

# PROFIT EFFICIENCY OF INDIAN BANKS: POST-INTERNET ERA

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## Abstract:

The present study is mainly concerned with the analysis of profitability factors that influence the performance of banks after the introduction of internet banking. This study examines the trends in important banking indicators for 10 years period from 2013 to 2022. The study actually concentrates more on NPA and taken into consideration of profit efficiency variables in relation to internet banking of scheduled commercial banks. Therefore, this study focus on the detailed analysis of profit efficiency by incorporating all variable while keeping NPA's ratios as central for study. The study have concluded the decline in NPA (Non-Performing Assets). Further, Reserves & Surplus is also analysed intensively to know the future prospects of scheduled commercial banks.

**Keywords:** Profitability, Non-Performing Assets, Scheduled Commercial Bank and Internet Banking

## Introduction:

India is the 5th largest economy, with nominal GDP of \$3.75 trillion dollar in the year 2023. In addition to that India is the largest country with huge financial systems in South Asia. In current economic scenario banks are expected to cope-up with fast moving world economy. Thus, an efficient, sound, progressive and dynamic banking system is a fundamental requirement for economic development and growth.

Internet banking helps to improve the business growth among extremely competitive market. Internet banking or online banking or net-banking is a digital payment system which enables customers of a bank or other financial institution to conduct a range of financial transactions through the financial institution's website. This service gives online access to almost every banking service, traditionally available through a local branch including fund transfers, deposits, and online bill payments to the customers. It also enables customers to access banking services at any place and time through their smart phones and computers.

This paper analyse only public and private sector banks of scheduled commercial banks. There are 12 public sector banks and 22 private sector banks in India. Aggregated of selected variable of bank groups are used in the study. These selected variables are imp (Immediate Payment System), Net NPA to Net Advances and Reserves & Surplus

**Types of Fund Transfer using Internet:**

1. One-to-one fund transfer is allowed through National Electronic Fund Transfer (NEFT). Using NEFT, customers of a bank, individual, corporates and any member of public in general can transfer funds electronically through his/her account from any bank branch to any other bank branch. NEFT service is available 24\*7. Usually NEFT transfer is successfully completed within 30 minutes. It is a time-restricted service at traditional delivery channel.
2. Real-Time Gross Settlement (RTGS) is a continuous settlement of funds. It is a mechanism of transferring funds from one bank to another on a 'real time'. Through RTGS funds are settled as soon as transaction proceeded. It is also available 24\*7. Under RTGS the minimum amount of fund transfer is 2 lakh and there is no limit for the maximum amount
3. Another payment method is Immediate Payment System (IMPS), which transfer funds on real-time. IMPS is inexpensive mode of payment, which is used to transfer instantly within banks across India via mobile, internet and ATM. It does not require details like IFSC, account number etc. Funds transferred just with the mobile number of the beneficiary.

In this research paper, we have taken only IMPS fund transfer service because of its fast growth. Reserves and surplus represent a portion of a bank's retained earnings that are not distributed as dividends to shareholders. These funds are set aside for various purposes, ensuring financial stability and flexibility. These variables represent profit, while NPA represent loss for the banks. Non-Performing Assets (NPAs), commonly referred to as bad assets or distressed assets, are a critical aspect in the banking industry. NPAs are loans or advances issued by banks or financial institutions that no longer generate income for the lender. This happens when the borrower fails to make payments on the principal and interest of the loan for at least 90 days. Thus, NPA is considered loss.

**Literature Review:**

The impact of Information Technology (IT) on scheduled commercial banks operating in India analyzed by Goel, M. (2013) shows improving trend.

The research to examine the impact of information technology on productivity of Indian Banking Sector by Kumar (2013) states that increased electronic transactions in the banking channel had resulted in increase in increase in productivity.

In terms of Return On Assets (ROA) and Return On Equity (ROE) Tunay et al., (2015) analyze the interaction between internet banking and bank performance in 30 European countries and find out strong relationship between them.

Vidhya Jolly (2016), studied the influence of internet banking on the efficiency and cost savings of bank's customers and revealed that it has positive relationship in financial point of view.

Singh and Kaur (2019) conducted the research upon the financial performance of top 10 public sector banks to analyze the impact of online banking in Indian Banking Sector by taking ROA and ROE

as examining variable for the year 2018 and 2019. The result shows that online banking has positive results on performance of banks.

Piyush Kumar Singh and Keyur Thaker (2020), estimated a more plausible measure of efficiency, that is, Profit Efficiency using Data Envelopment Analysis (DEA).

Vineet Shekhar, Nitin Singh and Rajesh Rathore (2023), has analysed the SBI and HDFC banks in terms of their financial performance for the period of 2019-2022. It is found that HDFC Banks has never gone above 2% in net NPAs during the study period while SBI has never gone below 7% during the study period.

### **Research Gap:**

The earlier studies differed from one another. Besides, none of the studies has taken into account IMPS and Reserves and Surplus for measuring profitability.

### **Statement of Problem:**

Banks are in the process of granting loans and purchasing investment securities, new demand deposits are also established. Accepting and discounting bills of exchange allows for trade both within and outside the country. One of the notable problems in banks is non-performing assets. The NPA has great impact on the successful operation of banks. To study these dynamic changes of NPA due to internet banking, we have selected scheduled commercial bank. Further, the Reserves and Surplus variable is also included to know about the withstanding capacity of these banks.

### **Research Question:**

1. What is NPAs relationship with IMPS of scheduled commercial bank?
2. Examine the Reserve & Surplus trends of scheduled commercial bank?

### **Objective:**

1. To analyse the impact of NPA within the stipulated time period in post-internet era
2. To identify and compare the emerging Reserve & Surplus trends for past 20 years.

### **Hypothesis:**

H0: There is negative significant relationship between the Net NPA as Percentage of Net Advances and IMPS.

H1: There is positive significant relationship between the Net NPA as Percentage of Net Advances and IMPS.

### **Analysis:**

As a first step, we used Pearson Correlation to find relationship between Net NPA as Percentage of Net Advances and IMPS for measuring the impact of internet era on banks profit.

**Table 1:**

Year	IMPS (In Crores)	Net NPA as Percentage of Net Advances
2012-2013	433	1.7
2013-2014	9581	2.1
2014-2015	58187	2.4
2015-2016	162226	4.4
2016-2017	411624	5.3
2017-2018	892498	6
2018-2019	1590257	3.7
2019-2020	2337541	2.8
2020-2021	2941500	2.4
2021-2022	4171037	1.7
Pearson Correlation	-0.292084209	

Source: Reserve Bank of India

The above correlation shows the negative correlation between these variables. Here IMPS is taken as X variable and Net NPA as Y variable. In simple term, it implies that when the use of IMPS (Immediate Payment System) increases, Net NPA as Percentage of Net Advances shows declining status.

Even though it shows inverse relationship, Gross NPA shows increasing patterns. In that case, it's recommended to take into account banks Reserves & Surplus variable to know about capital efficiency of scheduled commercial banks.

**Table 2:**

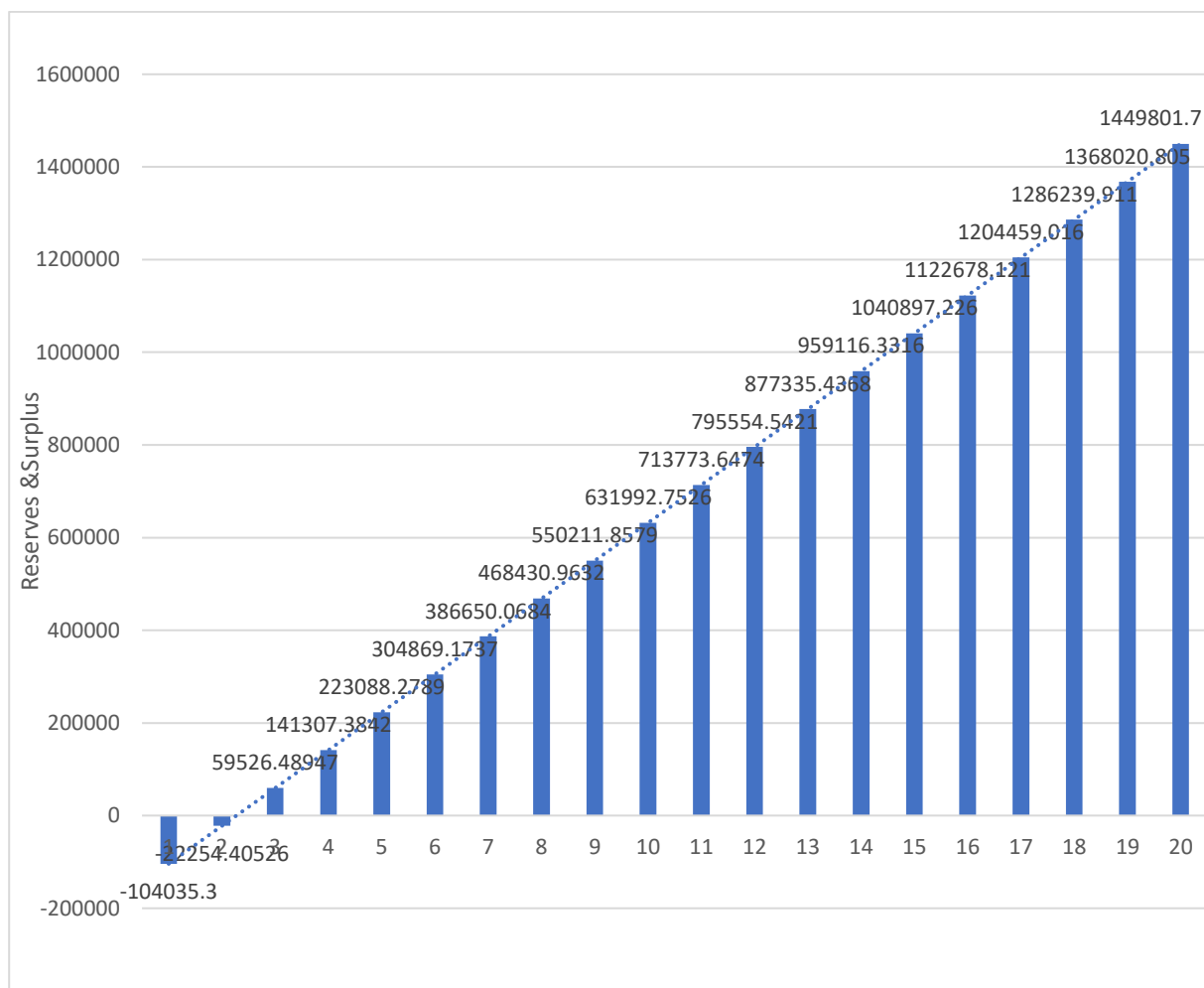
Year	Y	X	XY	X <sup>2</sup>	Trend Value
2002-2003	75791	-19	-1440029	361	-104035.3
2002-2004	94245	-17	-1602165	289	-22254.405
2004-2005	123705	-15	-1855575	225	59526.4895
2005-2006	157975	-13	-2053675	169	141307.384
2006-2007	189619	-11	-2085809	121	223088.279
2007-2008	275524	-9	-2479716	81	304869.174
2008-2009	324658	-7	-2272606	49	386650.068
2009-2010	381542	-5	-1907710	25	468430.963
2010-2011	450944	-3	-1352832	9	550211.858
2011-2012	544898	-1	-544898	1	631992.753
2012-2013	638603	1	638603	1	713773.647
2013-2014	729832	3	2189496	9	795554.542
2014-2015	822798	5	4113990	25	877335.437
2015-2016	913080	7	6391560	49	959116.332

2016-2017	1010786	9	9097074	81	1040897.23
2017-2018	1079770	11	11877470	121	1122678.12
2018-2019	1176531	13	15294903	169	1204459.02
2019-2020	1282208	15	19233120	225	1286239.91
2020-2021	1495278	17	25419726	289	1368020.81
2021-2022	1689877	19	32107663	361	776918.5
Total	13457664		108768590	2660	

Source: Reserve Bank of India

In the above table, X is taken as Reserves & Surplus variable. Past 20 years data is analysed to have accuracy in trend value.

**Graph 1:**



The graph clearly indicates the increasing trends of Reserves & Surplus of scheduled commercial banks. But Gross NPA of the year 2021-2022 is 12750006 (in crores), which is much greater than Reserves & Surplus of the year 2021-2022.

## Results:

Table 1 implies negative relationship between IMPS and Net NPA as Percentage to Net Advances with value -0.292084209 in Pearson's correlation method. It is examined for the study period of 2012-2022. Past 10 years is taken to have clear picture without any major disturbance. Therefore, when IMPS value increase, Net NPA as Percentage to Net Advances either remain same or decrease. These advanced payment methods does not affected banks profit in negative way.

Table 2, further note down the banks capital stability for the period of 20 years by taking Reserves & Surplus variable. During 2023-24, the Reserve Bank of India (RBI) transferred a surplus of ₹87,416.22 crore to the Central government. This amount is higher than both the previous year's transfer (₹30,307.45 crore) and the budgeted amount for dividend/surplus transfer. The surplus reflects the RBI's prudent financial management and its role in maintaining monetary stability in India. Reserves and surplus is shown rising from 2003 in our study. Therefore, it provides solid ground in financial stability.

## Discussion:

There are many payment system indicators, but this paper particularly concerned with Immediate Payment System (IMPS). Now-a-days, IMPS fund transfer is thriving very fast. The main reason is its convenience. The transaction volume done through this method is also increased notably within few years. The government has increased the transaction limit of IMPS to 5 lakhs. Its effect on NPA is negative, which means, when IMPS increase Net NPA as Percentage to Net Advances decrease. Therefore, we accept null hypothesis.

This study has laid more empahsize on Reserves & Surplus, because many research is not attributed towards this variable. Many previous literature has focused on profit efficiency in terms ROA (Return on Assets), ROE (Return on Equity), Profit Margin, Capital Adequacy Ratio (CAR) and Cost saving variables. Among all the profit efficiency variable, Reserves & Surplus alone refers to bank's profits that is set aside for specific future purposes. These purposes may include buying fixed assets, paying dividends, repaying debt, legal settlements, and more. Thus, it ensures financial sustainability in future. As this study has more focus on NPA, which is loss for banks, Reserves & Surplus variable is taken into analyse to understand banks capacity to withstand such losses.

## Conclusion:

Many past literature have given different point of view, perspective and interpretation for banks profitability. The major focus of this paper is on banks financial view in post internet era. Because introduction of internet is considered a tremendous change in banking system. That's too in recent time, many convenient methods of fund transfer methods are there in our banking system. Among those methods, this research has taken IMPS payment system indicator. And the analysis concluded the presence of inverse relationship. Therefore, we accept null hypothesis. Further, this paper turns its focus towards future sustainability of banking. This is done through analysing the trend value of Reserves &

Surplus variable. It also reveals favourable trend pattern. Such an analysis would throw more light on the recent scepticism on the continued importance of the banking sector for economic development

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