SJCC Management Research Review
Print ISSN-2249-4359
Vol - 9(1) June. 2019. Page No. 128-146

NON PERFORMING ASSETS- A STUDY ON SIZE DIFFERENCES OF COMMERCIAL BANKS

Rashika Jain*

High level of NPAs leads to loss of income on one hand and on the other hand heavy provisioning requirements on NPAs leads to further erosion of already depleted profits. For any economy which is striving for achieving reasonable growth rate with the given resources, banking system acts as a blessing.. Now banks perform the major role of channelizing the surplus funds of surplus savings unit and providing it to the deficit saving units. Today NPAs have become major drawback for Indian Banking Industry. NPAs are highly unacceptable due to the issues faced in terms of lower profitability and capital erosion. Study sample conprises of 35 Indian Commercial Banks and study period covers past 12 financial years spanning between 2007-2018. Data collected through secondary source is subjected to Trend Analysis, one way ANOVA and Gabriel Post Hoc test. Two financial ratios are used namely Gross NPAs to Gross Advances and Net NPAs to Net Advances.The present research work shows that medium sized banks are incurring NPAs higher than small banks and large banks. Small banks are more efficient than medium and large banks and thus banks should not always favor the merger and expansion strategies. The study reveals that there is no significant difference exists in Gross NPA to Gross Advances and Net NPA to Net Advances of small, medium and large banks.The study does not supports “too big to fail” attitude and foreshadows that big size of banks may not always provide economies of scale. Thus the society should evaluate the financial position from every aspect before voting in favor of medium and large banks.

Key Words: Non Performing Assets, Private Sector Banks, Public sector Banks, ANOVA, Size Difference.

**Junior Research Fellow, Faculty of Commerce, Banaras Hindu University, Varanasi*

Email : rashika597@gmail.com.

Introduction

For any economy which is striving for achieving reasonable growth rate with the given resources, banking system acts as a blessing.. Now banks perform the major role of channelizing the surplus funds of surplus savings unit and providing it to the deficit saving units. By diverting the resources in desired direction and in consonance with the aim of fostering the productive activities, banks perform the role of financial intermediation. The deposits received from public are disbursed in the form of loans and advances to the borrowers.

Any banking industry has its assets mainly comprised of loans and advances. And the asset quality of any bank surely determines its financial soundness (Murari, 2014). These loans and advances generate interest income in the form of difference between interest received on borrowings and interest paid on deposits. Till the time assets are able to generate this income, it is regarded as performing assets. When the assets fail to generate income, it is treated as 'Non Performing Asset' (NPA). Thus in general, any asset is regarded as Non performing when interest payment or installment payment of principal amount is due for a period more than 180 days. However this guideline was revised with the effect from March, 2004 whereby now any asset is regarded as non performing when interest and installment payment is due for period of more than 90 days (Faizanuddin and Mishra, 2012).

Broadly NPAs are classified in to two heads- Gross NPAs and Net NPAs. Gross NPAs refer to the amount outstanding in the account of borrower excluding the interest receivables. Once any account is declared as NPA, no interest can be debited and apportioned as profit. Banks are required to maintain some provision on the Gross NPAs depending upon the category of asset (Standard Asset, Sub-Standard Asset, Doubtful Asset and Loss Asset). When this provision is deducted from Gross NPAs, the figure left aside is known as Net NPAs. Thus the two financial ratios used in the present study to assess the NPA position are Gross NPAs to Gross Advances and Net NPAs to Net Advances.

NPAs are classified in to four categories depending upon the time period up to which asset has remained as non-performing. Standard Assets are those which carry normal

risk of the business. When the assets have remained non-performing for period not exceeding two years, it is classified as Sub-Standard Asset, Doubtful Assets are those assets which have remained as non-performing for a period exceeding two years and lastly Loss Assets are those which have not been written off by the bank and have quite low recovery value.

Today NPAs have become major drawback for Indian Banking Industry. NPAs are highly unacceptable due to the issues faced in terms of lower profitability and capital erosion. High level of NPAs leads to loss of income on one hand and on the other hand heavy provisioning requirements on NPAs leads to further erosion of already depleted profits. Further it reduces the return on assets, return on equity and reduces capital adequacy ratio too (Jain, 2007).

Several factors which contribute to NPAs are mentioned by researchers. Some of these factors are internal like poor credit monitoring, losses due to failure of business and product, transfer of funds to associate concern, incorrect technology and delays in implementation of project. Other factors are external factors and include recession, fluctuations in exchange rate policy, power failure, non availability of desired inputs or sudden changes in government policies (Joseph and Prakash, 2014).

Though NPAs adversely affect all the banks but its impact may differ depending upon the variations in size of the banks as measured by total assets, total deposits or other parameters.

Large sized banks have larger resource base and so they are in position to enjoy the benefit of economies of scale due to higher business, higher spread, better profitability and lower per unit cost due to managerial specialization. But since large banks also advance more loans as compared to small banks and medium banks, so they carry inherent risk of higher NPAs. Seen in this way it becomes important to throw some light on how the size of bank determines its NPA position.

With this backdrop, the present study is done to assess the difference in NPA position of the different sized banks and thus to find whether large banks are really able to gain the benefits of large size over the small and medium sized banks.

The rest of the paper has been divided into 8 sections. Section 2 provides the overview of existing literature followed by Section 3 which summarizes the objectives and Section 4 which mentions the Hypothesis of the research. Section 5 describes the research methodology adopted to achieve the objectives. Analysis of the data and interpretation of the results are done in Section 6 and Section 7 respectively. Section 8 concludes the research work.

Scope of the Study:

The present study has made an attempt to evaluate the NPA position of the banks on the basis of difference in their size. Thus the study covers all the private sector banks and public sector banks. Financial performance is measured through two financial ratios namely Gross NPA to Gross Advances and Net NPAs to Net Advances.

Review of Literature:

Das and Dutta (2014) in their work have selected the sample of 26 public sector banks and have analyzed the NPA position of the banks for the period of 6 years covering the financial year 2007-08 to 2012-13. Collecting the data from secondary sources, the researchers have applied ANOVA to find the significance of difference in mean NPA of the banks. The finding of the study has revealed that there is no significant difference in the mean NPA of the selected banks. Thus the study has concluded that all the banks are similar in terms of NPA irrespective of their operation. Pasha and Srivenkataramana (2014) have critically evaluated the non performing assets of Indian Banks. The study has found that both gross and net NPAs of all public sector banks have shown an increasing trend during the period 2008-13. Performance of private sector banks is better especially new private sector banks are far more efficient with NPA less than 1 percent. The sub standard assets are higher in PSBs group than in PvtSBs group. The doubtful assets of PSBs are less than that in PvtSBs till the year 2012 after which again PvtSBs made welcome decline. The study has concluded that PSBs should adopt credit risk evaluation system, continuously monitor the assets and establish faster recovery mechanism to reduce the rising NPAs and come at par with PvtSBs. Murari, Krishna (2014) has compared the financial performance of selected private sector banks and public sector banks for the period of 13 years (2001-2013) using secondary data. The study has found that there is no significant difference between private sector banks and

public sector banks in terms of Gross NPAs and Net NPAs which implies that both the banks are striving hard in reducing their NPAs through proper credit evaluation due to regulatory pressure. Rajput, Arora, and Kaur (2011) have studied the NPAs and capital adequacy ratio position of all Indian Public Sector Banks. The study has analyzed the NPA position for period of 10 years (2001-2010). The study has concluded that though the PSBs have performed better during the period of economic slowdown and due to regulatory pressure the banks have managed to reduce their NPAs, yet they all need to improve their asset quality through proper implementation of recovery mechanism. Kapitsa and Muthumeenakshi (2016) have compared the performance of selected private sector banks and public sector banks for the period of 5 years covering the period 2011-2015. Using secondary data collected from annual reports of banks and website of RBI, the study has concluded that private sector banks have performed poor on the NPA front. The study has suggested the banks to reschedule their NPAs and follow the regulatory guidelines to improve their asset quality. This is similar to study done by Satpal (2014) where he also has compared the performance of private sector banks and public sector banks on NPA front and has found that public sector banks have much higher NPAs than private sector banks. The study has suggested that banks should monitor the financial health of the borrower and should strive for proper credit evaluation along with strict recovery rules to reduce NPAs. Otherwise higher NPAs will continue the erosion of net worth and profitability in banks. Mohnani and Deshmukh (2013) have studied the NPA position of selected private sector banks and public sector banks. The study has been done for a 10 year period covering 2003-2012. The study has found that in private sector bank group, HDFC bank has lower NPAs than ICICI bank and in public sector bank group, the performance of PNB is better than that of SBI. The study has suggested that effective management of NPAs is highly important as it is one of biggest obstacles in the success road of banks. The study has listed few measures to reduce NPAs such as proper recovery effort through legal channel, well documented loaning policy, credit appraisal and credit audit, review of accounts by committee and half yearly certificate of confirmation regarding balance due to be obtained from all borrowers.

Research Gap: Several studies have been done to compare the performance on the basis of ownership with respect to NPAs. But studies are scanty when it comes to comparison of the banks on the basis of difference in their size.

Objectives

The present study aims to achieve the following objectives-

3.1. To study the trend in Gross NPA to Gross Advance of the small, medium and large banks.

3.2. To study the trend in Net NPA to Net Advance of small, medium and large banks.

3.3. To study the difference in average Gross NPA to Gross Advance of small, medium and large banks

3.4. To study the difference in average Net NPA to Net Advance of small, medium and large banks.

Hypotheses

H1: There is significant difference in average Gross NPA to Gross Advance ratio of small, medium and large banks

H2: There is significant difference in average Net NPA to Net Advance ratio of small, medium and large banks

Research Methodology

The study uses secondary data collected from Annual Reports of respective Banks, Report on Trend and Progress of Banking in India, RBI, and Statistical Tables Relating to Banks in India, RBI.

Sample of the Study

The sample of the study comprises of 15 private sector banks and 20 public sector banks after excluding two private sector banks namely Catholic Syrian Bank and Tamilnad Mercantile Bank due to non availability of consistent data. Thereafter the banks are classified into three categories of small, medium and large banks on the basis of quartile deviations of average net worth for the entire study period (2007-18). Banks falling below lower quartile range are classified into small banks, banks falling above the upper quartile range are classified as large banks and banks falling in between upper quartile range and lower quartile range are classified in to medium banks. Thus 9 banks are categorized as small banks, 17 banks as medium banks and 9 banks as large banks.

Period of the Study

The study period covers past12 financial years covering the period 2006-07 to 2017-18.

Statistical Tools Used

The several statistical tools employed in the study comprises of average, standard deviation, coefficient of variation, compound annual growth rate (CAGR), One Way

ANOVA and Post Hoc Test. The results are tested and validated at 5 percent level of significance. The two ratios used to measure the NPA position of the banks are Gross NPA to Gross Advance and Net NPA to Net Advance.

One Way ANOVA- Analysis of variance is a statistical tool used to study the significance of difference in mean of two samples. In the present study ANOVA is applied to study that if there is significant difference in the mean ratios of small, medium and large banks.

Gabriel Post Hoc Test- Post Hoc Tests is carried after ANOVA to compare mean of two or more sample and find as to which two groups of samples are statistically significant. In the present research Gabriel Post Hoc is applied as it is most perfect tool for multiple comparisons when sample size is large and number of observation in each sample is unequal.

Data Analysis

Trends in Gross NPA to Gross Advance

A perusal of Table reveals that average Gross NPA to Gross Advances of medium banks is highest (5.1870) followed by large banks (4.5977) and small banks (3.2418). The consistency position further reveals that large banks have recorded lowest consistency in gross NPA to gross advance ratio as indicated by highest CV (81.37%) followed by medium banks (73.52%) and small banks (70.17%). Further when we look at the CAGR values, we find that all the banks have positive CAGR which implies that Gross NPAs have increased in all sized banks during the study period with rate of increase being highest in large banks followed by medium banks and small banks. The highest average Gross NPA to Gross Advance in medium banks along with highest ratio in maximum number of years clearly denotes medium banks have performed worst followed by large banks and small banks respectively.

Year wise analysis of trend in gross NPA to gross advance ratio reveals that in small banks the ratio followed a fluctuating trend from the year 2007 till the year 2010. During the year 2011 and 2012 the gross NPA to gross advances ratio received a set back and decreased from 2.90% in the year 2010 to 2.11% and 2.01% during the year 2011 and 2012 respectively. This welcome decline in gross NPAs again took reversal and rose

sharply following an increasing trend during the later years. Thus the gross NPA to gross advances increased to a high of 2.49% in the year 2013 from a low of 2.01% in the year 2012 recording an increase of 23.88%. During the entire study period average gross NPA to gross advanced ratio has increased from 3.36% in the year 2007 to 6.49% in the year 2018 recording an increase of 93.15%. This sharp increase in gross NPAs in small banks with much sharp increase during the later part of study period particularly during the year 2016 clearly evidences that small banks have to be more cautious in managing their NPAs to improve their deteriorating asset quality.

The year wise analysis in medium banks reveals that the gross NPA to gross advances followed fluctuating trend from the year 2007 till the year 2012 with intermittent years increase and decrease. There after the ratio followed an increasing trend and thus reached a high of 13.51% in the year 2018 from a low of 3.47% in the year 2013.The increasing trend was aggravated during the year 2016 with highest annual growth rate of 74.08%. This trend was much similar to that found in small banks. This implies that the year 2016 has recorded sharp increase in NPAs of the banks. Taking the entire study period as whole, we find that average gross NPA to gross advance ratio has increased from 2.69% in the year 2007 to 13.51% in the year 2018 recording an increase of 402.23%.

On the same token when we take a look at the performance of large banks, we find that average gross NPA to gross advance ratio followed mixed trend during the year 2007 till the year 2011 with several fluctuations year after year. Thereafter from the year 2012 onwards, average GNPA to Gross Advance ratio increased continuously from 2.70% in the year 2012 to 12.88% in the year 2018. During the entire study period average ratio has increased from 2.14% in the year 2007 to 12.88% in the year 2018 by 501.86% with highest annual growth rate of 99.76% during the year 2016.

Thus we find that among all sized banks, the overall percentage increase in GNPA to Gross Advance ratio is highest in case of large banks. However highest average GNPA to Gross Advance followed by highest average GNPA ratio in maximum part of study period in medium banks clearly indicates that medium banks have performed worst on this front.

Table 6.1: Trends in Average Gross NPA to Gross Advances of Commercial Banks

Year	Small Banks	Medium Banks	Large Banks
2007	3.36	2.69	2.14
2008	2.25	2.90	2.00
	(-32.98)	(7.74)	(-6.49)
2009	2.93	2.19	2.01
	(29.90)	(-24.52)	(0.19)
2010	2.90	2.45	2.52
	(-1.03)	(12.09)	(25.62)
2011	2.11	2.41	2.35
	(-27.05)	(-1.90)	(-6.63)
2012	2.01	2.99	2.70
	(-5.01)	(24.23)	(14.73)
2013	2.49	3.47	2.83
	(23.85)	(15.91)	(4.80)
2014	2.74	4.44	3.21
	(10.26)	(28.05)	(13.64)
2015	2.82	5.28	3.97
	(2.83)	(19.02)	(23.59)
2016	3.95	9.19	7.93
	(40.20)	(74.08)	(99.76)
2017	4.86	10.73	10.63
	(23.05)	(16.68)	(33.99)
2018	6.49	13.51	12.88
	(33.39)	(25.89)	(21.12)
Mean	3.2418	5.1870	4.5977
SD	1.3025	3.8135	3.7414
CV (%)	40.17	73.52	81.37
CAGR	0.0758	0.1963	0.2206

Source: Statistical Tables Relating to Banks in India, Various issues, RBI.

SJCC Management Research Review
Print ISSN-2249-4359
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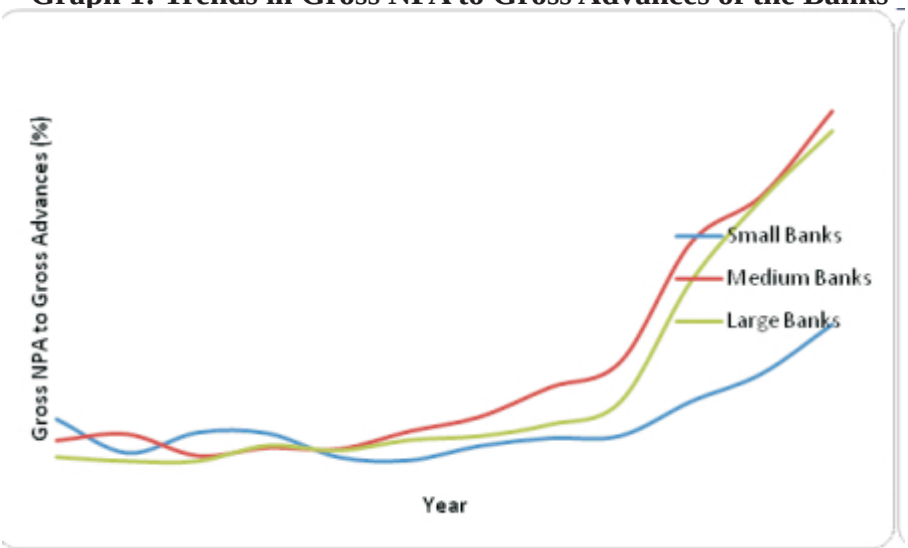
Graph 1: Trends in Gross NPA to Gross Advances of the Banks



After finding the trend in average GNPA to Gross Advance ratio, let us see if there is any significant difference in the same on the basis of size. For this purpose we have applied One Way ANOVA. A perusal of Table 6.2 reveals that there is no significant difference in average GNPA to Gross Advance ratio of small, medium and large banks as the p value obtained (.105) is greater than .05 at 5% level of significance. Thus the alternate hypothesis is rejected and it has been safely concluded that there is no significant difference in average gross NPA to Gross Advances of small, medium and large banks.

Table 2: One Way ANOVA

	Small	Medium	Large
Mean	3.2422	5.1882	4.5989
Variance	.9224	2.6008	2.0085
N	9	17	9
Df (Total)	34		
F Statistic	2.426		
P value	.105		

To confirm our findings above, we further went on to apply post hoc Gabriel Test. Results of this revealed that there is no significant difference between any two groups of the banks. Therefore the overall ANOVA came to be in significant.

An interesting point worth noting here is that since the year 2016 saw an abnormal rise in NPAs, therefore in the next step we separated the entire study period in to two separate time frames. Two separate time windows were created, first one covering the financial year 2006-07 to 2014-15 and another one covering the financial years 2015-16 to 2017-18. During these two separate time windows when we repeated the ANOVA we find that there is no significant difference in average Gross NPA to Gross Advance ratio of the banks during first time frame (2007-2015).

However during the second time frame (2016-18), significant difference was found between averages GNPA to Gross Advance ratio of the banks. A perusal of Table 6.3 reveals that p value obtained (.033) is less than .05 at 5% level of significance which implies that there is significant difference between average GNPA ratio of small, medium and large banks. We further applied post hoc Gabriel test to find as to which two groups of banks are significantly different. The results in this regard are presented in

Table.4.
A perusal of Table 4 reveals that between small and medium banks, medium banks have higher NPAs and this difference in performance is statistically significant as p value obtained (.032) for these two groups of banks is less than .05 at 5% level of significance.

However the results found above may be due to presence of 9 weak banks in the sample. There are certain banks which are identified as weak by government due to continuous losses and poor financial position of such banks. To check the robustness of our results we dropped the sample of those weak banks and repeated the analysis again. Here we find that there is no significant difference in any two groups of banks in any time frame. It is because earlier sample included weak banks together account for 60.67% of NPAs of medium banks group. This clearly means that NPAs have increased in weak banks during the second time frame which is major cause of significant difference in performance of small and medium banks. Otherwise all the banks are at par with each other.

Table 3: One Way ANOVA

	Small	Medium	Large
Mean	5.0989	11.1429	10.4789
Variance	2.8535	6.0821	6.1783
N	9	17	9
Df (Total)	34		
F Statistic	3.801		
P value	.033		

Table 6.4: Multiple comparisons through Gabriel Post Hoc Test

Size (I)	Small (J)	Mean Difference **(I-**J)	Std. Error	P Value
Small	Medium	-6.0440	2.2607	.032
	Large	-5.3800	2.5852	.128
Medium	Small	6.0440	2.2607	.032
	Large	.6640	2.2607	.987
Large	Small	5.3800	2.5852	.128
	Medium	-.6640	2.2607	.987

Trends in Net NPA to Net Advance

After finding the position of Gross NPAs in banks let us study the Net NPA position of the banks. Banks are required to create provision on the absolute amount of gross NPAs. When this provision is deducted from Gross NPAs, the amount left aside is known as Net NPA. When this Net NPA is expressed relative to net advances we get Net NPA to Net Advance ratio.

A perusal of Table reveals that average Net NPA to Net Advance is highest in large banks (2.7625) followed by medium banks and small banks. When it comes to consistency position we find that small banks have maintained highest consistency as

indicated by lowest CV followed by large banks and medium banks. The positive CAGR values in all three groups of banks reveals that during the period of time, average Net NPA to Net Advance ratio has increased instead of decreasing with rate of increase being highest in medium banks followed by large banks and small banks. The highest rate of increase followed by highest average Net NPA to Net Advance ratio in medium banks clearly indicates that medium banks have performed poorest on this front.

Year wise analysis of trend reveals that average Net NPA to Net Advance in small banks followed fluctuating trend from the year 2007 till the year 2012 with minor upward and downward trend. From the year 2013 till the year 2018, continuous increase year after year has been noticed. Thus the average Net NPA to Net Advance increased from a low of 1.14% in the year 2007 to a high of 3.97% in the year 2018 thus recording an increase of 248.25%.

In medium banks, different trend was found. The Net NPA to Net Advance ratio followed declining trend from the year 2007 till the year 2009 after which it slightly increased by 0.13% from 0.81% in the year 2009 to 0.91% in the year 2010. Thereafter similar increasing trend was found as that in small bank. The ratio increased year after year thus reaching a high of 7.97% in the year 2018 from a low of 1.09% in the year 2007 recording an increase of 631.19%.

Lastly when we take a look at the Net NPA position of large banks, we find that average Net NPA to Net Advance decreased from 5.65% in the year 2007 to 0.87% in the year 2009 recording a decrease of 84.60%. This welcome decline was not continued for long and again in the year 2010 the average Net NPA to Advance rose to 0.98% which again went down to 0.83% in the year 2011. This denotes that large banks are constantly making efforts to reduce their NPAs. However they could not continue with the declining trend for long and thus ones again, Net NPAs went up year after year from the year 2012 till the year 2018. Taking the entire period as whole we find that it has increased from 5.65% in the year 2007 to 7.16% in the year 2018 recording an increase of 26.72%.

The highest percentage increase of 63.19% in medium banks along with maximum NNPA ratio in maximum part of the study period (2011-18) denotes that they have performed poorest on Net NPA to Net Advance front.

Table 6.5: Trends in Net NPA to Net Advances

Year	Small Banks	Medium Banks	Large Banks
2007	1.14	1.09	5.65
2008	0.78 (-0.32)	0.87 (-0.20)	0.89 (-0.84)
2009	1.24 (0.59)	0.81 (-0.07)	0.87 (-0.02)
2010	1.24 (0.01)	0.91 (0.13)	0.98 (0.13)
2011	0.64 (-0.48)	0.86 (-0.06)	0.83 (-0.15)
2012	0.83 (0.29)	1.20 (0.39)	1.07 (0.28)
2013	1.34 (0.62)	1.61 (0.35)	1.51 (0.41)
2014	1.78 (0.33)	2.12 (0.31)	1.68 (0.11)
2015	1.94 (0.09)	2.71 (0.28)	2.14 (0.28)
2016	2.33 (0.20)	5.16 (0.91)	4.73 (1.21)
2017	2.87 (0.23)	6.69 (0.30)	5.64 (0.19)
2018	3.97 (0.38)	7.97 (0.19)	7.16 (0.27)
Mean	1.6761	2.6666	2.7625
SD	0.9804	2.5158	2.3326
CV (%)	58.49	94.34	84.43
CAGR	0.1200	0.1982	0.0217

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Print ISSN-2249-4359
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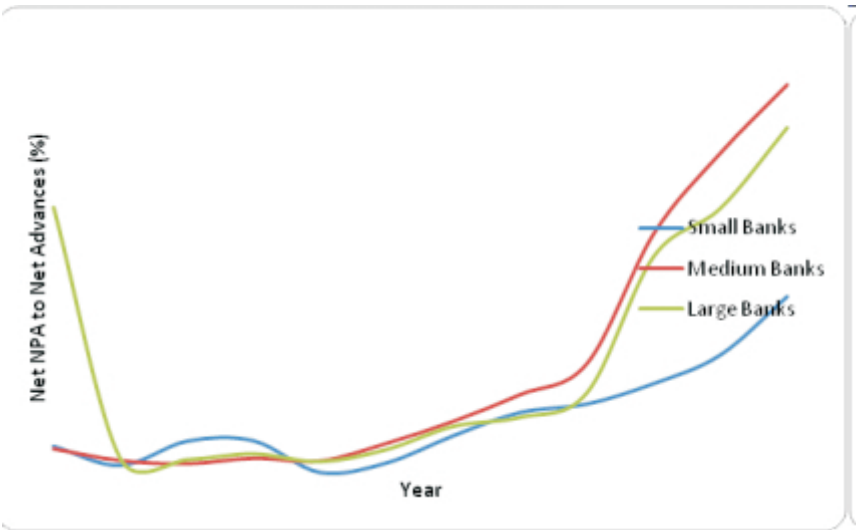
Graph 6.2: Trends in Net NPA to Net Advance of the Banks



After studying the trend in Net NPA to Net Advance of the banks, let us see if there is any significant difference between the three groups of banks on this front. For this purpose we applied One Way ANOVA, the result of which is presented in Table 6.6.

A perusal of Table 6.6 reveals that there no significant difference between the three groups of banks as p value obtained (.140) is greater than .05 at 5% level of significance. Thus the alternate hypothesis is rejected and it has been safely concluded that there is no significant difference in average Net NPA to Net Advance of small, medium and large banks.

Table .: One Way ANOVA

	Small	Medium	Large
Mean	1.6767	2.6671	2.7622
Variance	.5889	1.3571	1.0377
N	9	17	9
Df (Total)	34		
F Statistic	2.763		
P value	.140		

To validate the above results, we applied Gabriel post hoc test. A perusal of Table 6.7 reveals that there is no significant difference between any two groups of banks. On this count, the alternate hypothesis is rejected and it has been safely concluded that there is no significant difference between small, medium and large banks.

Table 7: Multiple comparisons through Gabriel Post Hoc Test

Size (I)	Small (J)	Mean Difference **(I-**J)	Std. Error	P Value
Small	Medium	-.9903	.4658	.111
	Large	-1.0855	.5326	.140
Medium	Small	.9903	.4658	.111
	Large	-.0951	.4658	.996
Large	Small	1.0855	.5326	.140
	Medium	.0951	.4658	.996

Since the year 2016 saw remarkable increase in Gross NPAs and Net NPAs, therefore we repeated similar analysis as above and divided the entire study period in two separate time frames. Here we find that there is again no significant difference in average Net NPA to Net Advance of the banks during first time frame as the p value was greater than .05 at 5% level of significance.

However during the second time fame, significant difference is found on the basis of size as the p value obtained (.010) is less than .05 at 5% level of significance as evident from Table 6.8 and Table 6.9. To find that this significant difference existed between which two groups of banks, we applied post hoc Gabriel test which gave us multiple comparisons between the banks through which it was revealed that medium banks have higher Net NPA to Net Advances and this difference in performance is significant as p value (.048) for these two groups of banks is less than .05 at 5% level of significance.

To check the robustness of our results, we dropped the sample of 9 weak banks and repeated ANOVA and Post Hoc Test where we find that there is no significant difference in performance of any two groups of banks during any two time window. This is because weak banks accounted together for 62.68% of the NPAs in medium banks. This clearly

denotes that not all medium banks have higher NPAs rather it is only weak banks which are responsible for poor performance and that the NPAs in medium banks have suddenly increased during the year 2016.

Table 8: One Way ANOVA

	Small	Medium	Large
Mean	3.0567	6.6059	5.8433
Variance	1.6404	3.9948	3.5907
N	9	17	9
Df (Total)	34		
F Statistic	3.182		
P value	.010		

Table 6.9: Multiple comparisons through Gabriel Post Hoc Test

Size (I)	Small (J)	Mean Difference **(I-**J)	Std. Error	P Value
Small	Medium	-3.5492	1.4206	.048
	Large	-2.786	1.6245	.256
Medium	Small	3.5492	1.4206	.048
	Large	.7625	1.4206	.929
Large	Small	2.7866	1.6245	.256
	Medium	-.7625	1.4206	.929

7 Results and Discussion:

The present study reveals that there is no significant difference in financial performance of small, medium and large banks on NPA front which implies that balance sheet of all banks is beleaguered under heavy NPAs. Among the three groups of banks, medium banks have performed worst which implies that for increasing the size, medium banks are advancing heavy loans, large part of which is becoming NPA every year thus leading to deterioration in asset quality. For increasing the business, medium banks should step

out slowly at slower pace and should not compromise with asset quality so as to avoid huge NPAs. This result goes against the general theory that large size of the banks will always be beneficial for the economy. The results further reveals that few banks which are identified as weak by the government should get a chance of revival as they are responsible for the set back of entire banking industry. The NPAs in weak banks have risen abnormally higher during the year 2016 which is responsible for poor performance of entire medium banks group.

Conclusions

The study concludes that medium banks have highest NPAs but size of bank is not a matter of concern as analysis of variance reveals that no significant difference exist between small banks, medium banks and large banks during the entire study period taken together. The general theory is that larger the size of banks better is the financial position due to economies of scale. This is because of research gap in this area which has been addressed in this research which reveals that this theory is just one side of the coin. Though profitability may increase due to large size and economies of scale but large banks will incur huge NPAs also which will lead to erosion of profitability and thereafter net worth too. Present research concludes that larger banks give larger advances and at the same time they incur more NPAs than small banks. Further the study finds that during the year 2016 NPAs of all weak banks has increased sharply thus worsening the situation of weak banks and leading to poor performance of all medium banks with significant difference on the basis of size. If such weak banks implement some faster recovery mechanism and are able to clear off their balance sheet from burden of rising NPAs, surely no difference will exist in terms of size between the banks. Thus we conclude that all banks are suffering from huge burden of NPAs irrespective of their size.

Practical Implications: This study gives practical implication to entire banking industry in the area of mergers and conveys that merging small banks with large banks just in a hope of increased profitability and efficiency is not a desired step. Regulatory authorities and government should aim at strengthening the position of small banks at their present size rather than aiming at merging them with large banks in a hope of higher profitability. Similarly large banks should address their weakness on NPA front and despite the large size they should stop advancing loans without appraising the credit worth of the borrowers

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