A STATISTICAL ANALYSIS OF NON-PERFORMING ASSETS AND THE EFFECTIVENESS OF VARIOUS RECOVERY CHANNELS IN SCBs

ARJUN GUPTA
School of Open Learning, University of Delhi, Delhi, India

ABSTRACT
The banking industry serves as a stanchion in the growth of the nation. It mobilises deposits and gives credit to variegated sectors in the country. This sector collects surplus funds from customers and channelizes the same in the form of loans. As it has a vital role in the growth of other sectors, it needs to be flourishing rather than unthriving. Considering the latter, this research paper attempts to focus on one of the major causes to be blamed for the crumbling state of the Indian banking sector today i.e. the Non-Performing Assets (NPAs), its link with certain factors impacting the financial health, and its recovery in the context of SCBs in India.

The paper has four parts. The first part is all about a brief discussion on NPAs and its various recovery channels. The second part presents a contrast between Net NPA and Gross NPA and further linking it with the profits. The third part dwells on the recuperation of NPAs through Lok Adalats, Debt Recovery Tribunals & SARFAESI act. Finally this paper is concluded with suggestions on avoidance and management of NPAs.

KEYWORDS: Non Performing Assets (NPAs), Schedule Commercial Banks (SCBs), SARFAESI ACT(2002), DEBT RECOVERY TRIBUNAL (DRTs) & LOKADALATS

INTRODUCTION
Non Performing Assets
The non performing assets can be defined as

An asset, including a leased asset, becomes non performing when it ceases to generate income for the bank.

An NPA may be a loan or an advance where

- Interest and/or installment of principal remain overdue for a period of more than 90 days in respect of a term loan.
- The account remains ‘out of order’ in respect of an Overdraft/Cash Credit (OD/CC).
- The bill remains overdue for a period of more than 90 days in the case of bills purchased and discounted.
- The installment of principal or interest remains overdue for two crop seasons for short duration crops.
- The installment of principal or interest remains overdue for one crop season for long duration crops.
- In respect of derivative transactions, the overdue receivables representing positive mark-to-market value of a derivative contract, if these remain unpaid for a period of 90 days from the specified due date for
RECOVERY CHANNEL

Various channels for the recovery of NPAs are explained as under

- **Lok Adalats**: The Lok Adalats are also known as people’s court were established by the Indian government to settle disputes with the help of compromise. The decision made by the Lok Adalats is final and no person can file any appeal against such decision in any court of law. The cases involving amount of minimum Rs.5,00000 or more are referred to these Adalats by DRTs. This channel is best suited for recovery of small loans.

- **Debt Recovery Tribunals (DRTs)**: The Debt Recovery Tribunals also known as DRTs were set up with the main aim of debts recovery of various financial institutions from their clients. Cases involving amount of Rs.1000000 or more are referred by banks to these tribunals for their recovery. In case any person wants to file an appeal against the order passed by DRTs, they can file it before Debt Recovery Appelate Tribunal. Initially, these tribunals have made a great impact in recovering the amount of NPAs of banks but in the later years they failed to meet up their expectations. The reason is because these tribunals were very less in number and they also lack proper infrastructure facility. To correct the situation, various efforts such as amendment in RDBBFI ACT in 2016 have been made by the government.

- **Securitization and Sarfaesi Act**: SARFAESI ACT (Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest) is the most efficacious one among various recovery channels that helps the financial institutions to get rid of the problem of NPAs by selling the property of the individual who have made a default in the repayment of their loans and the property can be either residential or commercial or can be both. It helps the banks to reduce their NPAs by making use of various measures for recovery/reconstruction. If any borrower made a default in repaying his/her loan, then this act gives the banks a power to seize the properties (excluding agriculture land) of such person without any interference of the court. This act applies only to secured loans where banks has the power to enforce the asset underlying such as hypothecation, mortgage etc. But if the asset is unsecured, then in that case, banks have to move to court and has to file a civil case against the defaulter borrower.

REVIEW OF LITERATURE

Various papers are available in the area of non-performing assets and an outsized number of academicians as well as researchers have tried to study the impact of NPA in banking sector. A brief review of some of their papers is explained as below:-

Dr. Gresshma Francis (2019) in his study on, “AN OVERVIEW OF SARFAESI ACT AND ITS IMPACT ON NPA” has said that SARFAESI ACT has helped the banks as well as financial sector to get rid of the issue of NPAs and the experience with this ACT has been very positive.

VIVEK RAJBAHADUR SINGH (2016) in his paper titled, “A STUDY OF NON PERFORMING ASSETS OF COMMERCIAL BANKS AND ITS RECOVERY IN INDIA” has said that the quantum of NPAs is quite high in public sector sector banks in India and the government should follow stringent policies to solve this issue.

Dr. M. Syed Ibrahim and Dr. Rangasamy (2014) in his paper titled, “A STUDY ON THE COMPOSITION OF
NPAs OF SCBs IN INDIA” has said that because of high NPAs, the customer of banks would not be able to maintain their faith on them so there is a need to handle the problem of NPAs in such a way that the customers would not lose their trust on banks.

Kumar (2013) in his study on “A Comparative study of NPA of Old Private Sector Banks and Foreign Banks” has said that NPAs have become a big problem for the Indian financial sector for the last many years. One of the major issues that challenge the performance of commercial banks in the late 90s adversely affecting was the accumulation of large amount of non-performing assets (NPAs).

Gupta (2012) in her study “A Comparative Study of Non-Performing Assets of SBI & Associates and Other Public Sector” has said that before giving credit to a borrower, it's financial capacity should be evaluated by bank's own independent credit agency and it is also necessary that the financial condition of the clients should be constantly monitored by the bank.

Kaur (2006) in her thesis titled “Credit management and problem of NPAs in Public Sector Banks” has said that to handle the problem of NPAs effectively, proper awareness amongst the bank staff about the unpleasant impact of NPAs on performances of banks must be created.

SCOPE OF THE STUDY

This paper covers the recovery of NPAs of SCBs and the period of 18 years spanning from 2001-02 to 2018-19 is taken for the study. As observed from the review of literature, no recent study has been carried out to find out any relation between net profit and net NPAs of SCBs and also the recent trends in the recovery of NPAs of SCBs through Lok Adalats, DRTs and SARFAESI ACT. So it becomes important to know how effective various recovery channels are as well as the relation between net profit and net NPAs of SCBs.

Source of Data

The data used in this paper is through secondary sources and it includes collecting data from yearly reports of RBI, research papers etc. and compiling them in order to have better understanding about performance of SCBs. This paper uses the yearly reports of SCBs from 2001-02 to 2018-19. Various Tables, charts and other statistical tools such as coefficient of correlation, ANOVA (Analysis of variance) etc are used in this paper to gain better understanding of data.

Time Period of the Paper

The cumulative data for the period of 18 years i.e from 2001-02 to 2018-19 is taken for this study.

NON PERFORMING ASSETS IN INDIAN SCHEDULE COMMERCIAL BANKS

Table 1: Gross Advances and Gross Npas of SCB (Amount in Billion)

<table>
<thead>
<tr>
<th>Year</th>
<th>Gross Advances</th>
<th>Gross NPAs (Amount)</th>
<th>Gross NPAs (percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001-02</td>
<td>6809.58</td>
<td>708.61</td>
<td>10.4</td>
</tr>
<tr>
<td>2002-03</td>
<td>7780.43</td>
<td>687.17</td>
<td>8.8</td>
</tr>
<tr>
<td>2003-04</td>
<td>9020.26</td>
<td>648.12</td>
<td>7.2</td>
</tr>
<tr>
<td>2004-05</td>
<td>11526.82</td>
<td>593.73</td>
<td>5.2</td>
</tr>
<tr>
<td>2005-06</td>
<td>11513.78</td>
<td>510.97</td>
<td>3.3</td>
</tr>
<tr>
<td>2006-07</td>
<td>20125.10</td>
<td>505.17</td>
<td>2.5</td>
</tr>
<tr>
<td>2007-08</td>
<td>25078.85</td>
<td>566.06</td>
<td>2.2</td>
</tr>
</tbody>
</table>
The above mentioned table convey the amount of Gross advances, Gross NPAs and the percentage of Gross NPAs of SCBs from 2001-02 to 2018-19.

By contemplating the above data, we got to know that the Gross advances have been proliferated by Rs 96099.65 billion from 2001-02 to 2018-19.

The amount of gross NPAs have also been proliferated by Rs.8656.09 billion from 2001-02 to 2018-19.

Similarly, percentage of NPA has also been escalating up from 2.3 in 2008-09 to 11.2 in 2017-18.

After rising for several successive years, Gross NPAs of all SCBs declined in the year 2018-19 as recognition of bad loans approached fruition.

The above mentioned table reveal the amount of net advances, net NPAs and the percentage of net NPAs of SCBs from 2001-02 to 2018-19.

By contemplating the data, we got to know that the gross advances have been proliferated by Rs 89507.89 billion from 2001-02 to 2018-19.
A Statistical Analysis of Non-Performing Assets and the Effectiveness of Various Recovery Channels in SCBs

- The amount of gross NPAs have also been proliferated by Rs.3195.22 billion from 2001-02 to 2018-19.

In 2001-02, the percentage of net Non Performing Assets is 5.5 and it gets reduced to 1.0 in 2007-08. Then, it has increased to 6% in 2017-2018. In 2018-19, the net NPA ratio declined to 3.7 because of the decline in gross NPA % in 2018-19.

- The above figure indicates the trend of Net and Gross NPA in billions i.e. from 2001-02 to 2018-19.

- The X axis in figure 1 represents the years where as Y axis of the figure represents the amount of Net NPA and Gross NPA.

- It can be inferred from the above figure that starting from 2007 to till 2018, the Net NPA as well as Gross NPA has been showing an escalating trend and after that it started falling because of the SARFAESI act amendment 2016.
RECOVERY THROUGH VARIOUS CHANNELS

Table 3: Recovery of NPA by SCBs through Lok Adalats (Amounts in crore)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No of cases referred</td>
<td>18635</td>
<td>54830</td>
<td>77883</td>
<td>61601</td>
<td>47607</td>
<td>84091</td>
<td>105657</td>
<td>293831</td>
<td>445654</td>
<td>215285</td>
<td>331789</td>
<td>408047</td>
</tr>
<tr>
<td>Amount involved</td>
<td>2142</td>
<td>4023</td>
<td>7225</td>
<td>5254</td>
<td>1700</td>
<td>6600</td>
<td>23200</td>
<td>30979</td>
<td>72033</td>
<td>105800</td>
<td>45728</td>
<td>55306</td>
</tr>
<tr>
<td>Amount recovered</td>
<td>176</td>
<td>98</td>
<td>112</td>
<td>151</td>
<td>200</td>
<td>400</td>
<td>1400</td>
<td>984</td>
<td>3224</td>
<td>3800</td>
<td>1811</td>
<td>2816</td>
</tr>
<tr>
<td>% of amount recovered</td>
<td>8.2</td>
<td>2.4</td>
<td>1.55</td>
<td>2.87</td>
<td>11.8</td>
<td>6.1</td>
<td>6.2</td>
<td>3.17</td>
<td>4.47</td>
<td>3.6</td>
<td>4.0</td>
<td>5.3</td>
</tr>
</tbody>
</table>

Source: R.B.I

- Table 3: Recovery of NPA through Lok Adalats (2008 -09 to 2018-09)
  - From 2008 to till 2019, the no. of cases interpolated to Lok Adalats has been proliferated by 38,94,412.
  - The amount recovered by Lok Adalats in the above table depicts an escalating trend after 2010.
  - These Lok Adalats recovered only 2816 crores out of 53506 crores in 2018-19.
  - As the Lok Adalats are not so efficient in getting back the amount involved in NPAs, that’s why SCBs resorted to other recovery channels.

Table 4: Showing NPA Recovered by SCBs through DRTs (Amount in crore)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No of cases referred</td>
<td>3728</td>
<td>2004</td>
<td>6019</td>
<td>12872</td>
<td>13365</td>
<td>13408</td>
<td>28258</td>
<td>22004</td>
<td>24537</td>
<td>28902</td>
<td>29345</td>
<td>52175</td>
</tr>
<tr>
<td>Amount involved</td>
<td>5819</td>
<td>4130</td>
<td>9797</td>
<td>14002</td>
<td>24100</td>
<td>31000</td>
<td>55300</td>
<td>60371</td>
<td>69340</td>
<td>67100</td>
<td>133095</td>
<td>306409</td>
</tr>
<tr>
<td>Amount recovered</td>
<td>3020</td>
<td>3348</td>
<td>3133</td>
<td>3930</td>
<td>4100</td>
<td>4400</td>
<td>5300</td>
<td>4208</td>
<td>6305</td>
<td>16400</td>
<td>7225</td>
<td>10574</td>
</tr>
<tr>
<td>Recovery</td>
<td>51.9</td>
<td>81.1</td>
<td>32.0</td>
<td>27.89</td>
<td>17.00</td>
<td>14.1</td>
<td>9.5</td>
<td>6.97</td>
<td>9.09</td>
<td>24.4</td>
<td>5.4</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Source: RBI

- Table 4: Recovery of NPAs through DRTs (2008 to 2019).
  - The above table clearly shows an increment in the recovery of NPAs cases referred to DRTs.
  - In 2008-09, the amount of recovery through DRTs is 81.1% and in afterward years also the percentage of recovery is reasonably significant. That’s why the commercial banks are moving to DRTs as compared to Lok Adalats.

Table 5: Showing NPA Recovered by SCBs through SARFAESI ACT (Amount in crore)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No of cases referred</td>
<td>83942</td>
<td>61760</td>
<td>78366</td>
<td>118642</td>
<td>140991</td>
<td>190537</td>
<td>184707</td>
<td>175355</td>
<td>173582</td>
<td>80076</td>
<td>91330</td>
<td>248312</td>
</tr>
<tr>
<td>Amount involved</td>
<td>7263</td>
<td>12067</td>
<td>14249</td>
<td>30604</td>
<td>35300</td>
<td>68100</td>
<td>94600</td>
<td>156778</td>
<td>80100</td>
<td>113100</td>
<td>81879</td>
<td>289073</td>
</tr>
<tr>
<td>Amount recovered</td>
<td>4429</td>
<td>3982</td>
<td>4269</td>
<td>11561</td>
<td>10100</td>
<td>18500</td>
<td>24400</td>
<td>25600</td>
<td>13179</td>
<td>7800</td>
<td>26380</td>
<td>41876</td>
</tr>
<tr>
<td>% of amount recovered</td>
<td>61.0</td>
<td>33.00</td>
<td>30.00</td>
<td>37.78</td>
<td>28.6</td>
<td>27.1</td>
<td>25.8</td>
<td>16.32</td>
<td>16.45</td>
<td>6.9</td>
<td>32.2</td>
<td>14.5</td>
</tr>
</tbody>
</table>

Source: RBI
Table 5: Recovery of NPAs through SARFAESI ACT (2008 to 2019).

The above table clearly shows that the cases of NPA that are referred to SARFAESI Act and the amount involved in those cases has escalated largely during the period 2008-2019.

From table 5, it is apparent that the in 2019, the percentage of amount recovered through SARFAESI Act is 14.5%.

Figure 3: “Recovery of NPAs through various channels”(2008 – 2019).

In 2018-19, the amount recovered through SARFAESI ACT was Rs.41,876 crore which clearly depicts the strength of this ACT in tackling the problem of NPAs.

The highest number of recovery is made by the DRTs in 2016-17. This happened because of the opening of new tribunals, strengthening of existing infrastructure and computerized processing of court cases.

Figure 4: Percentage Npa Amount Recovered to Total Amount Recovered.
Figure 4 shows that the percentage NPA amount recovered through DRTs was higher till 2008-09 i.e. 81.07% in comparison to 33% in SARFAESI ACT and just 2.39% in Lok Adalats.

However from the period 2009-10, SARFAESI Act has shown exceptional performance in recovery of NPAs.

In order to know whether there exists any significant difference in the recovery of various recovery channels, we used one way ANOVA (Analysis of variance) test

**Hypothesis of the Study**

- $H_0$: There exist No Significant Difference in the Recovery of Npa through Lok Adalats, Drt as Compared to Sarfaesi Act.

- $H_1$: There exist Significant Difference in the Recovery of Npa through Lok Adalats, Drt as Compared to Sarfaesi Act.

**Test Statistic:** Anova & Tukey Hsd Post Hoc Test

**Level of Significance:** $a = 0.05$

**Decision Rule:** If the calculated value of “F” is greater than $F_{CRITICAL VALUE}$ which is 3.354, then we reject our null hypothesis.

**Computation:**

10 years data starting from 2010 to 2019 is used in ANOVA table

<table>
<thead>
<tr>
<th>Year</th>
<th>Lok Adalats</th>
<th>Drts</th>
<th>Sarfaesi Act</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>1.55</td>
<td>32.00</td>
<td>30.00</td>
</tr>
<tr>
<td>2011</td>
<td>2.87</td>
<td>27.89</td>
<td>37.78</td>
</tr>
<tr>
<td>2012</td>
<td>11.8</td>
<td>17</td>
<td>28.6</td>
</tr>
<tr>
<td>2013</td>
<td>6.1</td>
<td>14.1</td>
<td>27.1</td>
</tr>
<tr>
<td>2014</td>
<td>6.2</td>
<td>9.5</td>
<td>25.8</td>
</tr>
<tr>
<td>2015</td>
<td>31.7</td>
<td>6.97</td>
<td>16.32</td>
</tr>
<tr>
<td>2016</td>
<td>4.47</td>
<td>9.09</td>
<td>16.45</td>
</tr>
<tr>
<td>2017</td>
<td>3.6</td>
<td>24.4</td>
<td>6.9</td>
</tr>
<tr>
<td>2018</td>
<td>4.0</td>
<td>5.4</td>
<td>32.2</td>
</tr>
<tr>
<td>2019</td>
<td>5.3</td>
<td>3.5</td>
<td>14.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>MEAN</th>
<th>STD. DEVIATION</th>
<th>STD.ERROR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lok adalats</td>
<td>10</td>
<td>4.906</td>
<td>2.8268</td>
<td>.8939</td>
</tr>
<tr>
<td>Drts</td>
<td>10</td>
<td>14.985</td>
<td>10.01</td>
<td>3.1664</td>
</tr>
<tr>
<td>Sarfaesi</td>
<td>10</td>
<td>23.565</td>
<td>9.5678</td>
<td>3.0256</td>
</tr>
<tr>
<td>TOTAL</td>
<td>30</td>
<td>43.456</td>
<td>22.4046</td>
<td>7.0859</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>DF</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1744.5364</td>
<td>2</td>
<td>872.2682</td>
<td>13.09712</td>
</tr>
<tr>
<td>With in Groups</td>
<td>1798.2007</td>
<td>27</td>
<td>66.6</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>3542.7371</td>
<td>29</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A Statistical Analysis of Non-Performing Assets and the Effectiveness of Various Recovery Channels in SCBs

CONCLUSIONS

The computed value of “f” which is 13.097 is greater than f critical value which is 3.354, so the Null Hypothesis is rejected which says that there exist no difference in the recovery of NPAs through Lok Adalats, DRTs as compared to SARFAESI. Also, SARFAESI ACT is more effective than Lok Adalts and DRT because of its highest mean as compared to Lok Adalts and DRTs.

Further To Know Which Specific Group’s Means (Compared With Each Other) Are Different, We Use Tuckey’s Hsd Post Hoc Test

- H₀: There Exist No Difference Between Any Two Specific Group’s Mean
- H₁: There Exist Significant Difference Between Two Specific Group’s Mean

Test Statistics: Tukey Hsd Post Hoc Test

Level of Significance: a=.05

Decision Rule: If the calculated value of q is greater than its critical value which is 3.51, we reject our null hypothesis.

Computation

Table 9: Tukey Hsd Post HOC Test

<table>
<thead>
<tr>
<th></th>
<th>Differences between their means</th>
<th>n (group 1)</th>
<th>n (group2)</th>
<th>standard error</th>
<th>q</th>
<th>if q&gt;3.51, we reject NULL HYPOTHESIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOK ADALATS</td>
<td>DRTs</td>
<td>10.079</td>
<td>10</td>
<td>10</td>
<td>2.580698</td>
<td>3.905533</td>
</tr>
<tr>
<td>DRTs</td>
<td>SARFAESI</td>
<td>8.58</td>
<td>10</td>
<td>10</td>
<td>2.580698</td>
<td>3.324682</td>
</tr>
<tr>
<td>SARFAESI</td>
<td>LOK ADALATS</td>
<td>18.659</td>
<td>10</td>
<td>10</td>
<td>2.580698</td>
<td>7.230214</td>
</tr>
</tbody>
</table>

From the Studentised Range Distribution Table

\[ q_{0.05}(3,27) = 3.51 \]  \hspace{1cm} (1)

Conclusions

Thus, it can be concluded that in case of comparison between DRTs and SARFAESI ACT, the calculated value of q is lesser than its critical value which means acceptance of null hypothesis. Thus, we can say that there exists no significant differences between SARFAESI ACT and DRTs.

IMPACT of NPAs

The Impact of NPA on Banks is explained as below

- **Liquidity Problem**: One of the major impacts of NPA is that the money gets blocked in such non performing assets which lead to banks borrowing cash for carrying out their day to day functions smoothly. This results additional cost to the bank. As money become insufficient in hand, banks would not be able to pay its dues as well as its payments on time.

- **Impact on Credibility**: If the bank is confronting the issue of Non Performing Asset, it antagonistically influence the position of banks regarding market credit. It will start losing its reputation in light of the fact that bank can't
take care of its obligations on schedule and its worse effect is that individuals will start pulling back their deposits from bank which at that point cause liquidity crisis and furthermore results of its credibility.

- **Inclusion of The Executives:** Time and endeavors of the board is another backhanded cost which bank has to shoulder because of Nonperforming assets otherwise time and endeavors of the board in taking care of and overseeing such assets would have been focussed towards some productive exercises, which would give great returns.

- **Impact on Profitability:** Because of NPA, the money of the banks gets blocked due to which banks have to bear so much of additional cost probably in the form of opportunity cost etc which in turn reduces the profitability of banks. This happens because of the negative relation that NPA has with the profitability of banks i.e THE MORE THE NPAs, THE LESSER THE PROFITABILITY of banks. So it is always in the best interest of banks that they will try to adopt such measures that will help to reduce their amount of NPAs.

**Relationship between Net NPA & Net Profits of Scheduled Commercial Banks**

**Correlation**

Correlation is a technique that helps in ascertaining the relationship between two or more variables.

**Purpose of Using the Technique**

The purpose of using this technique is to know whether there exist any relation between the Net Profits of SCBs and its NET NPAs or not.

**Formula:**

\[ r = \frac{\text{Cov}(x, y)}{\sigma_x \sigma_y} \]  

Or

\[ r = \frac{\sum (x - \bar{x})(y - \bar{y})}{\sqrt{\sum (x - \bar{x})^2 \sum (y - \bar{y})^2}} \]

**Table 10:** Calculation of Correlation between NET NPA and NET Profit of Scheduled Commercial banks. (Amount in billion)

<table>
<thead>
<tr>
<th>Year</th>
<th>NET PROFIT(X) (in billion)</th>
<th>(X-X bar)^2</th>
<th>NET NPA(Y) (in billion)</th>
<th>(Y-Y bar)^2</th>
<th>(X-Y bar)^2</th>
<th>(\Sigma(X-X\text{ bar})(Y-Y\text{ bar}))</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>341</td>
<td>285.25</td>
<td>81367.56</td>
<td>3498</td>
<td>(648.25)</td>
<td>(184913.31)</td>
</tr>
<tr>
<td>2017</td>
<td>439</td>
<td>383.25</td>
<td>146880.56</td>
<td>4331</td>
<td>184.75</td>
<td>34132.56</td>
</tr>
<tr>
<td>2018</td>
<td>(324)</td>
<td>(379.75)</td>
<td>144210.06</td>
<td>5206</td>
<td>1059.75</td>
<td>1123070.06</td>
</tr>
<tr>
<td>2019</td>
<td>(233)</td>
<td>(288.75)</td>
<td>83376.56</td>
<td>3550</td>
<td>(596.25)</td>
<td>355514.06</td>
</tr>
<tr>
<td>Total</td>
<td>223</td>
<td>455834.74</td>
<td>16585</td>
<td>1932944.68</td>
<td>(344380.76)</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>55.75</td>
<td></td>
<td></td>
<td>4146.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S.D</td>
<td>675.15</td>
<td></td>
<td></td>
<td>1390.30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ r = \frac{-344380.76/675.15*1390.30}{675.15*1390.30} = 366 \]

**Interpretation**

Thus it can be interpreted that correlation coefficient is equal to -.366 which simply means that there exist a negative
correlation between net profit of SCBs and its net NPA i.e. as the amount of NPA decreases, the net profit of banks will increase and vice versa.

Findings

- From 2001-02 to 2018-19, Gross NPAs of SCBs have been proliferated by Rs.8656.74 billion.
- From 2001-02 to 2018-19, Net NPAs of SCBs have been proliferated by Rs. 3195.76 billion.
- During the period from 2001-02 to 2018-19, the mean percentage of net Non performing asset was approximately 2.582%.
- From 2007-08 to 2018-19, the no. of cases interpolated to Lok Adalat have been proliferated by 3894412.
- From 2008 to 2019, Lok Adalats recovered around Rs. 15170 crores.
- From 2008 to 2019, DRTs recovered around Rs. 71953 crores.
- From 2008 to 2019, SARFAESI ACT recovered around Rs. 192076 crores.
- Amongst various recovery channels, the most compelling one is the SARFAESI act, followed by DRTs and then by LOK ADALATS.
- The relationship between Net Non performing assets & net profit of schedule commercial banks is found to be inverse.
- Through “ANOVA” and “TUKEY HSD POST HOC TEST” we got to know that there exist no significant difference in the effectiveness of SARFAESI ACT and DRTs.
- SARFAESI AND DEBT RECOVERY Tribunals are more compelling than Lok Adalats in terms of recovery.

Recommendation for management of NPAs

- The credit appraisal techniques that are used by the banks should be reformulated so as to prevent further cases of NPA.
- Frequent discussions and taking suggestions from staff for the recovery of dues should be done.
- Appropriate assessment of the loan request needs to be done which will help the banks to uncover the infeasible projects instantly.
- Before giving loan to any borrower, bank should try to get complete information about its present projects, the efficiency of its executives, future projects etc..
- Credit rating of the borrower should be done before giving the loan and credit rating should be based on accurate financial data provided by the borrower. This will enable bank to prevent itself from improper lending.
- RBI should initiate actions against those who defaulted in their loans by means of publishing their names in various sources such as magazines, press, media etc. Such move will surely help other institution from giving loan to defaulter.
• It should be kept in mind that every borrower of NPA account is not a wilful defaulter. It may be the case that there may be any natural calamity like floods, droughts etc. In that case, bank should always try to either decrease the interest or increase the time period of the loan.

• Any property against particular loan case reimbursed should be entered in CERSAI Portal. It will prevent other banks from lending against the same property.

Conclusions

The whereabouts of Indian banking sector have been peevd by the ascending level in NPAs. Several remedial measures have been taken up by the government and the banks in the last decade for downsizing the amount of NPAs substantially. With reference to recovery of NPAs in Schedule Commercial Banks, after taking into consideration SARFAESI ACT, LOK ADALATS AND DRTS, it can be concluded that the SARFAESI ACT and DRTs do not have much significant differences and any of them can be used for gauging the situation of NPA. Further, after comparing net NPA with net profit, it is concluded that there exists a negative relation between these two. This correlation clearly indicates that the reduction in NPAs improve profitability of banks. After the SARFAESI ACT AMENDMENT 2016, banks are doing great in recovering their NPAs and because of this, a large number of cases as compared to other recovery channels are being referred to SARFAESI ACT for recovery. The SARBESI Act has helped recovering around 80 per cent of the amount. There is no doubt that SARFAESI ACT proves to be an effective way to deal with NPA but governments should come up with more innovative solution, otherwise the problem of NPA will keep on affecting the banking industry.

REFERENCES


8. RBI website retrieved from www.rbi.org.in