CO-OPERATIVE BANKS’ PERFORMANCE IN TAMIL NADU

DR.A.SELVARAJ
ASSOCIATE PROFESSOR,
PG & RESEARCH DEPARTMENT OF COMMERCE,
GOBI ARTS AND SCIENCE COLLEGE,
GOBICHETTIPALAYAM

ABSTRACT
Co-operatives in Tamil Nadu play a pivotal role in the development of rural economy by disbursing credit, facilitating marketing of agricultural produce and selling inputs and consumer goods at reasonable prices. The Co-operatives in Tamil Nadu are functioning under the Cooperation, Food and Consumer Protection Department, broadly fall into the following categories like Credit Co-operatives, Marketing Co-operatives, Consumer Co-operatives and Co-operatives promoting Co-operative. While rural and urban credit needs are taken care of by the credit Co-operatives and banks, the Co-operatives Marketing Societies facilitate in marketing agricultural produce. The Consumer Co-operatives with their wide net work in the State help in holding the price line of essential commodities. Crop loan is the most important component of the agricultural credit extended by Primary Agricultural Co-operatives Credit Societies. Efforts have been made to achieve inclusive growth in crop loan disbursal through the strategy consisting of increasing the disbursal of crop loan, covering new farmers and promoting the concept of group lending among farmers. Credit is also being provided for the promotion of other agricultural and allied activities like purchase of farm equipments, micro irrigation, land development and dairy.

KEYWORD: Co-operatives- Primary Agricultural Co-operatives Credit Societies-Urban Banks-covariance.

INTRODUCTION
Co-operative banks play imperative role in Indian financial system as cooperation has been inherent in Indian cultural ethos to work as a socio-economic organization for the well-being of the people. The principles and practices of Co-operative system have been guiding the people for community based management of means of production and economic resources. The expectations from Co-operatives have been to facilitate self-sufficiency in food grain production, creation of better employment opportunities for rural people, workers and artisans and to provide organizational strength to the persons of the limited means for their sustenance. In three tier structure of working, District Central Co-operative Banks (DCCBs) operate in the middle/district level by providing finance to the primary credit societies, accepting of deposits, granting of loans/advances, fixed deposit receipts, gold/bullion, goods and documents of title of goods, collection of bills, cheques, safe custody of valuables, agency services and work as balancing center for PACS. The financial situation of Co-operative banks in India cannot be claimed sound at present. Many banks became insolvent and others are on the verge of mergers or acquisition. In this paper, an attempt has been made to analyze the Performance of Primary Agricultural Co-operative Society and Co-operative Urban Banks. Collected data have been analysed with tools.
like range, mean, standard deviation, annual growth rate, compound growth rate, correlation matrix and correlation co-efficient.

**PRIMARY AGRICULTURAL CO-OPERATIVES CREDIT SOCIETIES**

In Tamil Nadu, there are 4,534 Primary Agricultural Co-operatives Credit Societies as on 31.7.2011. Their main objective is to provide agricultural and non-agricultural credit in the rural areas. They also undertake the distribution and sale of agricultural inputs viz., fertilizers, seeds and small agricultural equipments. In addition, they operate 15,569 public distribution system outlets, making the essential commodities available in the rural areas. Primary Agricultural Co-operatives Credit Societies do also lend for other purposes of their members such as housing, self help groups, etc. It is proposed to disburse Rs.3,000 crores of crop loans to farmers and Rs. 300 crores of investment credit for agriculture and allied activities during the year 2011-12.

Performance of Primary Agricultural Credit society from 2005-06 to 2010-11 in the aspects of liability, deposits, borrowings and cash position has been shown in Table 2.

### TABLE 1

**PERFORMANCE OF PRIMARY AGRICULTURAL CREDIT SOCIETY (Rs. In cr.)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Share Capital</th>
<th>AGR</th>
<th>Fixed Deposits</th>
<th>AGR</th>
<th>Credit</th>
<th>AGR</th>
<th>Loan</th>
<th>AGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-06</td>
<td>18513</td>
<td>-</td>
<td>31641</td>
<td>-</td>
<td>36679</td>
<td>-</td>
<td>21036</td>
<td>-</td>
</tr>
<tr>
<td>2006-07</td>
<td>18568</td>
<td>0.29</td>
<td>25994</td>
<td>-17.84</td>
<td>30945</td>
<td>-15.63</td>
<td>19293</td>
<td>-8.28</td>
</tr>
<tr>
<td>2007-08</td>
<td>37081</td>
<td>99.70</td>
<td>57636</td>
<td>121.73</td>
<td>67624</td>
<td>118.52</td>
<td>40329</td>
<td>109.03</td>
</tr>
<tr>
<td>2008-09</td>
<td>20044</td>
<td>-45.94</td>
<td>29156</td>
<td>-49.41</td>
<td>76919</td>
<td>13.74</td>
<td>41253</td>
<td>2.29</td>
</tr>
<tr>
<td>2009-10</td>
<td>21037</td>
<td>4.95</td>
<td>32753</td>
<td>12.33</td>
<td>88361</td>
<td>14.87</td>
<td>42881</td>
<td>3.94</td>
</tr>
<tr>
<td>2010-11</td>
<td>41081</td>
<td>95.27</td>
<td>61909</td>
<td>89.01</td>
<td>165280</td>
<td>87.05</td>
<td>84135</td>
<td>96.20</td>
</tr>
<tr>
<td>Range</td>
<td>22568.00</td>
<td>35915.00</td>
<td>1.97</td>
<td>24644.00</td>
<td>17974.50</td>
<td>16766.00</td>
<td>8664.92</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>26054.00</td>
<td>39848.16</td>
<td>7.76</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Median</td>
<td>20540.50</td>
<td>32197.00</td>
<td>7.22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>1.02</td>
<td>1.566</td>
<td>4.84</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACGR</td>
<td>-233.28</td>
<td>25.71</td>
<td>10.1</td>
<td>25.97</td>
<td>36.16</td>
<td>36.42</td>
<td>30.62</td>
<td>33.86</td>
</tr>
</tbody>
</table>

Source: Annual Report of Primary Agricultural Credit Society from 2005 to 2011.

From the Table 1, it is cleared that the compound growth rate of share capital is negative (-233.28). The annual growth rate range from -45.94 to 99.70, the average annual growth rate is 25.71. The fixed deposit compound growth rate is 10.1, the annual growth rate range between -49.41 and 121.73; the average annual growth rate is 25.97. The compound growth rate of credit is 36.16, the annual growth rate range between -15.63 and 118.52; the average annual growth rate is 36.42. The compound growth rate of loan is 30.62, the annual growth rate range between -8.28 and 109.03; the average annual growth rate is 33.86. In this regard highest positive compound growth rate is credit (36.16) in Performance of Primary Agricultural Credit Society from 2005 to 2011.

Performance of Primary Agricultural Credit society from 2005-06 to 2010-11 in the aspects of liability, deposits, borrowings and cash position has been shown in Table 2.
### Table 2: Performance of Primary Agricultural Credit Society

<table>
<thead>
<tr>
<th>Year</th>
<th>Liability</th>
<th>AGR</th>
<th>Deposits</th>
<th>AGR</th>
<th>Borrowings</th>
<th>AGR</th>
<th>Cash</th>
<th>AGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005-06</td>
<td>28223</td>
<td>-</td>
<td>50868</td>
<td>-</td>
<td>64602</td>
<td>-</td>
<td>12886</td>
<td>-</td>
</tr>
<tr>
<td>2006-07</td>
<td>28211</td>
<td>-0.04</td>
<td>46110</td>
<td>-9.35</td>
<td>73942</td>
<td>14.45</td>
<td>13941</td>
<td>8.18</td>
</tr>
<tr>
<td>2007-08</td>
<td>56434</td>
<td>100.04</td>
<td>96978</td>
<td>52.45</td>
<td>138545</td>
<td>87.36</td>
<td>26828</td>
<td>92.43</td>
</tr>
<tr>
<td>2008-09</td>
<td>28190</td>
<td>-50.47</td>
<td>55611</td>
<td>-42.65</td>
<td>127833</td>
<td>-7.73</td>
<td>15842</td>
<td>-40.94</td>
</tr>
<tr>
<td>2009-10</td>
<td>28185</td>
<td>-0.17</td>
<td>57078</td>
<td>2.63</td>
<td>148555</td>
<td>16.21</td>
<td>16745</td>
<td>5.70</td>
</tr>
<tr>
<td>2010-11</td>
<td>56375</td>
<td>99.77</td>
<td>112689</td>
<td>97.43</td>
<td>276388</td>
<td>86.05</td>
<td>32587</td>
<td>94.60</td>
</tr>
</tbody>
</table>

| Range   | 28249.00   | 6.66 | 211786.00 | 1.97 |
| Mean    | 37603.00   | 6.98 | 1.38      | 1.98 |
| Median  | 28217.00   | 5.63 | 1.33      | 1.62 |
| SD      | 1.45       | 2.77 | 7.59      | 8.00 |
| ACGR    | 8.21       | 24.85| 12.3      | 16.75| 30.36       | 32.72| 14.24 | 26.66|

Source: Annual Report of Primary Agricultural Credit Society from 2005 to 2011.

The Table 2 reveals that the compound growth rate of liability is positive (8.21), the annual growth rate range from -50.47 to 100.04, the average annual growth rate is 24.85. Deposit compound growth rate is 12.3, the annual growth rate range between -42.65 and 97.43; the average annual growth rate of deposit is 16.75. The compound growth rate of borrowings is 30.36, the annual growth rate of borrowings range between -7.73 and 87.36 and the average annual growth rate is 32.72. The compound growth rate of cash is 14.24, the annual growth rate of cash range between -40.94 and 94.60; the average annual growth rate of cash is 26.66. In this regard highest positive compound growth rate is borrowings (30.36) in Performance of Primary Agricultural Credit Society from 2005 to 2011.

**Urban Co-operatives Banks**

At present, 120 Urban Co-operatives Banks are functioning in Tamil Nadu. These Urban Co-operatives Banks provide banking and credit facilities to the urban and semi-urban population. They mobilize deposits from the public and extend credit facilities to small traders, artisans and persons belonging to middle income group for various purposes like housing, business, education, consumer and other non-farm sector activities. It is planned to sanction and disburse loans to the extent of Rs.5920 crore by these banks and to collect deposits to the extent of Rs.4500 crore, during the year 2011-12. The Urban Co-operatives Banks are expected to lend not less than 60% of their total advances to the priority sector. Besides, it will be ensured that at least 25% of the priority sector lending shall be disbursed to the weaker sections of the community.

The State Government has signed a Memorandum of Understanding with the Reserve Bank of India to improve the functioning of Urban Co-operatives Banks. Computerisation of all the Urban Co-operatives Banks and their branches is under progress. This will improve their operational efficiency so that they can offer the best services to their customers on par with commercial banks. Performance of co-operative Urban banks from 2001-02 to 2010-11 in the aspects of share capital, deposits, loan and net profit has been shown in Table 3.
TABLE 3
PERFORMANCE OF CO-OPERATIVE URBAN BANKS

<table>
<thead>
<tr>
<th>Year</th>
<th>Share capital</th>
<th>AGR</th>
<th>Deposit</th>
<th>AGR</th>
<th>Loan</th>
<th>AGR</th>
<th>Net Profit</th>
<th>AGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001-02</td>
<td>61.91</td>
<td>-</td>
<td>3427.65</td>
<td>-</td>
<td>2175.66</td>
<td>-</td>
<td>15.60</td>
<td>-</td>
</tr>
<tr>
<td>2002-03</td>
<td>62.29</td>
<td>0.61</td>
<td>3771.93</td>
<td>10.04</td>
<td>2154.80</td>
<td>-0.95</td>
<td>19.46</td>
<td>24.74</td>
</tr>
<tr>
<td>2003-04</td>
<td>61.41</td>
<td>-1.41</td>
<td>3873.26</td>
<td>2.68</td>
<td>2283.31</td>
<td>5.96</td>
<td>11.20</td>
<td>-42.44</td>
</tr>
<tr>
<td>2004-05</td>
<td>57.77</td>
<td>-5.92</td>
<td>3662.68</td>
<td>-5.43</td>
<td>2219.55</td>
<td>-2.79</td>
<td>21.00</td>
<td>87.5</td>
</tr>
<tr>
<td>2005-06</td>
<td>55.97</td>
<td>-3.11</td>
<td>3528.41</td>
<td>-3.66</td>
<td>2207.58</td>
<td>-0.53</td>
<td>14.38</td>
<td>-31.52</td>
</tr>
<tr>
<td>2006-07</td>
<td>53.21</td>
<td>-4.93</td>
<td>3586.86</td>
<td>1.65</td>
<td>2848.90</td>
<td>29.05</td>
<td>10.28</td>
<td>-28.51</td>
</tr>
<tr>
<td>2007-08</td>
<td>50.89</td>
<td>-4.36</td>
<td>4328.83</td>
<td>20.68</td>
<td>3042.46</td>
<td>6.79</td>
<td>9.30</td>
<td>-9.53</td>
</tr>
<tr>
<td>2008-09</td>
<td>50.14</td>
<td>-1.47</td>
<td>5129.32</td>
<td>18.49</td>
<td>3079.49</td>
<td>1.21</td>
<td>10.56</td>
<td>13.54</td>
</tr>
<tr>
<td>2009-10</td>
<td>48.35</td>
<td>-3.57</td>
<td>5954.26</td>
<td>16.08</td>
<td>3562.17</td>
<td>15.67</td>
<td>50.56</td>
<td>378.78</td>
</tr>
<tr>
<td>2010-11</td>
<td>48.41</td>
<td>0.12</td>
<td>6247.62</td>
<td>4.92</td>
<td>4299.77</td>
<td>20.70</td>
<td>23.35</td>
<td>-53.81</td>
</tr>
<tr>
<td>Mean</td>
<td>55.03</td>
<td></td>
<td>4351.05</td>
<td></td>
<td>2798.36</td>
<td></td>
<td>18.569</td>
<td></td>
</tr>
<tr>
<td>STD</td>
<td>5.30</td>
<td></td>
<td>996.71</td>
<td></td>
<td>678.26</td>
<td></td>
<td>62.63</td>
<td></td>
</tr>
<tr>
<td>C.V. (%)</td>
<td>9.65</td>
<td></td>
<td>22.90</td>
<td></td>
<td>24.24</td>
<td></td>
<td>11.6293</td>
<td></td>
</tr>
<tr>
<td>ACRG</td>
<td>-4.67</td>
<td>-24.05</td>
<td>9.07</td>
<td>65.47</td>
<td>9.88</td>
<td>75.11</td>
<td>7.05</td>
<td>338.74</td>
</tr>
</tbody>
</table>


From the Table 3, it is clear that compound growth rate of share capital is negative (-4.67). The annual growth rate of share capital range from -4.93 to 0.61, the average annual growth rate is -24.05. The deposit compound growth rate is 9.07, the annual growth rate of deposit range between -5.43 and 20.68; the average annual growth rate is 65.47. The compound growth rate of loan is 9.88, the annual growth rate of loan range between -0.95 and 29.05; the average annual growth rate is 75.11. The compound growth rate of net profit is 7.05, the annual growth rate range between -42.44 and 378.78; the average annual growth rate is 338.74. In this regard highest positive compound growth rate is loan (9.88) in Performance of Co-operative Urban Banks from 2001 to 2011.

CORRELATION MATRIX OF CO-OPERATIVE BANKS

The correlation coefficient reveals the magnitude and direction of the relationship. The magnitude is the degree to which variables move in unison or opposition. The coefficient’s sign signifies the direction of the relationships. Direction tells whether large values on one variable are associated with large values on the other (and small values correspond with other small values). When the values correspond in this way, the two variables have a positive relationship and vice versa. The correlation coefficient value varies over a range of +1 through 0 to -1. The designation $r$ symbolizes the coefficient’s estimate of linear association based on sampling data. The coefficient $r$ represents the population correlation.

$$r = \frac{\sum (X - \bar{X})(Y - \bar{Y})}{(n-1)\sigma_x \sigma_y}$$

The correlation matrix was computed for all the portfolios and for the benchmark indices to understand the relationship between the returns. Similarly, the relationship between the risks of all portfolios was assessed through Covariance; Covariance is the statistical measure that
indicates the interactive risk of a security relative to others in a portfolio of securities. In other words, the way security returns vary with each other affects the overall risk of the portfolio. The covariance between two portfolios A and B was calculated by using the following formula:

$$\text{Cov} = \frac{\sum (X_a - \bar{X}_a) (X_b - \bar{X}_b)}{N}$$

Where,

- $\text{Cov}_{ab}$ denote the covariance between the portfolios $a$ and $b$;
- $X_a$ denote the return of portfolio $a$; $X_b$ denotes the return of portfolio $b$;
- $\bar{X}_a$ and $\bar{X}_b$ denote the mean return of the portfolios $a$ and $b$ respectively.

### CORRELATION MATRIX OF PRIMARY AGRICULTURAL CREDIT SOCIETY

The covariance is a measure of how deviations in the returns of two portfolios move together. If returns of two portfolios move in the same directions consistently, the covariance would be positive and vice versa. If the movements of returns are independent of each other, covariance would be close to zero. Thus, the covariance indicates the direction and the interactive risk relationship between the two portfolios. The correlation matrix of the portfolios Share Capital, Fixed Deposits, Credit, Loan, Liability, Deposits, Borrowings and Cash in Primary Agricultural Credit Society, along with the benchmark indices was computed to understand the relationship between the portfolios. The Table 4 shows the correlation matrix of the performance of the Primary Agricultural Credit Society.

### TABLE 4
CORRELATION MATRIX OF PRIMARY AGRICULTURAL CREDIT SOCIETY

<table>
<thead>
<tr>
<th></th>
<th>Share Capital</th>
<th>Fixed Deposits</th>
<th>Credit</th>
<th>Loan</th>
<th>Liability</th>
<th>Deposits</th>
<th>Borrowings</th>
<th>Cash</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share Capital</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Deposits</td>
<td>0.991</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit</td>
<td>0.733</td>
<td>0.703</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loan</td>
<td>0.790</td>
<td>0.758</td>
<td>0.995</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liability</td>
<td>0.988</td>
<td>0.985</td>
<td>0.619</td>
<td>0.686</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deposits</td>
<td>0.996</td>
<td>0.990</td>
<td>0.778</td>
<td>0.830</td>
<td>0.974</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Borrowings</td>
<td>0.806</td>
<td>0.771</td>
<td>0.990</td>
<td>0.996</td>
<td>0.704</td>
<td>0.840</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>0.991</td>
<td>0.972</td>
<td>0.813</td>
<td>0.861</td>
<td>0.958</td>
<td>0.993</td>
<td>0.877</td>
<td>1</td>
</tr>
</tbody>
</table>

This Table shows the correlation between different measures of Primary Agricultural Credit Society.

Table 4 shows that the correlation between the eight measures of Primary Agricultural Credit Societies regulations ranges between 0.686 and 0.996 indicating that the various measures capture different dimensions of the regulatory framework. It is measures for bank performance, liability and loan are low positive correlation (0.686) in Primary Agricultural Credit Societies, followed by fixed deposits and credit (0.703), liability and borrowings (0.704), credit and share capital (0.733). Loans and borrowings are high positive correlation (0.996) in Primary Agricultural Credit Societies.
CORRELATION MATRIX OF CO-OPERATIVE URBAN BANKS

The covariance is a measure of how deviations in the returns of two portfolios move together. If returns of two portfolios move in the same directions consistently, the covariance would be positive and vice versa. If the movements of returns are independent of each other, covariance would be close to zero. Thus, the covariance indicates the direction and the interactive risk relationship between the two portfolios. The correlation matrix of the portfolios Share capital, Deposit, Loans and Net Profit in Co-operative Urban banks, along with the benchmark indices was computed to understand the relationship between the portfolios. The Table 5 shows the correlation matrix of the performance of the Co-operative Urban banks.

**TABLE 5**
CORRELATION MATRIX OF CO-OPERATIVE URBAN BANKS

<table>
<thead>
<tr>
<th></th>
<th>Share capital</th>
<th>Deposit</th>
<th>Loans</th>
<th>Net Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share capital</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deposit</td>
<td>-0.791</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loans</td>
<td>-0.874</td>
<td>0.923</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Net Profit</td>
<td>-0.342</td>
<td>0.589</td>
<td>0.410</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 5 shows that the correlation between the four measures of Co-operative Urban banks regulations ranges between -0.874 and 0.923 indicating that the various measures capture different dimensions of the regulatory framework. It is measures for bank performance, loans and share capital are high negative correlation (-0.874) in Co-operative Urban banks, followed by deposits and share capital (-0.791), net profit and share capital (-0.342). Loans and deposit are high positive correlation (0.923) in performance of Co-operative Urban banks.

CONCLUSION AND SUGGESTIONS

Co-operative banks in India occupy a unique position and are organised on co-operative principles. Co-operatives are governed by the co-operative societies act of the concerned state, while Banking Regulation Act is applicable to them only in a limited form. The following policy implications have been evolved based on the findings of the study and observations made during the period of study for evolving the performance of banks in financing agriculture.

- The growth in outstanding balance showed a positive trend while that for numbers of accounts had shown negative trend, so lending should be in such a way that, there should be proportionate growth in both number of loan accounts and amount advanced by the banks.

- High overdues in private banks as compared to public sector banks because of less agricultural technical staff and poor follow up. Hence more and more agriculture graduates needs to be appointed in the private banks as it was done public sector banks.

- To avail loan from the banks the borrowers needs to submit various documents, which is a tedious process and consumes lot of time and energy. In order to avoid this difficulty computer networking of revenue department, land records office, irrigation department, and, financial institutions operating in the area on a pilot basis to have easy access of the required information. The system may be evolved to get officially the documents from the concerned departments instead of asking farmers to get them done.
The Kissan credit cards should be made more popular in the banks in general and particularly in private sector banks (Karnataka bank ltd.) where it was not given much emphasis in order to came the difficulty in reducing cost of borrowing and time taken for lending.

The short term credit dominates the agricultural credit structure, accounting for more than 60 per cent of the total advances. In the context of structural transformation taking place in the farm front in favour of perennial and cash crops, the importance of short term production credit is diminishing and the need for term loans is increasing. The banks need to tune their lending pattern according to needs of the farmers.

It is found that the performance of Co-operative Bank is good in all years and at the same time it is found that most of the Banks are suffering a lot due to continuous loss. Hence, it is suggested that Government of Tamil Nadu may take necessary arrangements to revamp the administrative systems of co-operative banks.