MANAGEMENT OF NON-PERFORMING ASSETS: A COMPARATIVE STUDY BETWEEN CENTRAL CO-OPERATIVE BANK AND PASCHIM BANGA GRAMIN BANK IN THE DISTRICT OF BURDWAN, WEST BENGAL

Abstract of Thesis submitted to The University of Kalyani for the award of the Degree of Doctor of Philosophy under the faculty of Arts and Commerce

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ABSTRACT

The NPAs in Co-operative and RRBs are growing not only due to external factors like ineffective recovery strategies, wilful defaulters, lack of demand, labour problems, changes in government policies etc. but also internal factors like managerial deficiencies, inappropriate technologies, poor credit appraisal systems, absence of regular field visits etc. NPAs will become more and more complex and will affect the banks liquidity and profitability adversely. On the other, NPA which creates a bottleneck in the smooth flow of credit has an adverse impact on the economy by arresting the recycling of funds. They wear away the fiduciary role of banks, affect safety of depositors’ funds and beyond a certain points rapidly increase the risk of a run on bank deposits. The biggest challenge that the banking industry now faces is management of NPAs. Against this backdrop, study of management of NPAs by Co-operative and RRBs and comparing it with their counterparts in order to find out the grey area of their operation and to suggest the direction in which changes are necessary is of immense importance. Hence there is need for a rigorous effort of all to recover bad loans and arrest fresh accretion of NPAs. A stage has come now to think and find alternatives for recovery of NPAs.

The review of literature clearly reveals that no research was previously conducted on the comparative analysis of NPA management of District Central Co-operative Bank & RRB in Burdwan District of the West Bengal, India. Hence the proposed research aims to fill the gap by analyzing with some specified ratios and applying statistical tools to analyze the progress of the NPA management of BCCBL and PBGB in Burdwan District of West Bengal, India. The research gap in this area has motivated us to take up the current research. The present study, as such, makes a humble endeavor to make a comparative study on NPA management of district central co-operative bank and regional rural bank in the district of Burdwan, West Bengal.
On the basis of research gap the specific objective of this study is to make a comparative analysis of NPA management of the DCCB and RRB in West Bengal with special reference to the Burdwan District Central Co-operative Bank Ltd. (BCCBL) and Paschim Banga Gramin Bank (PBGB) in the district of Burdwan in terms of some financial indicators.

Specific objectives of the study are as follows:

1. To analyse the trend of the NPAs in BCCBL vis-à-vis PBGB.
2. To study the impact of NPAs on the performance of banks under the study.
3. To evaluate comparative analysis of the efficiency of NPA management of BCCBL and PBGB.
4. To make suggestions for the efficient and effective NPA management for the banks.

Important findings of the study are sketched hereunder:

1. It depicts that Burdwan district comprises 7024.00 sq. km. area, 7717563 populations with density of population 1099 population per sq. km. out of which 60.11% rural and 39.89% urban population (2011 census). The banks under the study (BCCBL and PBGB) provide financial services among 2418 villages, 2 municipal corporations and 9 municipalities (2011 census) within the Burdwan district.

2. It is found based on the data analysis that the Gross NPA as % of Gross Loans and Advances in BCCBL was fluctuating from 18.34% to 14.49% with an average 16.26% during the study period. In case of PBGB the Gross NPA as % of Gross Advance has continuously declined over the year from 11.56% in 2006-07 (with the exception of the year 2009-10) to 7.72% in 2014-15 with an average 10.51%. This decline in Gross NPA ratio is because of increasing rate of Gross Loans and Advances is higher than the increasing rate of Gross NPA. The average rate of Gross NPA as % of Gross Loans and Advances is higher in BCCBL than PBGB.

3. It is found based on the data analysis that the Net NPA as % of Net Loans & Advances in BCCBL was fluctuating from 4.29% to 7.65% with an average 5.59% during the study period. In case of PBGB the Net NPA as % of Net Loans & Advances has continuously declined over the year from 7.56% in 2006-07 (with the exception of the year 2009-10 and 2010-11) to 5.27% in 2014-15 with an average 7.22%. This decline in Net NPA ratio is due to increasing rate of Net Loans &
Advances is higher than the increasing rate of Net NPA. The average rate of Net NPA as % of Net Loans & Advances is higher in PBGB than BCCBL. However, during last three years the % of Net NPA to Net Loans & Advances is higher in BCCBL than PBGB.

4. The findings on NPA Trend Analysis are presented below in a tabular form:

<table>
<thead>
<tr>
<th>Trend Analysis of % GNPA on Gross Loans &amp; Advances</th>
<th>BCCBL</th>
<th>PBGB</th>
<th>Comparative Analysis between BCCBL &amp; PBGB</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. TV &gt; AV, except 2009-10, 2012-13 &amp; 2013-14. The yearly decreasing rate is 0.0095%, very slow. This is; perhaps, due to mismanagement of NPA i.e. decrease the recovery rate and or increase in addition to NPA in any reasons.</td>
<td>TV &gt; AV, except 2009-10 to 2012-13. The yearly decreasing rate is 0.388%, very slow. This is; perhaps, due to mismanagement of NPA i.e. decrease the recovery rate and or increase in addition to NPA in any reasons.</td>
<td>It is observed that the GNPA of BCCBL and PBGB has been showing downward trend throughout the study period. At the same time it also observed that declining trend of PBGB is higher than the trend of BCCBL. So, the picture reveals that the PBGB are performing better on NPA management than BCCBL but magnitude of this ratio is still higher in both the banks.</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Trend Analysis of % GNPA on Total Assets</th>
<th>BCCBL</th>
<th>PBGB</th>
<th>Comparative Analysis between BCCBL &amp; PBGB</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. TV &gt; AV, except 2006-07, 2007-08 and 2012-13 to 2014-15. The yearly decreasing rate is 0.096%, very slow.</td>
<td>TV &gt; AV, except 2006-07, 2009-10, 2013-14 &amp; 2014-15. The yearly decreasing rate is 0.109%, very</td>
<td>It is observed that the % GNPA on Total Assets of BCCBL and PBGB has been showing downward trend throughout the study period. At the same time it also observed that</td>
<td></td>
</tr>
<tr>
<td>Table</td>
<td>Trend Analysis of % NNPA on Net Loans &amp; Advances.</td>
<td>TV &gt; AV, except 2006-07, 2007-08, 2012-13 and 2013-14. The yearly increasing rate is 0.352%, not well. This is; perhaps, due to mismanagement of NPA i.e. decrease the recovery rate and or increase in addition to NPA in any reasons.</td>
<td>TV &gt; AV, except 2009-10 and 2010-11. The yearly decreasing rate is 0.291%, very slow. This is; perhaps, due to mismanagement of NPA i.e. decrease the recovery rate and or increase in addition to NPA in any reasons.</td>
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<tr>
<td>3. Trend Analysis of % NNPA on Net Loans &amp; Advances.</td>
<td>TV &gt; AV, except 2006-07, 2007-08, 2012-13 and 2013-14. The yearly increasing rate is 0.352%, not well. This is; perhaps, due to mismanagement of NPA i.e. decrease the recovery rate and or increase in addition to NPA in any reasons.</td>
<td>TV &gt; AV, except 2009-10 and 2010-11. The yearly decreasing rate is 0.291%, very slow. This is; perhaps, due to mismanagement of NPA i.e. decrease the recovery rate and or increase in addition to NPA in any reasons.</td>
<td>Here we observe that the NNPA of BCCBL has been showing upward trend which is not good sign of NPA management, where as PBGB has been showing downward trend throughout the study period which is good sign of NPA management. So, the picture reveals that the PBGB are performing well/better on NPA management than BCCBL but magnitude of this ratio is still higher in both the banks.</td>
</tr>
<tr>
<td>4. Trend Analysis of % NNPA on Total</td>
<td>TV &gt; AV, except 2006-07, 2007-08, 2012-13 and 2013-14. The yearly</td>
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<td>Here we observe that the NNPA of BCCBL has been showing upward trend which is not good sign of NPA management,</td>
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</tbody>
</table>
Assets.

increasing rate is 0.0755%, not well. This is; perhaps, due to mismanagement of NPA i.e. decrease the recovery rate and or increase in addition to NPA in any reasons.

decreasing rate is 0.0665%, very slow. This is; perhaps, due to mismanagement of NPA i.e. decrease the recovery rate and or increase in addition to NPA in any reasons.

where as PBGB has been showing downward trend throughout the study period which is good sign of NPA management. So, the picture reveals that the PBGB are performing well/better on NPA management than BCCBL but magnitude of this ratio is still higher in both the banks.

**Note:** Here, TV = Trend Value and AV = Actual Value.

5. Findings on the Analysis based on Descriptive Statistics

<table>
<thead>
<tr>
<th>Factor</th>
<th>Result</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mean value of SSA, DA &amp; LA</td>
<td>PBGB &gt; BCCBL</td>
<td>Financial status based on NPA in terms of SSA, DA &amp; LA of PBGB is poor that may adversely affect the financial performance of the bank. It is needless to mention that NPA management of both banks is not satisfactory but management of NPA of PBGB is poor than BCCBL.</td>
</tr>
<tr>
<td>2. C.V. (%) of SSA, DA &amp; LA</td>
<td>PBGB &gt; BCCBL</td>
<td>This indicates that the management of NPA is unsatisfactory and adversely affects the financial performance of the bank. It is needless to mention that NPA management of both banks is not satisfactory but management</td>
</tr>
</tbody>
</table>
3. Mean value of ROA, Liquidity & IM, except CL. | PBGB > BCCBL | This indicates that the management of NPA is unsatisfactory and adversely affects the financial performance of the bank. It is needless to mention that NPA management of both banks is not satisfactory but management of NPA of PBGB is poor than BCCBL. |
---|---|---|
4. C.V. (%) of ROA, Liquidity, IM & CL. | PBGB > BCCBL | This indicates that the management of NPA is unsatisfactory and adversely affects the financial performance of the bank. It is needless to mention that NPA management of both banks is not satisfactory but management of NPA of PBGB is poor than BCCBL. |
5. Skewness and Kurtosis | Both BCCBL & PBGB | It confirms that the data series are not normally distributed. |

6. Findings form Correlation Statistics

It is observed from the analysis of correlation statistics that general principle of correlation between Liquidity & NPA are not followed by the BCCBL and in case of PBGB relation between Liquidity & NPA and CL & NPA are not followed the general principle of correlation. So, we can conclude that **BCCBL is better rather than PBGB** in respect of correlation statistics.

7. Findings of the Regression Results

- **Based on the first model of BCCBL** (ROA = a + b₁SSA + b₂DA + b₃LA + €):

  The study revealed that this regression model is not good for explanation for causal relationship between the dependent variable and three independent variables under study.
Based on the first model of PBGB (ROA = a + b_1SSA + b_2DA + b_3LA + €):

The study revealed that this regression model is not good for explanation for causal relationship between the dependent variable and three independent variables under study.

Based on the second model of BCCBL (Liquidity = a + b_1SSA + b_2DA + b_3LA + €):

The study revealed that this regression model is not good for explanation for causal relationship between the dependent variable and three independent variables under study.

Based on the second model of PBGB (Liquidity = a + b_1SSA + b_2DA + b_3LA + €):

The study revealed that this regression model is not good for explanation for causal relationship between the dependent variable and three independent variables under study.

Based on the third model of BCCBL (CL = a + b_1SSA + b_2DA + b_3LA + €):

The study revealed that this regression model is not good for explanation for causal relationship between the dependent variable and three independent variables under study.

Based on the third model of PBGB (CL = a + b_1SSA + b_2DA + b_3LA + €):

The study revealed that this regression model is not good for explanation for causal relationship between the dependent variable and three independent variables under study.

Based on the fourth model of BCCBL (IM = a + b_1SSA + b_2DA + b_3LA + €):

The study revealed that this regression model is not good for explanation for causal relationship between the dependent variable and three independent variables under study.
Based on the fourth model of BCCBL (IM = a + b₁SSA + b₂DA + b₃LA + €):

The study revealed that this regression model is not good for explanation for causal relationship between the dependent variable and three independent variables under study.

8. Findings from the Regression Results of the first model based on the Panel Data (ROA = c + b₁SSA + b₂LA + €):

Inference based on analysis showed the random effect model has been tested to determine the impact of NPA on profitability. The test of Cross-section Random Effects results are illustrate that whilst SSA is changed by one unit, ROA is decreased by 0.6266 units, which is not significant statistically. However, ROA is positively influenced by LA but the results do not support the economic theory as well. When LA is changed by one unit, ROA is increased by 1.3691 units, which is significant statistically. R² indicates that 0.42% variations are there and the model is fit for this model. The probability of F-statistics is 0.796568, which is more than the statistical thumb rule, designates that there is no joint influences between the dependent variable ROA and two independent variables.

Therefore the final regression equation is as follows:

\[ ROA = 1.4022 - 0.626645 \times SSA + 1.369055 \times LA \]

9. Findings from the regression results of the second model based on the Panel Data (Liquidity = c + b₁SSA + b₂LA + €):

Inference based on analysis showed the fixed effect model has been tested to determine the impact of NPA on Liquidity. The test of fixed effect model results demonstrates that liquidity is positively influenced by SSA; the results do not support the economic theory as well. While SSA is changed by one unit, liquidity is increased by 0.001690 units, which is not significant statistically. However, liquidity is positively influenced by LA but the results do not support the economic theory as
well. When LA is changed by one unit, liquidity is increased by 0.072910 units, which is not significant statistically. $R^2$ indicates that 9.64% variations are there. The probability of F-statistics is 0.689722 which is more than the statistical thumb rule, designates that there are no joint influences between the dependent variable Liquidity and two independent variables.

Therefore the final regression equation is as follows:

\[
\text{Liquidity} = 0.942537 + 0.001690*\text{SSA} + 0.072910*\text{LA}
\]

10. Findings from the regression results of the third model based on the Panel Data ($\text{CL} = c + b_1\text{SSA} + b_2\text{LA} + \epsilon$):

Inference based on the analysis showed the random effect model has been tested to determine the impact of NPA on CL. The test of Cross-section Random Effects results are illustrate that the CL is negatively influenced by SSA, the results do not support the economic theory as well. While SSA is changed by one unit, CL is decreased by 0.197593 units, which is not significant statistically. However, CL is negatively influenced by LA; the result does not support the economic theory as well. When LA is changed by one unit, CL is decreased by 0.110603 units, which is significant statistically. $R^2$ indicates that 5.17% variations are there. The probability of F-statistics is 0.000019, which is less than the statistical thumb rule, indicates that there is a joint influence between the dependent variable CL and two independent variables.

Therefore the final regression equation is as follows:

\[
\text{CL} = -0.426353 - 0.197593*\text{SSA} - 0.110603*\text{LA}
\]

11. Findings from the regression results of the fourth model based on the Panel Data ($\text{IM} = c + b_1\text{SSA} + b_2\text{LA} + \epsilon$):

Inference based on the analysis showed the random effect model has been tested to determine the impact of NPA on IM. The test of Cross-section Random Effects results
are illustrate that the IM is positively influenced by SSA, the result support the economic theory as well. While SSA is changed by one unit, IM is increased by 0.017496 units, which is not significant statistically. However, IM is positively influenced by LA; the results support the economic theory as well. When LA is changed by one unit, LA is changed by one unit; IM is increased by 0.023551 units, which is significant statistically. But here the probability of F-statistics is 0.014917 which is less than the statistical thumb rule, designates that there are exists joint influences between the dependent variable IM and two independent variables.

Therefore the final regression equation is as follows:

\[
IM = -0.190523 + 0.017496 \times SSA + 0.023551 \times LA
\]

12. Evaluate and comparative analysis regarding the efficiency of NPA management of BCCBL and PBGB.

The analysis revealed that higher the index scores the more robust it is. From the analysis it appears that, the composite rank of PBGB is higher than the rank of BCCBL during the study period. Apparently it indicates that the PBGB manage NPA efficiently than the BCCBL. But, if we study the progress INPA Score, it observed that, the current years 2012-13 to 2014-15, the composite rank of INPA Score of PBGB is 1 and the composite rank of INPA Score of BCCBL is 2. So, it indicates the efficiency of NPA management of \textit{PBGB gradually improve than the BCCBL}.

Suggestions and Recommendations

In order to solve the burning problems of NPA management, many changes and measures are required. Some changes are structural and many others are qualitative in nature. Structural changes required actions from administration and administrative machinery. They may be of time consuming process. Qualitative changes require training, change of attitude, professional and behavioral expertise of the management.
Many of these factors are interrelated with each other. In that sense, it is difficult to give airtight compartmentalization of various suggestions and recommendations. Nevertheless, we put our suggestions and recommendations dividing them into the three categories, viz. (i) those requiring structural changes, (ii) those of general type, and, lastly, (iii) those of specific nature—all aimed at improving the management of NPAs.

Suggestions and recommendations on structural changes

1. The performance of every DCCB and RRB in West Bengal should be evaluated by an autonomous research organization to know the strengths and weakness of the bank. Systematic planning, implementation of the plan and evaluation should be major concern of the DCCBs and RRBs.

2. Exemplary action may be taken against corrupt employees pertaining frauds and penalties be imposed, if situation demand, on both employees as well as borrowers those who are found to be fraudulent and manipulative.

3. Special recovery cells should be set up at zonal levels. Recovery officer may be appointed at branches having considerable NPAs and their progress in the field of recovery may be monitored on regular basis.

4. BCCBL and PBGB should introduce a new assets category between standard and sub-standard assets for their own internal monitoring and follow up, keeping in view the local requirements of loan. Earliest signs of irregularities should be identified by an alert system.

5. For effective monitoring loan accounts, every DCCBs and RRBs should create a database of their NPA portfolio on well designed formats to provide meaningful inferences which would help in evolving effective strategies for preventing slippage of healthy loan accounts into NPAs.
General suggestions and recommendations

1. To arrest the slippage of performing assets into non-performing assets, steps should be taken in the right direction to keep NPAs within the manageable limit. So, NPA management policy of the banks should emphasize upon tackling potential NPAs accounts effectively through an in-built mechanism. Therefore, to reduce NPA the entire process is to avoid delay and to ensure time bound action plan covering both probable and existing NPAs.

2. Before disbursement of loan the banks need to more careful. The borrowers’ economic status, credit history and character must be analyzed thoroughly and carefully from various sources. For proper appraisal of the loan the bank should set up an economic research wing which should provide data on various types of farm and non-farm activities and rural industries etc.

3. The proper guidance and training to the borrowers should be treated as an important criterion of the plan for higher level of production and better price of their product. In fact awareness among the borrowers regarding loan and its utilization is an essential phenomenon.

4. Incentive may be given to honest repayers to create a better repayment environment. Regular honoring the best loanee can motivate other one to follow the same path. As a result, NPA and its existence can be thwarted significantly.

5. At the post disbursement stage, bankers should ensure that the advance does not become an NPA. Careful and strict supervision of the borrower units and timely follow up of loans and advances will reduce the incidence of NPAs to a large extent.

6. Strictly elimination of political and unethical interference in disbursement of loans to farmers, priority sector as well as industries is required to be ensured.
7. The senior bank officials is required be imparted specialized training at regular intervals to equip them with latest procedures and practices of management of NPAs.

8. Negligent borrowers are required to place under pressure to pay-in through remainders, personal counseling, etc.

Specific suggestions and recommendations

1. Banks should adopt advanced technology to open up new avenues for service delivery. Management Information System should be properly designed and implemented to facilitate periodic monitoring of the performance and timely corrective actions.

2. All DCCBs and RRBs should be strengthening the internal control system through simplification of documentation procedures and revision of audit procedures, operational manuals and implementation of related strategies.

3. Willful defaulters may be dealt with serious managerial and professional expertise. They may be cautioned legally and publicize their names, if required, in local media. The fear of damage to their social and public image might create pressure, to some extent, on them so that recovery of loan may be achieved.

4. DCCBs and RRBs have to take competent efforts to increase the mobilization of the rural finance, such as financial literacy camps, financial inclusion camps etc. should also be organized with wide publicity at the appropriate time of harvesting and selling of crops.

5. Borrowers may be given opportunity to redeem the loan as and when possible to reduce the interest burden and rescheduling of payments to avoid the pressure on liquidity of the bank.
6. Branch to branch recovery competition shall be launched in order to provide required boost to recovery system. Practice for awarding of trophy or merit certificates may be introduced for better recovery performance.

From the point of view “Prevention is always better than cure”, the DCCBs and RRBs should accord major driving force on preventive vigilance, reformation, strengthening of the system and procedures, revision of existing guidelines and formulation of new policies of many key aspects for better control and results of arresting of NPAs.

Limitations of the study

Limitations are always a part of any kind of research work. Even though, utmost care is exercised in all aspects of this research, certain limitations have been perceived and are acknowledged herewith.

1. The overall area of the study has been focused only with the Burdwan District of West Bengal. The study is limited with the Burdwan Central Co-operative Bank Ltd. (BCCBL), and Paschim Banga Gramin Bank (PBGB) in the district Burdwan, West Bengal.

2. The performances of the banks are shown just for the last nine years, ending 2014-15. Hence, any uneven trend before or beyond the set period will be the limitations of the study.

3. As per the requirement of the study some data have been grouped and sub grouped.

4. The research utilized feedback from bank officials working in BCCBL and PBGB, schedule Central Co-operative Bank and RRB in the district Burdwan, West Bengal. The incidence of the NPA management is explained with special reference to the selected banks.
5. Respondent bias would have to some extent affected the quality of data in spite of all precautionary measures taken to ensure its reliability.

6. The result of the research cannot be generalized to other bank groups except Central Co-operative Banks and RRBs as the data are obtained with special focus on Central Co-operative Banks and RRBs.

7. Last but not the least, various statistical tools and econometric models are used exclusively for the study has their own limitations which are bound to be reflected in this study due to their uses.

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(Signature of the Supervisor)                        (Signature of the Research Scholar)