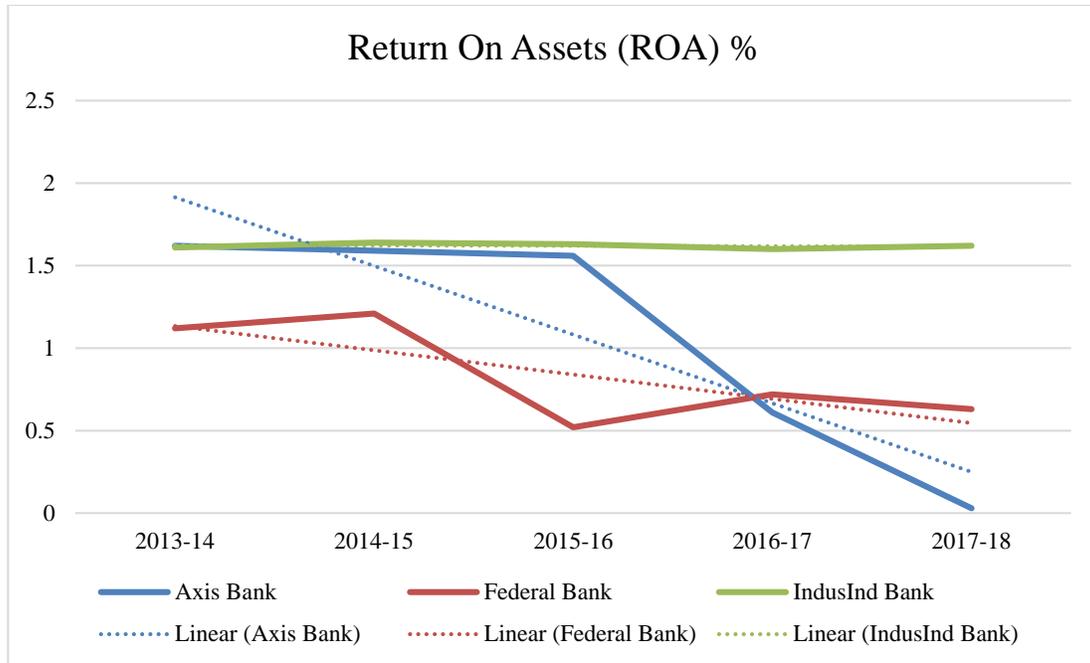
Interpretation

- ❖ ROA of Axis Bank is decreasing in all five years And IndusInd Bank is following the same ROA in all financial years. Axis Bank’s Performance is decreasing in each year and reaches 0.03% in 2017-18, shows that the bank is suitable for investor and shareholders to invest the shares.
- ❖ IndusInd Bank’s Performance is moderate and the percentage in each year is 1.6% and shows the bank is good in investing the shares and shareholders to promote new shares in the industry when

compared to Federal Bank and Axis Bank.

- ❖ In 2017-18, Axis Bank is performing the lowest ROA among banks as it holds 0.03% and next to Axis Bank, Federal Bank is having 0.63% and IndusInd Bank holds 1.62% and showing IndusInd Bank is having essential Net Income and have stable investors.
- ❖ In 2013-14, Axis Bank and IndusInd Bank is having the same percentage in ROA and showing the same investors and shareholders on that particular year. It makes the two banks become more competitive in the net profit and assets equality.

Chart 4.1.4 Return On Assets (ROA) %



Interpretation

- ❖ Trend Line of Axis Bank and Federal Bank is decreasing for the five financial years. Axis Bank is facing the major issue in ROA and doesn't maintains the shareholding partners and investor to promote the shares for the next consecutive years.
- ❖ Trend Line indicates that IndusInd Bank is good in understand the shareholding pattern in achieving the relations between investors in Profit and assets equality.

4.2.1 To test the relationship between Net NPA and Net Profit of Axis Bank.

Negative Hypothesis: There is negative relationship and indicates the company is decreasing in one variable of the selected variables for the values is below -1.

Null Hypothesis: The relationship between two variables are same and the co-efficient ratios are equal to understand the values are consistent when exactly 0.

Positive Hypothesis: There is positive relationship and indicates that the values is increasing in one dependent variable of the selected variable for the values is above +1.

Table 4.2.1 Comparing Net NPA and Net Profit of Axis Bank

Bank	Particulars	2013-14 ₹ Crores	2014-15 ₹ Crores	2015-16 ₹ Crores	2016-17 ₹ Crores	2017-18 ₹ Crores
Axis Bank	NET NPA	1,024.62	1,316.71	2,522.14	8,626.60	16,592.0
	NET PROFIT	6217.67	7357.82	8223.66	3,679.28	275.68

Interpretation

- ❖ Net profit of Axis Bank is continuously decreasing from financial year 2015-16 to 2017-18 and marked up with lowest Net Profit as ₹275.68 Crores and reflects more NPAs in the five years. This condition may bring heavy losses to the bank and may decrease net profit for future years also.
- ❖ Net NPA of Axis Bank is increasing for all five years and reaches the value of ₹16,592 Crores in 2017-18. The Net NPA of Axis Bank is stable in increase and bank have to take remedial measures on clearing those funds.

Table 4.2.2 Pearson Correlation Co-efficient of Axis Bank

Bank	Particulars	2013-14 ₹ Crores	2014-15 ₹ Crores	2015-16 ₹ Crores	2016-17 ₹ Crores	2017-18 ₹ Crores	Ratio
Axis Bank	NET NPA	1,024.6	1,316.7	2,522.1	8,626.6	16,592.0	-0.95
	NET PROFIT	6217.67	7357.82	8223.66	3,679.2	275.68	

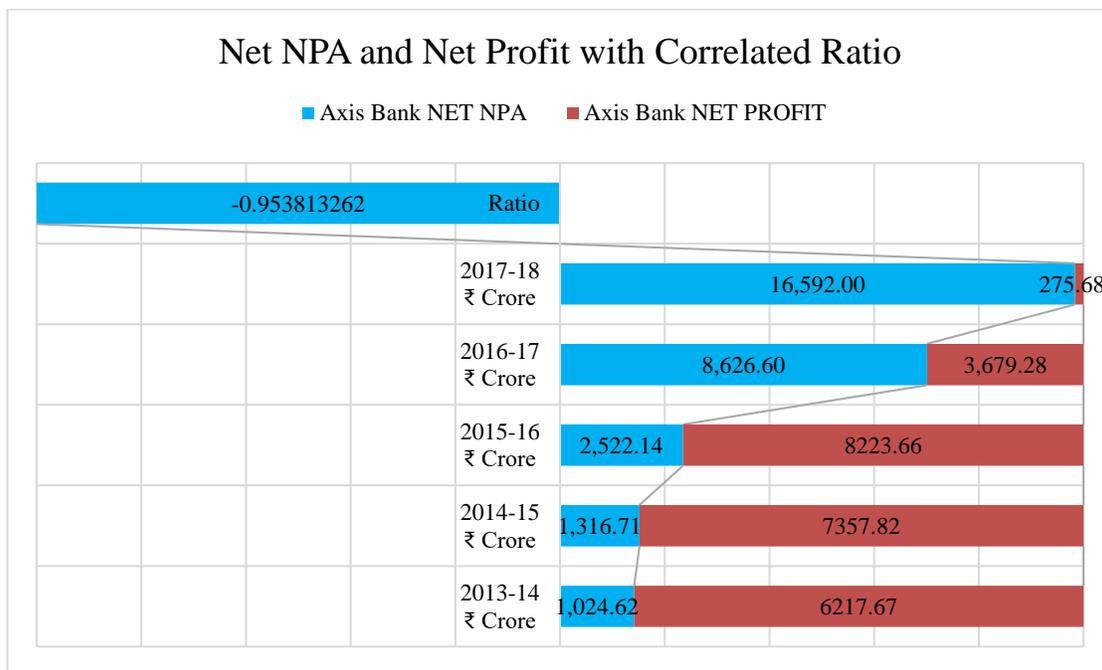
Interpretation

- ❖ As Axis Bank is facing major issues in Net NPA increasing for the five financial years, the bank's correlated ratio is -0.95 and the ratio is negative in relationships and shows that Net NPA and Net Profit is not related as Net NPA is increasing constantly and Net Profit is less when compared with Net NPA.
- ❖ In financial years 2013-14, 2014-15, 2015-16 shows that Axis Bank is maintaining the Net Profit as it requires to

performing the Bank assets and other internal provisions while the Net Profit is also increasing in other side.

- ❖ In financial years, 2017-18 Axis Bank faces its dramatical change in Net Profit and Net NPA is increased by ₹ 8,626.6 Crores and the NPAs is peeked in that year and tends to increase by ₹ 16,592 Crores and Axis Bank is in unexpected issues to control and monitor the funds.

Chart 4.2.1 Comparing Net NPA and Net Profit of Axis Bank



Interpretation

- ❖ In 2017-18, Axis Bank Net NPA is increased drastically and making the bank to suffer in upcoming financial years. Increase in Net NPA is not good for the Bank as it decreases the profitability for the following years.
- ❖ The Ratio -0.95 is showing the negative relationship between Net NPA and Net Profit for all five financial years. The Line express the relations associated with the Net NPA and Net Profit of Axis Bank.

- ❖ The Negative Relationship existing in Axis Bank leads to decrease in stock investors, lesser profitability and can't exists the following financial years to promote the budgets and the banking performance throughout the financial years.

4.2.2 To test the relationship between Net NPA and Net Profit of IndusInd Bank

Negative Hypothesis: There is negative relationship and indicates the company is decreasing in one variable of the selected variables for the values is below -1.

Null Hypothesis: The relationship between two variables are same and the co-efficient ratios are equal to understand the values are consistent when exactly 0.

Positive Hypothesis: There is positive relationship and indicates that the values is increasing in one dependent variable of the selected variable for the values is above +1.

Table 4.2.3 Comparing Net NPA and Net Profit of IndusInd Bank

Bank	Particulars	2013-14 ₹ Crore	2014-15 ₹ Crore	2015-16 ₹ Crore	2016-17 ₹ Crore	2017-18 ₹ Crore
IndusInd Bank	NET NPA	184.05	210.48	321.75	438.9	745.67
	NET PROFIT	1,408.02	1,793.72	2,286.45	2,867.89	2,978.89

Interpretation

- ❖ On interpreting IndusInd Bank Net NPA and Net Profit the bank is having Increasing factors for both the cases. Increased Net Profit and Increasing Net Profit is maintaining the Bank performance consistent and achieve their internal operations.
- ❖ While increase in Net Profit is a good sign for the Bank and can increase more shareholders and investors in their shares. On the same while, Net NPA is increasing in each year is also acting as a barrier for the bank’s growth in each year.
- ❖ The Net Profit which is earned by the bank is fully in depositing against the Bad Loans acquired by the Bank and it is highest NPA of ₹ 745.67 Crores and the Net Profit is ₹ 2,978.89 Crores which takes the bank to stable and constant in acquiring the good position in Banking Industry.

IndusInd Bank	NET NPA	184.05	210.48	321.75	438.9	745.67	0.88
	NET PROFIT	1,408.02	1,793.72	2,286.45	2,867.89	2,978.89	

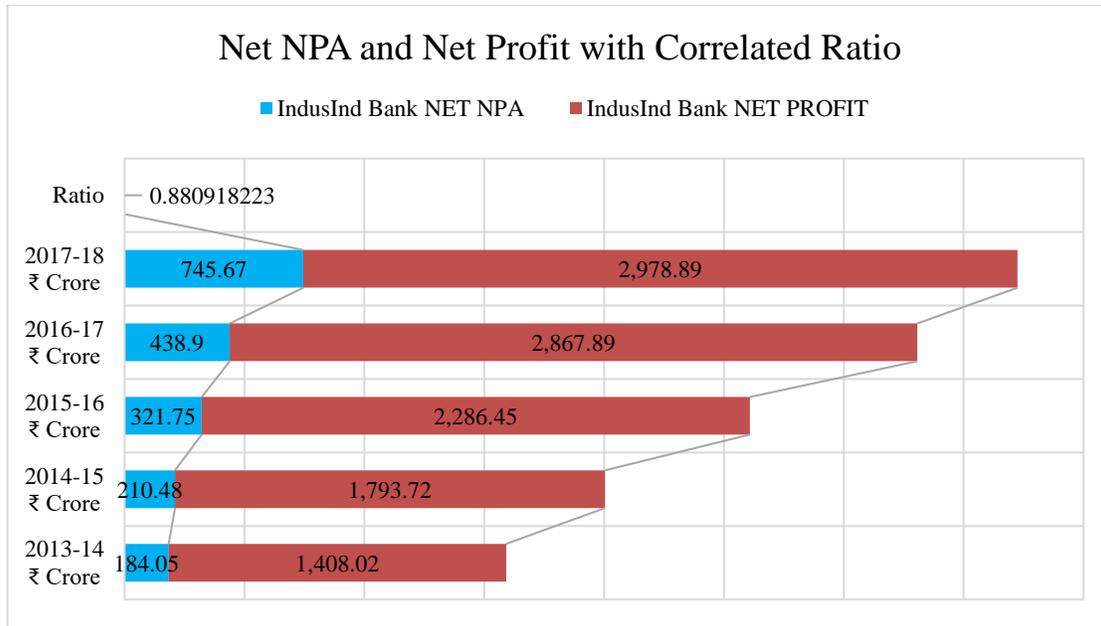
Interpretation

- ❖ The correlation ratio of IndusInd Bank is 0.88 and it shows the positive relationship between Net NPA and Net Profit for the all consecutive financial years. The Positive Relationship for the banks is reflecting the strong management and the organization of funds in each sector wise distribution of loans.
- ❖ IndusInd Bank performance is measured with its positive relationship among Net NPA and Net Profit. In this case, the Net NPA values is also increasing the factors and raising the bank to regulate the movement of NPAs among different sectors and their sources of funds.
- ❖ While considering the Net Profit of 2015-16 and 2016-17 is slightly increased and the bank is facing with higher NPA of ₹ 438.9 Crores which shows that the bank is lite unstable conditions but however the bank is organized by the essential funds on that particular year.

Table 4.2.4 Pearson Correlation Co-Efficient of IndusInd Bank

Bank	Particulars	2013-14 ₹ Crores	2014-15 ₹ Crores	2015-16 ₹ Crores	2016-17 ₹ Crores	2017-18 ₹ Crores	Ratio
IndusInd Bank	NET NPA	184.05	210.48	321.75	438.9	745.67	0.88
	NET PROFIT	1,408.02	1,793.72	2,286.45	2,867.89	2,978.89	

Chart 4.2.2 Comparing Net NPA and Net Profit of IndusInd Bank



Interpretation

- ❖ On interpreting the IndusInd Bank is facing more Net Profit when compared to Net NPAs and this is the major factor for IndusInd Bank is to maintain the greater management and the sources of funds among the industrial sectors.
- ❖ Positive relationship is acquired with 0.88 as Net NPA is lower when compared to Net Profit acquired by the banks each year.
- ❖ Higher Profitability shows that the bank is leading in acquiring new customers and other benefits in new customer avail facility for the branches in urban and rural areas. This Profitability can increase the goodwill among the investors and shareholders to place a god shares in the market place and can increase the sales of the bank.

2.3 To test the relationship between Net NPA and Net Profit of Federal Bank

Negative Hypothesis: There is negative relationship and indicates the company is decreasing in one variable of the selected variables for the values is below -1.

Null Hypothesis: The relationship between two variables are same and the co-efficient ratios are equal to understand the values are consistent when exactly 0.

Positive Hypothesis: There is positive relationship and indicates that the values is increasing in one dependent variable of the selected variable for the values is above +1.

Table 4.2.5 Comparing Net NPA and Net Profit of Federal Bank

Bank	Particulars	2013-14 ₹ Crore	2014-15 ₹ Crore	2015-16 ₹ Crore	2016-17 ₹ Crore	2017-18 ₹ Crore
Federal Bank	NET NPA	321.56	373.27	950.01	941.2	1551.96
	NET PROFIT	838.89	1,005.75	475.65	830.79	878.85

Interpretation

- ❖ Federal Bank is facing the major issues in the financial year 2017-18 as Net NPA value is higher than Net Profit Value and seeks the highest NPA of ₹ 1551.96 Crores which is higher in the five financial years and NPA is continuously increasing from the base year 2013-14.

- ❖ On interpreting the Net Profit of Federal Bank, the bank is facing again problem with constant increase and decrease in the profitability of banks. In financial year 2015-16 the bank is reached its lowest profit of ₹ 475.65 crores when compared with other financial years.

- ❖ In financial year 2015-16, the bank faces major issues by increased in NPA and decrease in Net Profit and makes the banks more unstable and the performance is again measured to be low in handling the bad loans to the vendors and borrowers.

	NET PROFIT	838.8	1,005.7	475.6	830.7
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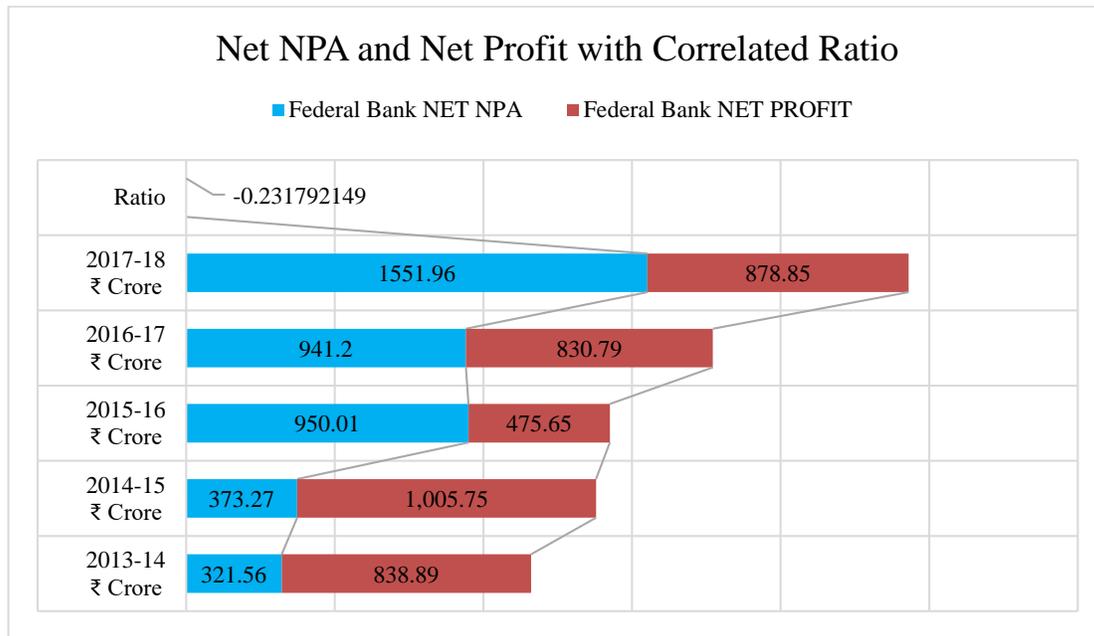
Table 4.2.6 Pearson Correlation Co-efficient of Federal Bank

Bank	Particular	2013-14 ₹ Crore	2014-15 ₹ Crore	2015-16 ₹ Crore	2016-17 ₹ Crore	2017-18 ₹ Crore
Federal Bank	NET NPA	321.5	373.27	950.0	941.2	1551.9

Interpretation

- ❖ Federal Bank's correlated ratio of Net NPA and Net Profit is -0.23, which reflects the bank is negative relationship in NPA and Profit. The negative relationship is unstable and the bank efficiency in providing the funds and money to other transfer is impossible in accessing the Bad loans. Net NPA and Net Profit is resembling the major part of a bank, in Federal Bank both factors are below in ratio to its lesser profitability and the bank is to take remedial measures in control the unorganized funds and loans to the borrowers. On interpreting Federal Bank is facing the decreasing values in both Net NPA and Net Profit. The Bank is weaker in assets and other provisions on looking the relationship is lower in each financial year.

Chart 4.2.3 Comparing Net NPA and Net Profit of Federal Bank



Interpretation

- ❖ On interpreting the Federal Bank with Net NPA and Net Profit for the correlation is taken with the negative relationship of -0.23 and lesser profitability in each sector for the bad loans.
- ❖ In financial year 2013-14 and 2014-15, the Bank is good in maintaining the profit and Net NPA with less credit wise exposures and more profitability in that financial years for the bank performance is good but

- the bank is aided in at the financial years 2016-17 and 2017-18 as Net NPA values are dominating Net Profit.
- ❖ Federal Bank is unstable and the operating expenses is also done in the lesser providence of the profit and the major issues are not maintain the organization to plan on next financial year structure to earn profit and to dominate the NPAs from borrowers and to increase shareholders.

4.2.4 To measure the effect of NPA in Selected Private Sector Banks Performance

Table 4.2.7 Pearson Correlation Coefficient Ratio

Bank Name	Correlation Coefficient Ratio
Axis Bank	-0.95
IndusInd Bank	0.88
Federal Bank	-0.23

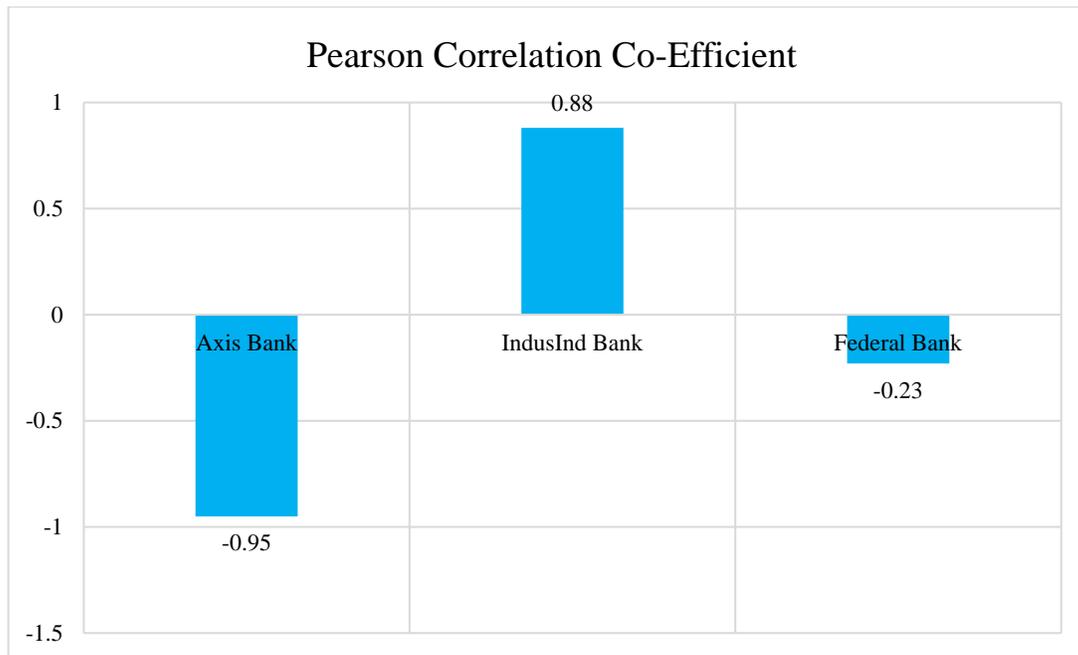
Interpretation

- ❖ Correlation ratio of IndusInd Bank is showing the positive relationship among the NPA and Profitability of bank. The Positive ratio finalize that IndusInd bank is more stable in acquiring profit and funds in each sectors of the loan distributions.
- ❖ Federal Bank is next to IndusInd Bank in correlation ratio, but it is negative relationship of -0.23 and bank have to be stable and to acquire more profit in associates

the funds in each sector and the funding positions of the bank.

- ❖ Axis Bank is the least negative ratio of -0.95 and facing the major issues in the profit and bank is in condition of loss in each year. The Bank have to take immediate measure in each sectoral sourcing funds and have to take decisions in expenditure to be followed in the organizational functions.

Chart 4.2.4 Pearson Correlation Co-efficient Ratio



Interpretation

- ❖ IndusInd Bank is getting Positive Ratio in Correlation Co-efficient and shows the consistent growth in generating net profit and maintain the NPAs values. Next to IndusInd Bank, Federal Bank and Axis Bank is getting negative values in NPA.
- ❖ IndusInd Bank is showing the positive Hypothesis as it shows the value above 0. The bank is ready to accept the

net profit and net gains in understanding the values and functions for increasing the net profits for next year.

- ❖ The Negative Hypothesis is again hit the Federal Bank by showing value of -0.23. The negative values indicate slight difference to make the positive hypothesis. The Bank has to work on Net Profit and to recover NPA to achieve again success in the future financial years.

V. FINDINGS AND SOLUTIONS

5.1 Findings of the Study

- ❖ Non-Performing Assets (NPA) is the major causes of each bank and every financial institution. In selected private sector banks, Axis Bank, Federal Bank, IndusInd Bank is having their Net NPA values of ₹30,082.07 crores, ₹4138 crores, ₹1900.85 crores respectively.
- ❖ The total NPA of three banks is evaluated as ₹36,20.92 crores. The NPA of these three banks is occupying the major NPA values of the private sector banks as market sales and recovery of funds.
- ❖ The Net Profit and Net NPA is compared in correlation co-efficient ratio to find the comparison among the three selected banks. The ratio is provided with Null Hypothesis and Positive Hypothesis in the three banks.
- ❖ The expected positive results are changed, by Axis Bank is having the negative hypothesis of -0.9538%. These co-efficient ratio shows that Axis Bank is indeed of getting decreased Net Profit and it reflected as Net Profit of ₹275.68 Crores in 2017-18 with Net NPA of ₹16,592 crores which is doubled of Net Profit.
- ❖ IndusInd Bank is showing the consistent growth in all five years and the growth is indicating the positive hypothesis of 0.8502%. The bank receives the increasing Net Profit as it indicates in Annual Reports.
- ❖ This shows that the bank stable in organizing the funds to organizational sectors. In other hand the Net NPA is also increasing for the five years, ₹184.05 crores in 2013-14, ₹214.08 crores in 2014-15, ₹321.75 crores in 2015-16, ₹438.9 crores in 2016-17 and ₹745.67 in 2017-18. This increasing factor of Net NPA will decrease the increasing Net Profit of Banks and may leads to loss in future.
- ❖ Federal Bank is funded with Negative Hypothesis of -0.2317. The Net NPA and Net Profit of this bank is fluctuating in all consecutive five years. This shows that the bank is unstable and should be positioned in the upcoming financial years.

5.2 Suggestions

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

VI. CONCLUSION

On concluding three private sector banks for the comparative is based on the sales report and their market values in the banking sectors. The Trend Analysis is used to analysed the GNPA and NNPA factors that are affecting the banking natures. The Correlation effect is compared between three banks and the hypothesis funded with IndusInd Bank is good in recovering the NPA and maintains their Net Profit and can move with the positive outgrowth for next financial years. NPA is the main artery vein of banking sector and other financial institutions to maintain the economy as a growing factors and to increase the country's profitability.

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