



## A study on the impact of NPA on the share price of banks

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### Abstract

There has been an increase in the credit flow to various sectors in the economy and this has thereby contributed to the increase in the non-performing assets of the bank. While it is clear that the amount of npa has a direct effect on the efficiency of the bank it is important to analyze if this has a relationship with the share price of the bank. Since the share price of a bank gives a partial idea about the peoples image of the bank it helps to understand if the public changes its opinion based upon the non-performing assets a banks owns. This paper aims to test the impact of the NPA on the share price of 10 banks for a period of 10 years. It also aims to find out if a relationship exists between the two variables.

**Keywords:** non-performing asset, share price, public sector banks, private sector banks

### 1. Introduction

The banking sector is the backbone of the Indian economy and has been prevalent right from the Vedic era. There also mentions of banking products in Chanakya's Arthashastra (300 B.C.) The sector has been growing with time and has been adapting itself to the various changes in the needs of the customers. However there are many risks that the industry faces such as technological changes and the threat posed by fintech companies but most of all the greatest risk that banks face is the non-repayment of loans by customers leading to Non- performing Assets. Although everyone is aware that this causes a loss to the banks, the affect it has on the stock performance of such banks has not been taken into consideration. This papers not only aims to find out the relationship between NPA's and stock price of banks but it also aims to compare the results between private sector banks and public sector banks. In India, the banking system has very long history evolving over many years passing through different phases after independence. After financial sector reforms as part of economic liberalization, the Indian banking system has undergone many noteworthy transformations. One such transformation has been the adoption of best international practices in regulating and supervising the money market of the country. In order to create a strong competitive and vibrant banking system, the country has allowed entry of new private sector banks and foreign banks leading to flexibility in operational work and financial autonomy to public sector banks in respect of fund mobilization and credit management. The banking sector has to concentrate on the effective management of funds, to avoid the hindrance of rotation of funds. Because many studies highlighted that most of the beneficiaries have used the loan amount for the purposes other than actual diverted the loan amount have used it for social ceremonies prior to spending on house maintenance and repaying old debts. This may be one of the causes for accumulation of overdue balances. This

will leads to poor recovery performance and will affect the banking regular activity. So, the concept of Non-Performing Assets (NPA) is developed, to help the financial institutions to speed up the collection and to make special effort to recover with the help of various Laws in force.

There are so many factors responsible for the accumulation of NPAs in banking sector in general, of which some of them plays important role like,

- Diversification of funds for purposes other than actual. That is, obtaining funds for new projects but diversifying the fund associate concerns. This is coupled with recessionary trends and failure to tap required funds in the capital and debt market.
- Business failure due to failure in product / marketing as well as due to failure in financial management, strained labour relations, adoption of inappropriate technology, using outdated and outmoded machinery, technical problems and product obsolescence.
- Economic recession, input shortage, power shortage, price escalation, accidents, natural calamities and problems with customers or in other countries leading to non - payment of over dues.
- Over run cost and time during project implementation stage.
- Frequent change in Government policies like changes in pollution control norms, excise duties, poor credit decisions, priority sector lending and legal systems.
- Willful default, siphoning off funds, fraud and misappropriation of loan funds by promoters and dispute among directors.

Loan is considered to be a default loan in turn leading or lending to non-performing asset if the borrower has failed to pay interest on principal amount or delayed paying installment of principal amount for 90 days. Non-performing assets are problematic for financial institutions since they depend on

interest payments for income. Sometimes, troublesome pressure from the economy can lead to a sharp increase in non-performing loans and often results in massive write-downs.

Technically, NPAs are loan accounts of borrowers, which have been classified by a bank into three categories viz, standard asset, sub-standard asset and Loss assets in accordance with the guidelines relating to asset classification issued by the RBI (Reserve Bank of India). The build-up of NPAs is an important factor in banking sector determining its financial stability and growth as high NPAs have a deteriorating impact on capital, liquidity and profitability of the banking institutions. Moreover, a high level of NPAs hampers the bank ability to recycle funds and puts a strain on the net worth of banks. Since the onset of the global financial crisis, the Indian banking system has become a source of concern due to rising NPAs.

In recent years, studies on bank efficiency have taken into account asset quality, specifically nonperforming loans. The omission of such a variable might lead to an erroneous bank efficiency measure. This is particularly true since a large proportion of non-performing loans may signal that banks use fewer resources than usual in their credit evaluation and loans monitoring process. In addition, non-performing loans lead to inefficiency in the banking sector as founded by Altunbas *et al.* (2007), Fan & Shaffer (2004), and Girardone (2004). This is because efficient banks are better at managing their credit risk as highlighted by Berger & Young (1997). In spite of an enormous quantity of literature on the banks, the literature still suffers from a paucity of studies on relating share price and bank efficiency it is understood that increasing NPA can badly affects the performance of the banks business and profitability. Most of the investor are watching the NPA changes though retain investor are not so keen about this. EPS give more realistic picture about the performance of the banks. There are many factors which affects the EPS of the Banks. NPA is one of them. In some cases EPS increases even though NPA is on higher side because banks other income generation sources are work effectively

## 2. Review of literature

1. Joseph A.L and Dr. Prakash. M (2014) talks about the trends on Non- Performing assets, and the main factors that are the cause for the formation on Non- Performing Assets. They also say that the amount of NPAs can reflect the efficiency of the bank, stating that higher the number of NPAs lower the efficiency. The research design is descriptive in nature and the data for this paper was collected from secondary sources. The finding was that the level of NPA in the public sector was much higher than that in the private sector. This paper however does not have anything to do with the relationship between NPAs and the share price of banks. That will be covered in this research paper.
2. Modi. S *et al.* (2014) found out the impact the NPAs had on the profitability of the bank. The research design was descriptive nature and was conducted using regression analysis on data that was collected from secondary sources. The population for the study was 74 banks. The findings was that there was a positive relation between Total Advances, Net Profits and NPA of bank.

3. Idier *et al.* (2011) evaluated the bank equity volatility, tail market risk and bank financial structure. A panel of 65 large US commercial banks has been analyzed over the period 1996-2010 using regression analysis. The study found that profitability, asset quality, interbank loans and bank size are important variables affecting their sensitivity to market risk significantly.
4. Makkar and Singh (2013) examined the stock return behavior of two Indian commercial banks SBI and ICICI Bank during the period of financial turmoil. The study found that stock price of ICICI Bank was more affected by the recent crisis compared to that of SBI. The main reason for the relatively less impact of the crisis on SBI stock prices is its public ownership.
5. Shveta Singh and Anita Makka (2014) have tried to empirically examine the relationship between the stock returns volatility and crisis in the Indian banking sector taking Bankex stock index as a proxy of stock prices of Indian commercial banks. Bankex index consists of major PSU and PrSB listed on BSE (90% of the Indian banks are listed on BSE). The time series data of closing stock prices for nine years was collected on daily basis from January 1, 2004 to December 31, 2012. The study found that Indian stock market has been significantly affected by the news of recession in the US stock market. There exists a significant difference in the stock returns of banks and its volatility between pre- and post-crisis periods.
6. Tanupa Chakraborty (2010) concluded that the relationship between stock return volatility and the application of fair values in the banks' investment portfolio over the time period April 1994-March 2008 has no significant impact on the volatility of banks' stock returns.
7. Deepti Sahoo and Pulak Mishra (2012) have examined the structure-conduct-performance relationships in Indian banking sector. They found out that strong inter-linkages exist amongst structure of the market, conduct of banks and their financial performance. While there was direct dependency of market share on its market size, selling efforts, asset base and past financial performance, as well as selling efforts of these banks varied directly with market share, asset base, and financial performance. On the other hand, returns on assets of a bank directly depended on the market share, but inversely with its asset base and selling efforts.

## 3. Research Methodology

### 3.1 Purpose of the study

The banking industry is heavily leverage by the existence of non- performing assets on its balance sheet. Although enough study has been conducted into what measures should be taken to control such assets no importance has been given to the effect of the number of non-performing assets a bank has on the way the public views it and therefore the effect it has on its share price. Therefore this study aims to find out if there is a relationship between these two variables and if there is to what extent.

### 3.2 Scope of the study

This study is limited to the findings arrived at after the analysis of data from the top 5 banks in the private and public

sector. More research could be done by taking into the sample size a larger number of banks. The banks that are chosen are only from India, no foreign banks have been taken into consideration. Therefore the findings only deal with the India.

### 3.3 Methodology

The research follows the quantitative research approach. The research will be conducted using secondary data from the NSE website and the relationship and impact will be calculated using correlation and regression analysis.

### 3.4 Research gap

Although there are many research papers based on NPA's and the how to control them, observing the various research papers I found a gap where not a lot of research has been done to measure the shareholders wealth affected by the NPA's of the banking system in India. This research paper aims to find out the effect of NPA's on the share price of the banks showing how it affects the perception of the customers about the bank.

### 3.5 Limitations

- The data collected is only secondary
- The share price at that particular time can also be affected by other factors

## 4. Results and discussions

### 4.1) HDFC Bank

Table 1

Regression Statistics	
Multiple R	0.878261
R Square	0.771342
Adjusted R Square	0.738677
Standard Error	199.8682
Observations	9

### 4.2) AXIS Bank

Table 2

Regression Statistics	
Multiple R	0.603119
R Square	0.363753
Adjusted R Square	0.284222
Standard Error	2165.521
Observations	10

### 4.3) Kotak Bank

Table 3

Regression Statistics	
Multiple R	0.914967
R Square	0.837165
Adjusted R Square	0.816811
Standard Error	237.0665
Observations	10

### 4.4) Yes Bank

Table 4

Regression Statistics	
Multiple R	0.894141
R Square	0.799487
Adjusted R Square	0.774423
Standard Error	155.5188
Observations	10

### 4.5) ICICI Bank

Table 5

Regression Statistics	
Multiple R	0.410721
R Square	0.168692
Adjusted R Square	0.064779
Standard Error	71.34571
Observations	10

### Public sector banks

### 4.6) SBI

Table 6

Regression Statistics	
Multiple R	0.505663
R Square	0.255695
Adjusted R Square	0.162657
Standard Error	15704.3
Observations	10

### 4.7) Punjab National Bank

Table 7

Regression Statistics	
Multiple R	0.221285
R Square	0.048967
Adjusted R Square	-0.06991
Standard Error	142516.7
Observations	10

### 4.8) Bank of Baroda

Table 8

Regression Statistics	
Multiple R	0.396438
R Square	0.157163
Adjusted R Square	0.051809
Standard Error	7040.139
Observations	10

### 4.9) Canara Bank

Table 9

Regression Statistics	
Multiple R	0.320723943
R Square	0.102863847
Adjusted R Square	-0.009278172
Standard Error	7793.14872
Observations	10

#### 4.10) Bank of India

**Table 10**

<i>Regression Statistics</i>	
Multiple R	0.721266
R Square	0.520225
Adjusted R Square	0.460253
Standard Error	7571.534
Observations	10

#### 4.11 Interpretation

From the above analysis we see that in most of the privately owned banks the NPA have a strong relation to the share price of the banks, however the same cannot be said for the public banks. The R values for all the public sector banks are closer to -1 showing a lesser relation between the non-performing assets and share price. Therefore the conclusion that can be drawn from the analysis is that people seem to have a unwavering faith in the public banks and their NPA's, even though of a greater volume than the private banks seem to have no effect of their share price. The private banks however although have to remember that their image depends of the number of NPA's they possess.

The main reason for the stark difference in the amount of NPA's that the PSB's have is due to the pressure to lend to priority sectors which in-turn constitute most of the NPA's. In tractor financing, according to industry sources, private sector banks and non-banking finance companies (NBFCs) account for 60 per cent, while PSBs' share has shrunk to 10 per cent from nearly 50 per cent a few years ago. Private financial institutions that are at the forefront of tractor financing, are HDFC, Kotak Mahindra, and ICICI among the banks, and Mahindra & Mahindra, L&T, Tata Capital, and Cholamandalam among the NBFCs. Their NPAs are negligible. The interest rate ranges between 12 and 20 per cent for such loans which are generally less than four years and of amounts less than Rs 4 lakh. The instalments are made on mutual agreement, either on monthly or crop-pattern basis, and are collected by agents from the homes of the borrowers, against receipts delivered through hand-held devices. The employees of the lending institutions are present in the premises of tractor dealers and offer a commission of one per cent as an incentive to facilitate the loan for the company. The Know Your Customer (KYC) norms are generally very simple but for security purposes, the borrower provides three blank cheques on a returnable basis and two references. The loan is extended after extensive field inspection followed by a telephonic check made by the zonal or regional office. Further each of the private sector lenders has a risk control unit and there is also a third-party review that randomly checks the credentials of the borrower.

The maximum amount of the loan is 75 per cent of the value of tractor to ensure that the borrower has a monetary stake in the purchase. Despite the elaborate arrangement, the loan is sanctioned within three working days. The tractor is hypothecated and the RC book is stamped. The recovery procedure is focused and sometimes, the recovery amount is enhanced, especially around harvest time. In sharp contrast, PSBs strictly follow KYC norms and the borrower

has to visit the branch office of the bank a number of times to avail of the loan. The rate of interest is lower than private sector and ranges between 10 and 15 per cent, the period of loan is higher and ranges between seven and nine years, and amount of installments is lower and generally payable on a monthly basis. In most cases, the cost of commission offered to the employee of the lending institution ranges from five to seven per cent of the value of the loan. The process is slow and takes a few weeks for the loan to be realized.

#### 5. Conclusions

The Non - Performing Assets have always created a big problem for the banks in India. It is not just the problem for the banks but for the economy as a whole. The money locked up in NPAs has a direct impact on shareholders' investment, profitability and market capitalization of the bank as Indian banks are highly dependent on income from interest on funds lent. This analysis has been emphasized for the period of 2006- 2016. In this period the NPA of SBI was on a rise and the stock prices were as usual in there waves. Similar observations could be made for other banking stocks as well. Through this study we can safely conclude that NPA may not be a strong or the only criteria for judging the health of any particular bank and making an investment decision solely based on this but we can use NPA as a catalyst in generating positive returns as this can be used to identify and exploit the herd mentality of the crowd and the emotional impact, though short term, this crowd brings in to the stock market due to its actions prodding out more due to emotions than based on facts and data.

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