

NON PERFORMING ASSET IMPACT ON BANKING EQUITY VALUES - A STUDY

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ABSTRACT:

In the developing economy Banking Sector plays a vital role. Country like India Banking Sector is having huge scope to grow because majority of the citizens doesn't have Banking accounts. Banking Sector is having a big threat for its growth is Non-Performing Asset. My study has been emphasized from the period of 2009-2014. Granger Causality test results indicates that SBI NPA is not effecting its stock price but rest of the select banks stock prices were getting influenced. Syndicate Bank NPA is not causing its Market Capitalizations growth but rests of the banks Market Capitalizations were getting influenced. Bivariate Correlation results indicate that SBI Npa and Stock Price were having Positive Correlation. This analysis is useful to the investors of the banking sector of equity, regulators of banking, bankers and investment bankers.

KEYWORDS:NPA, Market Capitalization, Stock Price, Andhra Bank, Indian Bank, Union Bank.

INTRODUCTION:

For any nation, banking system plays a vital role in the development of its sound economy. Banking is an important segment of the tertiary sector and acts as a back bone of economic progress. Banks are supposed to be more directly and positively related to the performance of the economy. Banks act as a development agency and are the source of hope and aspirations of the masses. Commercial banks are the major player to develop the economy. A major threat to banking sector is prevalence of Non-Performing Assets (NPAs). NPAs reflect the performance of banks. A high level of NPAs suggests high probability of a large number of credit defaults that affect the profitability and net-worth of banks and also erodes the value of the asset. The NPA growth involves the necessity of provisions, which reduces the overall profits and shareholders' value .

In present scenario NPAs are at the core of financial problem of the banks. Concrete efforts have to be made to improve recovery performance. The main reasons of increasing NPAs are the target-oriented approach, which deteriorates the qualitative aspect of lending by banks and willful defaults, ineffective supervision of loan accounts, lack of technical and managerial expertise on the part of borrowers.

REVIEW OF LITERATURE:

- 1) **Zahoor Ahmad (Aug-2013):** This analysis is to examine the individual banks got ranks as per their performance in management of NPA"s. And also tested there is significant difference in the level of NPA"s of nationalised banks which reflect their varied efficiency in the management of nonperforming assets. Whereas my research is not relevant to this study. My analysis is to test the impact of Npa and Stock Price, Market Capitalizations growth of the banks.
- 2) **Balraj Singh (Dec-2011):** This analysis is the study of A high level of NPAs suggests high probability of a large number of credit defaults that affect the profitability and net-worth of banks and also erodes the value of the asset. My analysis and his analysis are different and my complete analysis is to check the impact of Npa, Market Capitalizations of select Banking Equity.
- 3) **C.S.Balasubramaniam (2012):** This analysis investigates the Indian banking system financial sector to bring down Non-Performing Assets (NPA), to improve the profitability and overall financial health in the banks, in general. My analysis is useful to the investors of the banking sector of equity.
- 4) **Kajal Chaudhary and Monika Sharma (2011):** This analysis is done based on the functioning of Banks in India only after liberalization, globalisation and privatisation. It has become very mandatory to study and to make a comparative analysis of services of Public sector Banks and Private Sector banks. But whereas my analysis concentrating on the impact of the banking sector NPA levels so that they can measure its accurate impact on the stocks along with its Market Capitalization.
- 5) **Dr. K. Srinivas, I. Saroja (2013):** This analysis examines the analyse and compare the purpose of analysis of comparative financial performance of the select banks like HDFC and ICICI. World-renowned, CAMELS model with t-test is applied. CAMELS stand for Capital Adequacy, Asset Quality, Management, Earning Quality, Liquidity and Sensitivity. The capital adequacy and Tier I capital ratio of ICICI and HDFC bank is more than the Basel Accord. They concluded that both the banks are good with respect capital adequacy because it is above the Basel norms. The efficiency of HDFC Bank management is good because its NPAs are less than 0.5 for the study period from 2013 to 2012. Whereas my study has been done on selected banks of Indian banking sector for the study period 2009-2014 for 5 years and Granger causality test is applied.
- 6) **Gaurav Sharda, Namratha Swamy, Charan Singh (2014):** Their analysis examines the impact of foreign banks on Indian economy. Further, it discusses the various opinions towards the foreign bank operations in the host country, with India as the example. Whereas my analysis is not relevant to this study.
- 7) **Krishna Chaitanya.V (2012):** This research says that a strong banking sector is important for flourishing economy. The failure of the banking sector may have an adverse impact on other sectors. Non-performing assets are one of the major concerns for banks in India. NPAs reflect the performance of banks. A high level of NPAs suggests high probability of a large number of credit defaults that affect the profitability and net-worth of banks and also erodes the value of the asset. My research is based on high Market Capitalization from National Stock Exchange of the selected banks equity.

- 8) **ShipraSaxena(2013):** This study is the concept of Non-performing Asset (NPA) can be understood in simple terms as an Asset, which ceases to yield income to the Bank. . The present study is aimed at understanding the concept of non- performing assets and the efforts on behalf of the banks and financial institutions in harnessing the NPA's. The growth in NPA's can be checked considerably if banks and financial institutions take suitable internal measures. My analysis has been done on the only selected banks and SBI Stock returns were not caused by the NPA levels but rest of the banks returns were caused during the study period. Syndicate Bank Market Capitalization is not influenced by the NPA levels but all other banks Market Capital is getting influenced.
- 9) **AamirAzeem, Amara(2014):** This analysis uses the issue of non-performing loans (NPLs) is vital for banking system since its evolution. It is well-known debate among bankers to mitigate problem of NPLs by different policies and methods. Impact of NPLs has been quantified in this research article with data of sixteen major banks irrespective of size, ownership and functionality from 2006-2012 by using panel fixed effect model. It has been revealed that impact of NPLs on profitability is negative. But I have considered 10 banks equity's to find out how these banks got impacted by the Npa's from 2009 to 2014 by using NSE stock prices.
- 10) **DrTanmaya Kumar Pradhan(2012):**This analysis examined to find Higher level of NPA forced the banks to charge higher PLR and PLR related interest rates. This will attract high- risk borrowers which, in turn, may result in higher level of non- performing advances in future. Large borrowers are found to be the principal defaulters. Mismanagement or diversion of fund is also one of the main causes of NPA. But my analysis is the considered of NPA's impact on Banking equity, Selected banks market capitalizations and stock prices are influenced by the NPA levels of during the time period.

NEED:Banking system in any economy will be considered as back bone for its growth. InIndiamajority of the banking system are controlled by the psu's, which are highly leveraged by the non-performing assets on its balance sheet. In this study I had observed various research papers which were focused on how assets are getting effected by the higher npa levels. By observing the various research papers I found a gap where no research has been done to measure the share holders wealth effected by the npa's of the banking system in India.

OBJECTIVS:

1. To find the correlation between NPA, Market Capitalizations and Stock price of select Banking Sector
2. To measure the impact of NPA on Market Capitalizations
3. To measure the select Banks NPA impact on stock price movement

SCOPE: This analysis has been emphasized to measure the NPA's impact on Banking Sector for the period of 2009-2014 i.e., 5 years data has been considered. Based on the high Market Capitalization 10 banks were considered for the analysis purpose. Stock Prices of the select banks were considered from NSE India.

Empirical Study: net npa ratio's, share prices, market capitalization, stock prices, Andhra Bank, Indian Bank, Union Bank, Bank of Baroda, Corporate Bank, SBI, Syndicate Bank, Bank of India, IDBI, Punjab National Bank.

RESEARCH METHEDOLOGY:

The Granger causalitytest: It is a statistical hypothesis test for ascertaining whether one time series can be used for forecasting another time series. It is originally considered that regressions reflect "mere" correlations, but Clive Granger on the other hand argued that causality in economics could be reflected by measuring the ability of predicting the future values of a time series using historical values of another.

$$\mathbb{P}[Y(t+1) \in A | \mathcal{I}(t)] \neq \mathbb{P}[Y(t+1) \in A | \mathcal{I}_{-X}(t)]$$

Bivariate Correlation: This test involves the analysis of two variables (often denoted as X, Y), for the purpose of determining the relationship between (x,y). In order to see if the variables are related to one another, or not.

$$r = \frac{\sum f_{uv} - \frac{(\sum f_u)(\sum f_v)}{n}}{\sqrt{\sum f_u^2 - \frac{(\sum f_u)^2}{n}} \times \sqrt{\sum f_v^2 - \frac{(\sum f_v)^2}{n}}}$$

Regression: A statistical measure that attempts to determine the strength of the relationship between one dependent variable and the series of other changing variable.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n + \epsilon$$

Johansen test: This test is used to know whether data is co-integrated between variables. This test permits more than one co-integrating relationship so it is more generally applicable than the Engle-Granger test which is based on the Dickey–Fuller or the augmented test for unit roots in the residuals from a single co-integrating relationship.

LIMITATIONS:

1. Marketcapital of the select banks has been considered from nse.
2. Consolidated balance sheet has been considered for the net npa of the select banks.

DATA ANALYSIS:

1. To find the correlation between npa, Market Capitalizations and Stock price of select Banking Sector

		NPA	Mkt Capital	Stock
ABNPA	Pearson Correlation	1	-0.705	-0.649
	Sig. (2-tailed)		0.184	0.236
	N	5	5	5
BOBNPA	Pearson Correlation	1	0.03	-0.022
	Sig. (2-tailed)		0.962	0.971
	N	5	5	5
BOINPA	Pearson Correlation	1	.942*	-0.727
	Sig. (2-tailed)		0.016	0.164
	N	5	5	5
CORPNPA	Pearson Correlation	1	-0.743	-0.628
	Sig. (2-tailed)		0.15	0.257
	N	5	5	5
IDBINPA	Pearson Correlation	1	0.217	-0.671
	Sig. (2-tailed)		0.725	0.215
	N	5	5	5
IBNPA	Pearson Correlation	1	-0.611	-0.498
	Sig. (2-tailed)		0.274	0.394
	N	5	5	5
PNBNPA	Pearson Correlation	1	-0.738	-0.551
	Sig. (2-tailed)		0.155	0.335
	N	5	5	5
SBINPA	Pearson Correlation	1	0.526	0.448
	Sig. (2-tailed)		0.363	0.449
	N	5	5	5
SYNDNPA	Pearson Correlation	1	-0.023	-0.234
	Sig. (2-tailed)		0.971	0.705
	N	5	5	5
UBNPA	Pearson Correlation	1	-0.773	-0.619
	Sig. (2-tailed)		0.125	0.266
	N	5	5	5

Interpretation:The above analysis of Bivariate Correlation has been applied between NPA, Market Capitalizations, and Equity Stocks. Bank of India NPA is having strongly

correlation with its Market Capitalization even though it is having a Negative Correlation with equity. Bank of Baroda, IDBI, SBI NPA's are positively correlated with Market Capitalizations. Whereas SBI Stock is having positive correlation with NPA and rest of the Stocks are Negatively Correlated.

2. To measure the impact of npa on market capitalization.

	Banks	R square	Sig
1	AB	0.558	0.147
2	BOB	0.565	0.249
3	BOI	0.968	0.016
4	CORPB	0.837	0.085
5	IDBI	0.706	0.16
6	IB	0.812	0.037
7	PNB	0.905	0.048
8	SBI	0.484	0.192
9	SYNDIB	0.043	0.739
10	UB	0.968	0.016

Interpretation:The above table significant values of regression weight estimation indicates that select banks NPA's influence on Market Capitalization of equity. The analysis result shows that all the banks Market Capitalizations influenced by the Banking NPA's except Syndicate Bank. Because significant value is more than 0.5.

3. To measure the select Banks npa impact on stock price movement.

Null Hypothesis:	Obs	F-Statistic	Prob.	Hypothesis
ABNPA does not Granger Cause ABSTOCK	12	0.47423	0.6478	Reject
BOBNPA does not Granger Cause BOBSTOCK	12	0.35128	0.7199	Reject
BOINPA does not Granger Cause BOISTOCK	12	0.07924	0.925	Reject
CORPNPA does not Granger Cause CORPSTOCK	12	0.68802	0.5446	Reject
IBNPA does not Granger Cause IBSTOCK	12	0.35157	0.7197	Reject
IDBINPA does not Granger Cause IDBISTOCK	12	0.09396	0.9119	Reject
PNBNPA does not Granger Cause PNBSTOCK	12	0.10601	0.9014	Reject
SBINPA does not Granger Cause SBISTOCK	12	3.54069	0.1102	Accept
SYNDINPA does not Granger Cause SYNDISTOCK	12	0.19345	0.83	Reject
UBNPA does not Granger Cause UBSTOCK	12	0.29324	0.7578	Reject

Interpretation:The above analysis of Granger Causality test Null-Hypothesis indicates that all the select banks stock prices were Granger cause by the Bank NPA's except SBI Bank and accept the Alternative Hypothesis. The hypothesis analysis results indicate that all the banks stock prices were caused by their respective NPA's except SBI.

FINDINGS:

1. Bank of India NPA is strongly correlated with its equity Market Capital. This analysis indicates that Market Capital and NPA's are moving in the same direction during the study period.
2. SBI Stock and its NPA are positively correlated whereas in the same period rest of the Stock prices are negatively correlated with their NPA's.
3. Syndicate Bank Non-Performing Asset is not influencing its Market Capitalization but rest of the Banks Market Capitalization is getting influenced by the NPA.
4. SBI Stock price not caused by its Non-Performing Assets during the study period but all the select Bank Stock prices were caused by their NPA's in the same period that is 2009-2014.

CONCLUSION: I conclude the analysis of NPA's IMPACT ON BANKING SECTOR. This analysis has been emphasized for the period of 2009-2014. In the present days every bank is facing problem at Non-Performing Asset. That is the reason I had consider 10 Banks based on high Market Capitalization from National Stock Exchange and observe that SBI Stock returns were not caused by the NPA levels but rest of the banks returns were caused during the study period. Syndicate Bank Market Capitalization is not influenced by the NPA levels but all other banks Market Capital is getting influenced. Hence further study is recorded in this area where research scholars should consider various factors which influence the banking sector NPA levels so that they can measure its accurate impact on the stocks along with its Market Capitalization.

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