CHAPTER – V
OPERATIONAL EFFICIENCY – AN EVALUATION

5.1 Introduction

This chapter is to assess the operational efficiency of selected three urban cooperative banks in Villupuram district through financial analysis. Financial information is needed to predict, compare and evaluate the firm’s earning ability. The former statement viz Profit & Loss Account shows the operating activities of the concern and the later Balance Sheet depicts the balance value of the acquired assets and of liabilities at a particular point of time. However, these statements do not disclose all of the necessary and relevant information. For the purpose of obtaining the material and relevant information necessary for ascertaining the financial strengths and weakness of an enterprise, it is necessary to analyse the data depicted in the financial statement.

5.2 Operational efficiency

Operational efficiency ‘refers to the efficient utilization of human and material resources or the efficient use of people, machines, tools and equipment, materials funds. Better utilization of any or a combination of these, can increase output of goods and services and reduce costs. Operational efficiency is the tactical planning of an organization to keep a healthy balance between cost and productivity. It identifies the wasteful processes that contribute to drainage of resources and organizational profits. It deals with minimizing waste and maximizing the benefits of resource to
provide better services to the customers. To face tough competition lowering costs is a best option as internal wastage contributes to enhanced cost. Any input that is not processed through system into useful output is waste. It means producing more goods and services with no greater use of resources or maintaining the same level of production using fewer resources.

Operational efficiency is connected with diverse aspects of its operations, as its financial soundness, its profitability and quality services to customers. Here, in this research the word efficiency is a combination of growth & performance, productivity, profitability, and technical efficiency. The banking business as a whole has been given more emphasis on deposit mobilization, credit deployment and branch expansion. However now days it has also started giving emphasis on operational efficiency. It will not be possible to increase profit without improving efficiency and productivity. The increasing competition enforced the commercial banks to become cost effective and efficient in using the resources to perform well. The main objective of operational efficiency is to achieve —economic growth at less technical and social cost. The challenge of improving operational efficiency is more significant with the adaption of new technology in banking. It has empowered banks to not only handle enormous volume of transactions but also provide products and efficient services to garner new business in the face of tough competition in the market place. Well-trained employees and common policy and standards contribute better to greater operational efficiency.
The purpose of this chapter is to assess the operational efficiency of selected three urban cooperative banks in Villupuram district through various ratio analyses. The ratio analysis as a technique of analyzing the financial information, contained in the balance sheet and the profit and loss account, for a more meaningful understanding of the financial position and performance of the selected UCBs in Villupuram District.

5.3 Ratio analysis

Several ratios can be calculated from the accounting data contained in the financial statements. These ratios can be grouped into various classes according to the financial activity or function to be evaluated. The parties which generally undertake financial analysis are short-term creditors, long-term creditors, owners and management. Short-term creditors’ main interest is in the liquidity position or the short-term solvency of the firm. Long-term creditors, on the other hand, are more interested in the long-term solvency and profitability of the firm. Similarly, owners concentrate on firm’s profitability analysis and the analysis of the firm’s financial conditions. Management is interested in evaluating every activity of the firm. They firm have to protect the interests of all parties and see that the firm grows profitably. In view of the requirements of the various users of ratios, they are classified in this study into the following four important categories.
1. Operational ratios

2. Productivity ratios

3. Profitability ratios

4. Solvency ratios

5.3.1. Operational ratios:

An analysis of the operational ratios might bring to light the operational efficiency of the bank in its various activities, namely, mobilization of funds, use of funds; cost of funds, earning capacity etc. The funds of shareholders, creditors and deposit holders are invested in various kinds of assets and lent as advances to generate revenue and profit. Better management of funds results into larger amount of revenue. Operational ratios are employed to evaluate the efficiency with which the bank manages and utilizes its funds. The following operational ratios are calculated to judge the effectiveness of funds utilization. These ratios are exhibited in Table 5.1

(i) Interest earned to total income ratio

The total income includes interest earned from investments and loans as well as non-interest income earned by way of fees, commission, exchange, brokerage, profit on sales, rent on locker, etc. the main function of a bank is lending loans and advances as well as making investments. Income through interest is the major source of income for the bank. The ratio of interest earned to total income is obtained by dividing the interest income by the total income of the bank.
Non-interest income or other is one area where the bank can realize income instantaneously as and when the service is provided. But, in general, the banks do concentrate on interest income, the realization of which is not certain or regular. The commercial banks have started giving more importance to other income providing an array of ancillary service each at a nominal charge.

The interest income and the total income of the VUCB have registered the increasing trend throughout the study period with some fluctuation. The ratio of interest earned to total income varied between 0.93 times and 0.98 times. These variations are due to the fluctuation in the growth rates of both the variables. The average ratio of the entire study period is 0.95 times. In other words, the VUCB could earn 94 per cent of its total income through interest and only 6 per cent from other source of revenue. The VUCB must plan and implement certain strategies to improve its non-interest income by moving ahead with varieties of ancillary services.

The interest earned to total income ratio of TKVUCB has ranging between 0.84 times and 0.98 times and its average ratio is 0.94 times for the entire study period of ten years. The TKVUCB has earned a moderate rate of income through investments and credit portfolio.

The TDVUCB also earning a major total income through the interest income. The average ratio of interest earned to total income of TDVUCB has been arrived at as 0.95 times, i.e., TDVUCB is getting 96 per cent of its total income from interest
earned. This position has to be changed and it should concentrate to improve the non-interest income of the bank.

It indicates, all the three selected UCBs are highly depending on the income through interest generated through investment and credit portfolio, especially through credit portfolio. The trend has changed to a large extent during the last decade in the banking industry. Many commercial banks, both public and private sectors, and few Cooperative banks have been endeavoring in increasing their non-interest income by introducing novel ancillary services. Though, the VUCB, TKVUCB and TDVUCB have only 6 per cent from other income. Therefore, the bank must think and act in accordance to the line of increasing the other income to overcome future challenges in its business development.

(ii) Interest paid to total income ratio

The expenditure for a bank can be grouped under interest expenditure, establishment expenditure and other operational expenditure. The interest expenditure is always the main expenditure for the bank. This ratio is calculated in order to find out the quantum of bank’s total income that is drained out to meet the commitment of the bank to pay interest on both borrowings and deposits. There won’t be any second opinion on the fact that the total income of the bank must be increased every year and at the same time the interest expenditure must be comfortable spread for profit. Interest paid on borrowings can be controlled by choosing low cost borrowings like refinance and long-term soft loans from NABARD and other financial institutions. In
case of interest paid on deposits the bank management can concentrate on the mobilization of low cost deposits, namely, savings bank deposits and current account deposits, where the interest rate offered is very less as compared to term deposits. A good customer service provided with varieties of ancillary services could help the bank to increase the clientele and thereby the savings and current account customers may be increased. Thus, the ratio interest paid to total income will help the bank management to realize the cost consciousness besides it capability to control the interest expenditure up to an optimum level.

The interest paid expenses of VUCB has been reduced from Rs. 755.02 lakhs in 2001-02 to Rs. 542.18 lakhs in 2007-08 and it was increased from Rs.697.63 lakhs in 2008-09 to Rs. 798.84 lakhs in 2010-2011. It has showing a fluctuating trend during the decade. The ratio of interest paid to total income of VUCB has been fluctuating between 0.48 times and 0.68 times and the average has been 0.56 times in the period of ten years. The fluctuation in the ratio is much higher in the first half of the decade when compared to the second half.

The interest expenditure of TKVUCB has decreased from Rs.468.9 lakhs in 2001-02 to 286.30 lakhs in2006-07 and it has gradually increased from Rs.321.90 lakhs in 2007-08 to 463.60 lakhs in2010-11. Average ratio of interest paid to total income of TKVUCB is 0.66 times. In other words, the TKVUCB is incurring about 66 per cent of its total income in meeting the payment of interest on deposits.
The interest expenditure of TDVUCB has fluctuated during the whole study period and it has registered a growth rate of 1.05 times. The average ratio of interest paid to total income of TDVUCB is 0.48 times, though the ratio has been fluctuating between 0.33 times and 0.64 times during the study period. Thus, the TDVUCB has spends 48 per cent of its total income towards the payment of interest on deposits and borrowings.

The average of interest paid to total income of selected UCBs is 56 per cent in VUCB, 66 per cent in TKVUCB and 48 per cent in TDVUCB. Thus, high ratio of interest paid to total income pose threat to profitability. Therefore, the UCBs have to evolve strategies to mobilize more demand deposits at low rate of interest and to increase its total income to reduce the ratio moderately.

(iii) Total income to working funds ratio

The ratio of total income to working funds for a bank provides an indicator to measure the income earning capacity of the bank. Bank needs higher level of working funds and at the same time a reasonable income by employing the working funds effectively. Through the total income includes the interest earnings and non-interest earnings, working funds is the funds revolved frequently in the business operations of the bank, the effective use of which adds to the income. This ratio helps to understand the volume of business done with the available working funds and the income generated from such business operations.
The working funds of VUCB have showing increasing trend from the third year onwards of the study period amount of Rs.6503.54 to Rs.8543.92 lakhs in 2010-11. The total income of the VUCB also showing a fluctuating trend for the first five years of the decade and it has grown up to the second half of the study period. The ratio of total income to working fund has ranging between 0.10 times and 0.14 times during the decade and it has registered as average of 0.12 times.

Both the total income and working funds of the TKVUCB has showing a fluctuating trend for the first five years of the decade and it has grown up to the second half of the study period. The ratio of total income to working funds varied between 0.09 times and 0.15 times. The average ratio is 0.12 times.

The working fund of the TDVUCB has showing a fluctuating trend for the first seven years and it has grown gradually from Rs.1626.91 lakhs in 2008-09 to Rs.2022.52 lakhs in 2010-11. The growth rate of the working fund is 1.45 times during the decade. The total income of the TDVUCB has fluctuated and decreasing up to first five years of the decade and it has increased for the second half of the study period. The average ratio of total income to working funds is 0.13 times.

Both the total income and working funds of all the selected UCBs has been fluctuated during the study period. The growth in total income is inadequate. Thus, the ratio declined in some of the years in all the three selected UCBs. All the three UCBs must concentrate in generating more income. They have to ensure continuous
increase in the total income of the banks. The banks can launch schemes to provide more ancillary services through which they can earn more non-interest income.

(iv) **Total expenditure to total income ratio**

The ratio of total expenditure to total income may be identified as a corollary to the spread ratio. Spread ratio deals with interest income and interest expenditure and here, the ratio deals with total income and total expenses. This ratio evaluates whether the overall operations of the bank really yield any surplus or not. Any organisation or bank cannot run with its operational results below the level of break even. It must earn surplus to exist and to go ahead with future plans of expansion. Therefore, this ratio of total income to total expenses measures the percentage of expenditure incurred out of the total income earned by the bank. The increase of its ratio over a period indicates low margin of profit for the bank. This ratio may increase at the time of expansion process or when the bank takes up any diversified activities in connections with modernisation or otherwise. But a continuous increasing trend may hurt the avenues of making higher profit.

The VUCB is spending an average of 94 per cent from its income during the study period of ten years. In the first year onwards, the ratio is almost homogenous at the end of the study period. The average ratio of total expenditure to total income is 0.94 times. This ratio indicates only 5 per cent are left as surplus of income over
expenditure. The meager percentage of 5 per cent is highly insufficient for VUCB to run the bank comfortably.

In TKVUCB, the average ratio of total expenditure to total income for the study period is 0.93 times. Almost, the ratio is showing more than 89 per cent for the whole study period. The high ratio indicates, the TKVUCB has a Herculean task before it to reduce the expenditure and increase the total income.

The average ratio of total expenditure to total income of TDVUCB for the study period is 0.92 times. The ratio is high which is to be reduced at a shortest possible time to ensure profitability.

The average ratio of total expenditure to total income of VUCB is 0.94 times, TKVUCB is 0.93 times and TDVUCB is 0.92 times. All the three banks were having a least surplus during the study period. The least margin amount is not sufficient for the future development of the UCBs in the competitive era. All the three UCBs must take into an emergent action to control the expenditure and to enhance the income.

(v) Establishment expenditure to total expenditure ratio

Maintenance of infrastructure and premises attract expenditure for the bank besides the salary and allowances payable to the employees of the bank. Such expenditure, other than the interest expenditure, has been, usually, classified as established expenditure. As it is stated earlier, the total expenditure has always been influenced highly by the interest expenditure which could be minimized by selecting
the borrowing pattern and mobilizing low cost deposits. Similarly, the establishment expenses could also be controlled by proper monitoring of the expenditure incurred under various heads. Employees must be educated and trained to utilize the infrastructure facilities properly. The sense of belongings’ should be instilled in the minds of the staff so that they would come forward to contribute more to the bank, which will result in increased income and controlled expenditure. When both interest expenditure and establishment expenditure are controlled, the total expenditure would be under control providing a favorable atmosphere for the growth of profits. The ratio of establishment
Table 5.1
Operational Ratios of Selected UCBs in Villupuram District
(In times)

<table>
<thead>
<tr>
<th>Year</th>
<th>VUCB</th>
<th>TKVUCB</th>
<th>TDVUCB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IE/TI</td>
<td>IP/TI</td>
<td>TI/WF</td>
</tr>
<tr>
<td>2001-02</td>
<td>0.98</td>
<td>0.69</td>
<td>0.14</td>
</tr>
<tr>
<td>2002-03</td>
<td>0.94</td>
<td>0.68</td>
<td>0.13</td>
</tr>
<tr>
<td>2003-04</td>
<td>0.93</td>
<td>0.57</td>
<td>0.14</td>
</tr>
<tr>
<td>2004-05</td>
<td>0.94</td>
<td>0.48</td>
<td>0.12</td>
</tr>
<tr>
<td>2005-06</td>
<td>0.96</td>
<td>0.54</td>
<td>0.11</td>
</tr>
<tr>
<td>2006-07</td>
<td>0.96</td>
<td>0.53</td>
<td>0.10</td>
</tr>
<tr>
<td>2007-08</td>
<td>0.93</td>
<td>0.49</td>
<td>0.11</td>
</tr>
<tr>
<td>2008-09</td>
<td>0.96</td>
<td>0.48</td>
<td>0.12</td>
</tr>
<tr>
<td>2009-10</td>
<td>0.97</td>
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<td>0.12</td>
</tr>
<tr>
<td>2010-11</td>
<td>0.97</td>
<td>0.60</td>
<td>0.12</td>
</tr>
<tr>
<td>AVG</td>
<td>0.95</td>
<td>0.56</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>0.95</td>
<td>0.48</td>
<td>0.13</td>
</tr>
</tbody>
</table>

Sources: Calculated from the annual reports of the selected urban Cooperative banks

IE = Interest earned
TI = Total income;
IP = Interest paid
EE = Establishment expenditure;
WF= Working fund;
TE= Total expenditure;
expenses to total expenses would help the bank to relate the expenses with the effective utilisation of the infrastructure and human resources.

The establishment expenditure of VUCB has showing fluctuating trend during the study period and the growth rate is 1.46 times. The average ratio of the establishment expenditure to total expenditure of VUCB is 0.13 times. In other words, the establishment expenses cover 13 per cent of the total expenses incurred by the VUCB.

The TKVUCB has spent an average of 14 per cent of its total expenditure towards establishment expenditure in the first half of the study period and it has increased to 18 per cent on an average in the second half. The average ratio for the whole decade is 0.16 times, i.e., 16 per cent of the total expenses in spent towards establishment expenses. Thus, the TKVUCB could exercise enough control over the establishment expenditure and it should be maintained.

The establishment expenses of TDV UCB have grown by 1.63 times during the study period of the ten years. The first five years of the average ratio of establishment expenses to total expenditure is 0.11 times and it has increased to 0.19 times in the second half of the period. The average ratio for the whole decade is 0.15 times.

In all the three UCBs, the average ratio of establishment expenditure to total expenses is 0.13 times, 0.16 times and 0.15 times for the VUCB, TKVUCB and TDVUCB respectively. The management of the VUCB deserves application for their
effective control over the establishment expenses. The TKVUCB and TDVUCB should control the establishment expenses in future growth of the profits.

5.3.2 Productivity ratios

Productivity is defined as the relationship between output of goods and services and the inputs of factors provided to create this output.\(^1\) Productivity in a manufacturing industry is influenced by the combined functions of the factors of production. Viz., labour, management and technology and, hence, measurable in terms of quantity, while it is not so in a service industry like banking where services rendered include acceptance of deposits, dispensation of credit, remittance of funds, discounting and collection of bills, safe custody, etc. The inputs would be in terms of employees as also other financial assets.\(^2\)

Productivity in banks is related to services produced and resources utilized in producing the same. This means that in order to produce services either the field office or any other place of work. Certain resources have to be employed in the form of inputs to obtain outputs and productivity takes into consideration both these aspects. These inputs are men, money, machines, materials, energy, work technology, management and organisation. Higher productivity is secured by efficient use of these inputs.

\(^1\)Deshpande R.S, (April 2000), Productivity approach to Cooperative Banking, Cooperative Perspective, p.38.
Thus banking is essentially a services oriented industry and hence it is hard to find out its productivity in absolute terms. However the productivity of a bank can be measured through the performance of its employees over a period of time., as employees are users of the infrastructure available at the bank, they are the main inputs in the production of service products and they are the persons provide the service to the customers. Better customer relationship management and satisfaction of the customers are essential to multiply the volume of business. The ratio calculated as business per employee, income per employee, etc. is used as indicators to measure productivity of the bank. The following are the ratios employed in this study to analyse the productivity performance of the three selected Urban Cooperative Banks. They are exhibited in table 5.2.

(i) Per employee deposits

Per employee deposits has been arrived by dividing the total deposits by the number of employees. Deposits Mobilization is the main source of funds for the bank. Deposits are mobilized under various schemes from the public offering graded rate of interest as per the term of the deposits. Bank employees mobilize the deposits under various schemes utilizing the infrastructure provided by the bank. The courteous and prompt service rendered by the staff, the congenial atmosphere provided at the premises, proper explanations given to the queries raised by the customers, practicing
customer-friendly systems and procedure, etc. are essential for the bank to improve its deposits position. The employees are in the pivotal position in the mobilization for deposits from the public. Therefore, the per employee deposits ratio exhibits the average efficiency of the employees in mobilizing the deposits. In order words, the ratio provides a parameter to evaluate the average productivity of each employee of the bank. The experience, skills and the knowledge of the employee put together add to the productivity of the bank when a favorable environment is provided by the bank.

In VUCB, the total deposits increased from Rs.4969.44 lakhs in 2001-02 to Rs.5349.39 lakhs in 2002-03 and thereafter, it has decreased to Rs.5163.73 lakhs in 2007-08. Subsequently, it has increased to Rs. 6426.70 lakhs in 2010-11. The number of employees of VUCB has varied between 25 and 32 and mostly the number is 27. The per employee deposit ratio has been increased from 198.77 times in 2001-02 to 200.83 times in 2010-11. The average ratio of per employee deposit is 192.83 times during the study period of ten years.

The total deposits of the TKVUCB have been fluctuated from 2001-02 to 2006-07 and it has increased from Rs.3114 lakhs in 2007-08 to Rs. 4440 lakhs in 2010-11. The number of employees of the SUCB has 23 in the first six years and it has increased to 25 in the seventh year. Afterwards, it has gradually decreased to 18 in 2010-11. The per employee deposit ratio increased from 133.34 in 2001-02 to 246.66 in 2010-11 except a short fall in middle of the study period. The average ratio of per employee deposit is 156 times.
The total deposits of TDVUCB have fluctuated from the whole study period. The number of employees of TDVUCB has varied between 6 and 8. The average ratio of per employee deposit is 175.88 times.

All the three UCBs have limited the number of employees and the number is almost constant throughout the decade of the study. The per employee deposit ratios of all the three UCBs have increased and they have maintain the trend in future.

(ii) **Per employee advance**

The total advances are divided by the number of employees to find out the per employee advances. Advances are the portfolio of a bank, which generates the highest percentage of interest income, is the single major contributor to the total income of the bank. Right from the selection of borrowers, the loans and advances portfolio has varieties of functions involving the knowledge, skills and efforts of the employees till the last rupee of the loan is recovered. The processing of the loan application, security of the financial viability of the project, pre-sanction survey or enquiry, documentation, disbursement of loan, verification of assets created, post disbursement inspection, collection and review of the operational results, quarterly review, follow up of recovery of interest and installments, etc. are the various functions in loan management and each function needs to be attended by the employee including officials of the bank. The productivity of the employees of the bank in managing the advances portfolio is being brought to light by the ratio of per employee advances.
The total advances of VUCB have been fluctuated during the half of the study period and it has increased from Rs.2969.80 lakhs in 2006-07 to Rs. 4564.43 lakhs in 2010-11. The per employee advances ratio has increased from 92.03 times in 2001-02 to Rs 190.55 times in 2010-11. The ratio of per employee advances has grown by 2.07 times during the study period.

The advances of the TKVUCB have been gradually decreased from Rs.1392.39 lakhs in 2001-02 to Rs.1235.28 lakhs in 2005-06 and it has increased from Rs.1493.48 lakhs in 2006-07 to Rs.3103.58 lakhs in 2010-11. The growth rate is 2.23 times during the decade. The per employee advances has grown annually and registered a net increase of 2.58 times growth from Rs. 105.62 lakhs in 2001-02 to Rs.272.72 lakhs in 2010-11. It indicates that the utilization of manpower of this bank for the productive activities is very low.

The number of employees in TDVUCB is around 8 in the study period. The advances of SKUCB have grown 1.56 times during the study period. The growth trend of per employee advances ratio as 2.74 times as that of advance. The growth rate of advances in the first half of the decade is less than that of the growth recorded in the second half of the decade.

All the three UCBs advances has grown gradually throughout the study period, except very marginal set back in one or two year. Therefore, the ratio of per employee advances has registered a moderate growth rate in all the three UCBs.
(iii) **Per employee income**

Though productivity is being measured using different parameters, income generated leads to decide the real productivity of a bank. The perennially generated income of a bank provides a healthy and congenial atmosphere for its developmental activities thereby the productivity of the bank also will increase. The income generation is the ultimate apparatus that facilities the bank to carry on its productive functions with confidence. The attention of those interested to know about the health of the bank will be on the operative income of the bank and then on net profit. The employee’s interest or welfare measures also depend mostly on the income generation capacity of the bank. Thus the ratio of per employee income can be considered as a vital productivity ratio. The per employee income has been arrived at dividing the total income of the bank by the number of employees.

The total income of VUCB has declined annually in the first half of the study period and it has increased in the second half of the decade. The net growth has been registered as 1.10 times. The ratio of per employee income of the VUCB 25.74 times during the study period.

The total income of TKVUCB has been fluctuated during the first seven years of the study period, and it has increased from Rs. 405.20 lakhs in 2008-09 to Rs. 780.30 lakhs in 2010 – 11. The ratio of per employee income has varied between Rs.13.26 lakhs and Rs. 28.94 lakhs during the decade.
The total income of TDVUCB has been showing declining trend in the first half of the decade and it has increased in the second half of the study period. The same trend also reflected in the ratio of per employee income. The net increase in the income is 1.77 times but in the ratio is 23.67 times. The ratio per employee income of the TDVUCB is not satisfactory.

All the three UCBs have almost consistent number of employees during the study period. The total income as well as ratio of per employee income has fluctuated during the study period. In all the three UCBs the rate of increase in income as well as the increase in ratio slows in the first five years of the study period. In the second half, the rate of increase is faster and more over positive in the last three years. Therefore all the three UCBs must take appropriate corrective action to improve the income so as to strengthen the ratio of per employee income.

(iv) Per employee establishment expenditure

The banking operations are performed by the staff utilizing the machine, materials and premises. The infrastructure and personnel are required to be increased according to the volume of business and the relative establishment expenditure will be increasing. The establishment expenditure includes the manpower expenditure and other expenditure. The ratio of per employee establishment expenditure will indicate the cost of manpower for the bank. The percentage of increase in the cost of manpower will be studied along with the rate of increase in the volume of business and profits. Such an exercise will help the bank management in proper utilization of
the personnel as well as infrastructure for its business progress. The ratio of per employee establishment expenditure is calculated by dividing the establishment expenditure by the number of employees of the bank.

The establishment expenses of VUCB have fluctuated in every years of the study period. But it has increased from Rs.75.73 lakhs in 2001-02 to Rs.110.66 lakhs in 2010-11. With the fluctuating trend, the ratio of per employee establishment expenses has varied between Rs. 2.77 lakhs and Rs. 3.48 lakhs during the decade.

The establishment expenses of TKVUCB have registered an increasing trend during the study period. Therefore, the ratio of per employee establishment expenses also increased from Rs.2.33 lakhs in 2001-02 to Rs.4.43 lakhs in 2010-11. The net increase in the ratio is 1.90 times which is identical to the net increase in establishment expenditure.

In TDVUCB, the establishment expenditure has fluctuated but it has increased from Rs.22.33 lakhs in 2001-02 to Rs.36.34 lakhs at the end of the study period of 2010-11. The net increase in establishment expenditure is 1.67 times in the study period. The ratio of per employee establishment expenditure also had the same trend as total establishment expenditure. The ratio was Rs.3.72 lakhs in 2001-02 to Rs. 4.54 lakhs in 2010-11. The net growth in the ratio of per employee establishment expenditure is at 1.22 times.

All the three UCBs ratios of per employee establishment expenditure have showing an increasing trend throughout the study period. The net increase in the ratio
of per employee establishment expenditure is around 2.5 times in all the three UCBs. All the three UCBs should maintain the control over the establishment expenditure in future.

(v) Per employee spread

Spread is the excess of income through interest of the bank over its interest expenditure. This is the key element that determines the amount of profit for the bank, because income through interest and interest expenditure are the major contributors to the bank’s total income and expenditure respectively. Banks are facing more new challenges from the competitive fellow bankers in fixing of interest rates on the side and they are forced to manage various risks in lending and recovery of interest on other side. Therefore, the modern banking has been striving hard to increase non-interest income i.e., fees, commission charges, rent, exchange etc., to meet the entire non-interest expenditure i.e. establishment expenditure including other expenses. Once a bank could break between non-interest income and non-interest expenditure, then the spread will ensure the bank’s comfortable profitability.

Increasing interest income or non-interest income depends highly on the effective participation and performance of the employees of the bank. Similarly it is in their hands to contain the expenditure also. Thus employees play a vital role in contributing a lot to have a comfortable spread. The ratio of per employee spread
should set a growing trend in order to highlight the effective performance of the employees towards an integrated progress of the bank.

The spread for VUCB has registered a fluctuated growth during the whole study period. The spread has grown from Rs.223.14 lakhs in 2001-02 to Rs.312.85 lakhs in 2010-11. The net growth in spread is Rs.1.40 times in ten years. The ratio of per employee spread has been increased from Rs.8.92 lakhs in 2001-02 to Rs.9.77 lakhs in 2010-11 and it has reached the highest level of Rs. 11.83 lakhs in 2008-09.

The growth trend of the spread in TKVUCB has been fluctuated during the study period. The ratio of per employee spread had been Rs.4.51 lakhs in 2001-02 and it has increased in the subsequent years and reached the highest level of Rs.11.4 lakhs in 2010-11.

The spread of TDVUCB has been fluctuated and it has decreased from Rs.107.03 lakhs in 2001-02 to Rs.54.55 lakhs in 2010-11. The ratio of per employee spread was Rs.17.83 lakhs in 2001-02 to Rs.6.81 lakhs in 2010-11. It has registering a declining trend.

Among the three UCBs the VUCB and TKVUCB are registering slow growth in the spread as well as the ratio of per employee during the whole study period of ten years. But the TDVUCB showing declining trend. Thus, the selected UCBs are taking corrective steps to improve the rate of growth of per employee in future.
(vi) Per employee profit

The prime aim of any commercial organisation including bank is making profit in the course of the business. Making profit is a consecutive year will exhibit the operational efficiency of the bank. Profit is the excess of income over expenditure. Therefore, earning profit is possible only when the total income of the bank is magnified. Similarly, the total expenditure has to be kept under control. Increasing income and reducing expenditure are in the hands of the employees of a bank. In other words, where the employees are very much conscious about profit making they will perform diligently in augmenting the income for the bank and take care in controlling the items of expenditure. The ratio of per employee profit will help the bank management to review the efficiency and contribution of the employees towards profitability. The ratio of per employee profit is found by dividing the net profit by the number of employees.

The profit of the VUCB has increased from Rs.21.39 lakhs in 2001-02 to Rs.54.53 lakhs in 2010-11 with some up and downs of the whole study period. The same trend also reflected in the ratio per employee profit during the decade. The ratio of per employee profit position is satisfactory to the VUCB in the future development.

The profit of TKVUCB has varied between Rs.8.64 and Rs.42.98. The ratio of per employee profit has also fluctuated throughout the whole study period. The
average ratio of per employee profit is 1.24 times. It is not comfortable for smooth running of the VUCB.

The profit of the TDVUCB has fluctuated throughout the study period. The profit of the TDVUCB varies between Rs. 4.94 lakhs and Rs.23.81 lakhs. The ratio of per employee profit is showing a same position of the profit.

All the three UCBs have slow growth of the profit during the study period of ten years. Therefore, it is necessary to strive hard to make profits in the ensuring years to improve the rate of growth in profits.
<table>
<thead>
<tr>
<th>Year</th>
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<th>TKVUCB</th>
<th>TDVUCB</th>
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<td>2010-11</td>
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<tr>
<td>AVG</td>
<td>192.8</td>
<td>122.32</td>
<td>25.74</td>
</tr>
</tbody>
</table>

Source: Calculated from the annual reports of the selected urban Cooperative banks

**PED** = Per employee Deposits;  **PEA** = Per employee Advances;  **PETI** = Per employee Total income;  **PEEE** = Per employee Establishment expenditure

**PES** = Per employee Spread;  **PEP** = Per employee Profit;
5.3.3 Profitability ratio

Profit is the difference between total revenues and total expenses over a period of time. Profit is the ultimate output of a bank and it will have no future if it fails to make sufficient profits. The profitability ratios are calculated to measure the operating efficiency of the company. Besides management of the bank, creditors and owners are also interested in the profitability.

Appraisal of the financial position of the selected three Urban Cooperative Banks is incomplete without measuring its overall profitability. Profits are the primary motivating force for business activities. “Profits are the report card of the past, the inventive gold star for the future. If an enterprise fails to make profit, capital invested is eroded and if this situation prolongs the enterprise ultimately ceases to exist”. 3 It is the milestone of the operational performance and the touchstone of financial stability.

B.B. Howad and M. Upton observe that the word profitability may be defined as “the ability of a given investment to earn a return on its use” 4. It is observed by J.F. Weston and E.F. Bringham that, “profitability is the et surplus of a large number of policies and decisions” 5. Thus profitability is the ability of an organisation to earn profits.

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In spite of the several social objectives to be fulfilled the Urban Cooperative Bank, it is necessary for them to earn for their survival making at least a minimum rate of return on the capital invested. The analysis of profitability of the selected three Urban Cooperative Banks, in relation to the total income, total deposits, spread, total assets and net worth is made here with the help of following ratios. Profitability ratios of the three Urban Cooperative Banks in shown in table 5.3

(i) Net profit to total income ratio

This ratio measures the relationship between profit after taxes and total income. The profit margin is the overall measure of the firm’s ability to turn each rupee of revenue into net profit. Further, “this ratio is an indicative of the management’s ability to operate the business with sufficient success not only to recover from the revenue of the period, the cost of merchandise or service, the expenses of operating the business and the cost of the borrowed funds, but also to leave a margin of reasonable compensation to the owners for providing their capital at risk. The ratio essentially expenses the cost/price effectiveness of the operation”

Net profit is arrived from the operational profit after making adjustments including provides for NPA, etc. The operational profit is the excess of total income over total expenditure. The ratio of net profit to total income will bring to light the necessary to improve the total income. The low ratio exhibits the marginal net profit

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for the bank. The marginal edge of the profit could not provide a confident atmosphere for the bank to plan for any development. The bank must increase income and reduce the provisions so as to make comfortable net profit.

The net profit margin of the VUCB varied between 2.75 percent and 7.43 percent of the total income during the study period. Though the net profit and total income registered the increasing trends during the whole study period, the ratio fluctuated due to the fluctuations in the growth rates of the two variables. The average of net profit to total income is 5.86 percent. The first four years of the study period, the ratio is less than the average and rest of the period it has been higher than the average.

The average ratio of net profit and total income of TKVUCB is 6.60 percent. The range of net profit to total income ratio is varied between 1.79 per cent and 10.94 per cent during the decade. Out of ten years, half of the study period is below the average ratio and rest of the period; it has been registered above the average.

The net profit to total income of TDVUCB has not shown any regular trend throughout the decade of the study. The figures of the table have shown frequent ups and downs. The net profit to total income ratio ranges from 0.35 per cent to 38.94 per cent and the average is arrived at as 11.33.

All the three UCBs net profits and total income are fluctuated annually during the study period of ten years. The average ratio of net profit to total income of VUCB
is 5.86 per cent, TKVUCB is 6.60 and TDVUCB is 11.33. Among these banks, the
TDVUCB came under good level of performance.

(ii) Net profit to total deposits ratio

Net profit could be achieved by a bank only when it could earn more and
spread less. Earning more is possible when both interest income and non-interest
income increases. In the three Urban Cooperative Banks, the interest income plays the
pivotal role in deciding the profit as non-interest income is negligible. The sources of
funds to do banking business are owner’s equity, deposits and borrowed funds. In the
working funds of the Urban Cooperative Banks, deposits from the public occupy the
major share. The interest on deposits is the vital as well as essential expenditure.
Though the establishment expenditure form part of total expenditure, interest
expenditure on deposits, being the major expenditure, decides the profitability for the
bank. The deposits for a bank, thus plays the very base role of providing funds for the
business of banking and the cost of mobilizing the same deposits would decide the
profitability of the bank. Therefore an attempt to relate the net profit and total
deposits is made to analyse the functional efficiency of the bank.

In VUCB, the ratio of net profit to total deposits ratio has been increased from
0.43 per cent in 2001-02 to 0.93 per cent in 2008-09. Afterwards, it has decreased to
0.84 per cent in 2010-11. The average of net profit to total deposits ratio is 0.76 per
cent.
The TKVUCB ratio of net profit to total deposits ratio has not registered constantly. The highest level of ratio is 1.17 per cent in 2004-05 and lowest level is 0.27 per cent in 2002-03. The average ratio of net profit to total deposit is 0.81 per cent.

The net profit to total deposit ratio of TDVUCB has been fluctuated during the whole study period of ten years. The range of net profit to total deposit ratio is varied between 0.05 per cent and 5.69 per cent during the decade. The average of net profit to total deposit ratio is 1.53 per cent.

Out of three UCBs the TDVUCB was having highest average of net profit to total deposits then the other two UCBs. The TKVUCB and VUCB have a second and third position in the ratio of net profit to total deposits.

(iii) Net profit to spread ratio

The spread is gaining importance in banking as it directly contributes to the profitability of the bank. In other words, the present day bankers aim at meeting the entire non-interest expenditure with the non-interest income leaving the spread to contribute directly to the bank. Meeting of non-expenditure with the non-interest income is not easy for the banks where the non-interest income is negligible, while the non-interest expenditure (salary, rent on premises, etc.) has necessarily to be met by the banks. Therefore in Urban Cooperative Banks, the non-interest expenditure is met by non-interest income plus a major share of interest income and as a result the
profit is affected. The ratio of net profit to spread will help the Urban Cooperative Banks, to understand the necessity to improve net profit by enhancing non-interest income besides containing the whole expenditure.

This is the difference between interest earned to interest paid (non-interest expenditure to total assets and non-interest income to total assets). The higher the ratio, the better shall be the profitability.

The net profit to spread ratio of VUCB has fluctuated during the whole study period. But it has increased from 9.58 percent in 2001-02 to 17.43 percent in 2010-11. The average ratio is arrived at as 14.64 percent. The ratio registered the increasing trend due to increasing trend in the other incomes like commission, exchange and brokerages.

In TKVUCB, the net profit to spread ratio is grown gradually and registered a 1.45 fold growth during the study period. The net profit has not shown any regular trend throughout the decade of the study. The figures showed frequent ups and downs. The net profit to spread ratio of TKVUCB has gradually grown up from third year to six year of the study period. Afterwards it has been declined at the end of the study period except in 2009-10. The net profit to spread ratio has varied between 9.33 per cent and 28.57 per cent. These variations are due to the fluctuations in the growth rates of both the variables. The average ratio for the entire study period is 19.24 per cent.
The net profit of TDVUCB has grown positively with annual increments throughout the decade of study except a marginal decline in the years 2003-04 and 2005-06. The spread of VUCB have set fluctuating trend during the first seven years of the study period. Afterwards, it has increased up to end of the decade. The net profit to spread ratio for TDVUCB ranges from 0.81 per cent to 37.08 per cent and the average is arrived at as 25.23 per cent.

The average ratio of the net profit to spread is 14.64 for VUCB, 19.24 for TKVUCB and 25.23 for TDVUCB. It is very low for all the three UCBs, but the ratio is positive. All the three UCBs should take efforts to improve the ratio.

(iv) Net profit to total assets ratio

The ratio of net profit to total assets is used to find out the profit making capacity of assets. The bank can have an analytical view on the revenue yielding assets and their contribution to the net profit.

The total assets of Urban Cooperative Banks, has grown continuously throughout the study period. But the net profit has shown a fluctuated trend. The fluctuation in the net profit has reflected in the ratio.

The ratio of net profit to total assets is used to find out the profit making capacities of assets. This ratio is also known as return on assets and is the indicator of an excellent utilisation of resources.
The overall net increase in net profit of VUCB has registered a two and half fold growth in the decade, though there are ups and downs. The total assets of VUCB have grown gradually from Rs. 6280.67 lakhs in 2001-02 to Rs.8619.34 lakhs in 2010-11 registering nearly one and half fold net growth. The ratio of net profit to total assets has set a range of 0.34 per cent to 0.69 per cent and the average is arrived at as 0.57 per cent.

The net profit of TKVUCB has grown positively with annual increments throughout the decade of study except a marginal decline in the years 2002-03 and 2007-08. The total assets of TKVUCB have set fluctuating trend during the first six years of the study period. After wards, it has increased up to end of the decade. The net profit to total assets ratio for TKVUCB ranges from 0.21 per cent to 0.89 per cent and the average is arrived at as 0.63 per cent.

The net profit of TDVUCB has fluctuated during the whole study period. The total assets gradually increased throughout the decade of study except a marginal decline in 2007-08. The net profit to total assets ratio of TDVUCB is varied between 0.04 per cent and 1.26 per cent during the decade and the average is arrived at as 1.09 per cent.

The average ratio of net profit to total assets is 0.57 for VUCB, 0.63 for TKVUCB and 1.09 for TDVUCB. It is very low for all the three UCBs, but the ratio is positive. All the three UCBs should take efforts to imitate to improve the ratio by enhancing the net profit in the years to come.
(v) **Net profit to net worth ratio**

Net worth of a bank consists mainly the share capital the reserves built by the accumulation of profit. The net worth provides a part of working funds for the business of banking. Further net worth is essential for the bank to maintain the capital adequacy ratio as stipulated by RBI. Net worth is the owned funds of the bank. The contributors to the net worth, i.e., the shareholders would look at the performance of the bank. They are mainly interested to know about the profit of the bank. The net profit is the residual net income available to the shareholders and hence a comparison between net profit and net worth is made. The ratio of net profit to net worth will help the management to identify the level of contribution made by net profit towards the net worth. If the ratio goes up, it would indicate the healthy financial position of the bank.

The net worth of the VUCB has grown positively during the study period registering a 1.6 times growth. Both share capital and reserves increased annually throughout the decade. The overall net increase in net profit of VUCB has registered a two and half fold growth in the decade, though there are ups and downs. The average of net profit to net worth ratio is 13.87 times. Except the six years of the study period, the ratio of the VUCB is less than the average.

The net worth of the TKVUCB has increased slowly from Rs.142.74 lakhs in 2001-02 to Rs. 215.69 lakhs in 2010-11. The growth rate of the net worth is 1.51
times in ten years of the study period. The net profit has not shown any regular trend throughout the decade of the study. The figures showed frequent ups and downs. The average of return on equity is 14.77 times. Out of ten years, five years of the study period, the net profit to net worth is less than the average and vice versa.

The growth of the net worth of the TDVUCB has been increased from Rs.63.57 lakhs in 2001-02 to Rs.88.94 lakhs in 2010-11. The net profit of TDVUCB has grown positively with annual increments throughout the decade of study except a marginal decline in the years 2003-04 and 2005-06. The return on equity ratio has shown a variation between 0.979 times and 107.11 times with an average of 23.54 times.

The ratio of net profit to net worth for VUCB is 13.87, TKVUCB is 14.77 and TDVUCB is 23.54. Among the three UCBs, the TDVUCB has higher than the other two UCBs of VUCB and TKVUCB. Return on equity of TDVUCB has positive growth with annual increments.
<table>
<thead>
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<th>TDVUCB</th>
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<tbody>
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<td></td>
<td>NP/TI</td>
<td>NP/TA</td>
<td>NP/SP</td>
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<tr>
<td>2001-02</td>
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<tr>
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<td>2007-08</td>
<td>7.04</td>
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<td>6.38</td>
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<tr>
<td>AVG</td>
<td>5.86</td>
<td>0.76</td>
<td>14.64</td>
</tr>
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</table>

Source: Calculated from the annual reports of the selected urban Cooperative banks.

NP: Net profit; TI: Total Income; SP: Spread = Total Expenditure – Total Income;
TA: Total Assets; NW: Net Worth; TD: Total Deposit;
5.3.4 Solvency ratios:

The short term creditors like bankers and suppliers of materials are concerned with the firm’s current debt – paying ability. On the other hand, long term creditors like debenture holders, financial institutions etc., are more concerned with the firm’s long term solvency.

Financial strength is a pre requisite for any bank in order to run its operation successfully and smoothly and also to ensure its long-term existence. The solvency position of the selected three Urban Cooperative Banks in Salem District has analysed with the help of the following five ratios, i.e., (i) cash to deposits ratios, (ii) investments to deposits ratios, (iii) credits to deposits ratios, (iv) Ratio of spread to total assets ratios, (v) net worth to fixed assets ratios, and they are exhibited the table 5.4

(i) Cash to deposits ratio

Cash is an item where a part of working funds has been to meet day –to –day demand and to maintain the prescribed statutory requirement of cash reserve ratio (CRR) cash, here, includes cash and hand and cash at bank (balance with RBI). Deposit is the major sources of funds in all the commercial banks. Deposits here include all types of deposits mobilized by the bank.

Cash to deposits ratio reflects the liquidity position of the bank. It helps the management of the bank to evolve strategic deployment of funds without leaving any idle assets. The present CRR requirement is 5 per cent of the demand and a low level
of liquidity damages the images of the bank. Therefore, the bank has to strike out a balance between liquidity and profitability and maintain the cash balance at an optimum level of requirement. More cash balance with reference to the deposits will indicate the existence of more idle assets which are non-remunerative.

The solvency ratio of VUCB has decreased from 0.56 times in 2001-02 to 0.30 times in 2010-11. The average cash to deposit ratio of VUCB is 0.46 percent in the whole study period. It denotes that VUCB has to take risk for the maintenance of minimum cash balance.

The average cash to deposits ratio of TKVUCB is arrived for the study period as 0.34 times. In other words, an average of 34 per cent of the deposits has been kept as cash. The solvency ratio was fluctuated during whole study period. The ranges varied between 0.17 and 0.56. It indicates that SUCB has deployed the funds in investments or credit portfolio.

An average cash to deposit ratio of TDVUCB was 0.34 times in the whole study period. It has an average cash to deposit ratio was 0.43 times in the first half of the decade. In this period, the TDVUCB has not taken required steps to deploy the idle funds of cash balance. In the second half of the decade, the cash balance has decreased and it was 0.26 times in 2010-11.

The TKVUCB and TDVUCB have lower percentage of its deposits as cash throughout the study period. Among the three banks, the VUCB has realized the consequences of higher cash balance. It may help to shower higher liquidity position.
The TKVUCB and TDVUCB has realized the moderate cash balance during the decade. It may help to increase the profitability of the bank. Three UCBs were maintaining a cash balances in different mode. Therefore all the three UCBs should maintain an optimum level of cash balance by trading off between liquidity and profitability

(ii) Investments to deposits ratio

Investment is the funds which are deployed essentially to meet certain statutory requirements, like Statutory Liquidity Ratio, as prescribed by RBI. Present SLR is 25 per cent of demand and time liabilities. The DTL of the bank consist mainly deposits mobilized both under demand and time deposits schemes of the bank. The cooperative banks are restricted to invest their money in bonds and securities. Therefore, the investment portfolio has not gained much importance in the cooperative banking sector, including Urban Cooperative Banks. However, the bank can part its funds with less risk and high security, but the revenue will be low. It helps the bank to maintain a required level of liquidity, as the banks can convert the investments into cash with certain formalities to meet the exigencies. Such a volatile operation is not possible in case of the funds employed in loans and advances. Though the investment portfolio does not play a major role to meet certain requirements and to maintain a reasonable liquidity in the bank’s activities, the Urban Cooperative Bank have to invest in government securities as directed by RBI.
In VUCB an average of 18 per cent of the deposits are used to keep in investments during first half of the decade while in the second half of VUCB has used more funds to deploy under investments, as the average of the second half is arrived at as 22 per cent. The average ratio for the whole decade is 0.20 times.

The TKVUCB has an average of 31 per cent of its deposits in investment during the first five year of the study period. The investment has slowly increased to 36 per cent during the last five years of the study period. The TKVUCB had deposits is investments as average of 33 per cent. It helps to earn more income to the TKVUCB.

The TDVUCB has an average of 19 per cent its deposits in investments during the ten years taken for the study. The TDVUCB has 13 per cent of its deposits in investments during the first five years. In the second half of the decade, TDVUCB has increased its investments to 26 per cent.

Among the three UCBs, the VCUB and TDVUCB have maintained 20 and 19 per cent of its deposits in investments respectively. The performance of VUCB and TDVUCB, under investment portfolio may be compared with its performance in cash to deposit ratio. The VUCB has slightly higher percentage of deposits under cash (Average 29%) a non- remunerative asset. But it has low level of investment to deposit ratio (average26%), where investment is an asset that can provide income to the bank by way of either interest or dividend. It indicates that the VUCB have not
taken any steps to augment income by diverting the excess cash balances to investment portfolio without affecting the liquidity and solvency.

(iii) Credit to deposits ratio

Credit to deposits ratio is an index of the health of banking system in terms of demand for credit in proportion to total deposit growth in the banking sector. The ideal level of CD ratio for a bank is 65 to 70 per cent. Credit portfolio is very important as well as sensitive for a bank, where the larger income. On the other hand deposits are the major source of funds for the banking operations as well as the major item in the total demand and time liabilities of the bank. Bank has to meet the statutory obligations of both CRR and SLR. After meeting CRR and SLR requirements, the balance amount of deposits as well as other components of working funds is available with the banker to deploy in various forms of assets to generate income. Among the various forms of assets are created by the bank, credit formation (Loans and advances) is the one single major area on which the bank depends for its interest revenue. The interest income generated from the credit portfolio must take care of meeting the cost of deposits (interest paid on deposits) and providing marginal surplus to the bank. The link between the credit and deposits in a bank is being studied through the CD ratio. Adequate CD ratio ensures the solvency status of the bank. The bank must take concerned efforts to maintain an optimum level of CD ratio to ensure required level of consists income generation. A declining CD ratio implies

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that banking sector was flush with funds without any corresponding demand for credit affecting the bank’s profitability in the long run as have to pay interest to depositors without corresponding income from the credit outflow.

The average credit to deposits ratio of VUCB is 0.63 times for the study period of ten years. The first half of the study period, the credit to deposits ratio of the bank is less than the average and rest of the study period it has registered higher than the average level. Thus, the VUCB has marginally a low rate of credit to deposits ratio which could be hiked to enhance its interest income.

The average credit to deposits ratio of TKVUCB for the study period is 0.81 times, except the first five years of the study period. The credit to deposits ratio of the bank is higher than the average of the remaining last five years.

The average of credit to deposits ratio of TDVUCB for the decade under study is .79 times. Except the last three years of the study period in all other seven years, the credit to deposits ratio of the bank is less than the average.

Out of the three UCBs, the average credit deposits ratio of TKVUCB and TDVUCB is comparatively higher VUCB. In many of the years of the decade, the credit to deposits ratio of the selected UCBs is almost equal to the standard norms. It indicates that the VUCB had a better solvency and continuous flow of interest income during the study period.
(iv) Spread to total assets ratio:

The spread of a bank means the remainder of subtracting the interest paid on deposits from the interest earned on advances. The spread to total assets ratio is the quotient of dividing the spread by the total assets.

The spread is arrived at as the difference between the interest earned and interest paid by the bank. On the assets side, the major items, investments and loans generate income through interest for the bank. Similarly, on the liabilities side, the major items, borrowings and deposits incur through interest over the interest expenditure, plays an important role in the profitability of the bank. Higher spread ensures to make profit and a comfortable position for the bank and vice versa. Thus the ratio of spread to total assets is considered to be an important ratio for the analysis of the performance of the bank towards profitability, which in turn out the long terms solvency of the bank.

Higher spread ratio can be achieved only by increasing the interest received and lowering the interest paid. Both these factors cannot be manipulated as they are not decided by the banks. However, a timely recovery of loans would result in higher spread ratio. Furthermore investment of funds in more profitable and reliable sources would help bring in more interest and therefore a higher spread provides the spread ratio of the urban cooperative bank.
In the VUCB, the interest earned and interest paid has fluctuated during the first seven years of the study period. But, both are increased at the end of the decade. The average spread ratio for the decade has been arrived at as 0.03 times. The spread ratio is not adequate to have comfortable profitability position for VUCB. The VUCB must take corrective steps to improve the spread ratio.

The spread to total assets ratio of TKVUCB is ranging between 0.02 and 0.05 times during the study period. The average of spread ratio of 0.03 times is insufficient to TKVUCB to claim a solvent position as the profitability position is uncomfortable.

The average spread ratio of TDVUCB has been arrived at as 0.04 times. There is enough scope for TDVUCB to enhance income through interest and to certain the interest expenditure, so that the spread ratio may be strengthened.

The total assets of all the three UCBs, has set a growth trend throughout the decade except marginal fallout in few years. The spread to total assets ratio has been at an average of 0.03 and 0.04 times for both VUCB and TKVUCB and TDVUCB respectively. The spread to total assets ratio is not encouraging for all the three UCBs. The spread must be improved through professional approach by augmenting the income through interest i.e., by an effective investment and credit management. UCBs can concentrate more in mobilizing low cost funds through more savings bank and current account deposits by offering quality services to the customers. The term deposits are increases interest expenditure as the rate of interest in more. Thus, all the
UCBs, must initiate efforts to increase interest income and contain interest expenses to improve the spread ratio.

(v) **Net worth to fixed assets ratio:**

This ratio measures the ownership rights of the shareholders on the fixed assets of the bank. To find out this ratio the net worth is divided by the fixed assets. Net worth of the bank consists of share and reserve and surplus of the bank. It is a part and parcel of the working funds, which is otherwise called as bank’s owned funds. Higher the net worth helps the bank to have adequate solvency besides fulfilling the CAR norms prescribed by RBI. Low net worth exhibit the bank’s weakness and the bank would suffer with inadequate capital to prove its solvency. In case of fixed assets, the funds are locked in either movable or immovable assets which are not easily converted into liquid funds. Thus a high level of net worth and low level of fixed assets would help the bank to have a sound financial position and in such situations the net worth to fixed assets ratio will be high. Banks, in general, possess less fixed assets to spare more funds for its business operations. Also banks are expected to have a strong capital base with more equity.

The net worth of the VUCB has grown positively during the study period registering a 1.6 times growth. Both share capital and reserves increased annually throughout the decade. The fixed assets of the VUCB has been fluctuated and
decreased from Rs. 623.87 lakhs in 2001-02 to Rs. 302.29 lakhs in 2010-11. The average of net worth to fixed assets ratio is 9.28 times. Except the first five years of the study period, the ratio of the VUCB is less than the average. The growth of the fixed assets has affected the net worth to fixed assets ratio of VUCB.

The net worth of the TKVUCB has increased slowly from Rs. 142.74 lakhs in 2001-02 to Rs. 215.69 lakhs in 2010-11. The growth rate of the net worth is 1.51 times in ten years of the study period. The fixed asset has showing fluctuating trend during the whole study period. But it was increased from Rs. 6.94 lakhs in 2001-02 to Rs. 11.17 lakhs in 2010-11. The average of net worth to fixed assets ratio is 26.68 times. Out of ten years, six years of the study period, the net worth to fixed assets ratio is less than the average and the rest of period it shows the higher than the average.

The growth of the net worth of the TDVUCB has been increased from Rs. 63.57 lakhs in 2001-02 to Rs. 88.94 lakhs in 2010-11. The fixed assets have been fluctuated during the whole study period. The ratio has shown a small variation between 17.15 times and 131.18 times with an average of 65.97 times. However, the growth of net worth provides a strong capital base to prove its solvency as well as to fulfill the CAR requirements.

The ratio of net worth to fixed assets is no homogeneity during the study period of the selected UCBs. Net worth of all the three UCBs has positive growth with annual increments. In case fixed assets, it has been almost stable throughout the
decade in TKVUCB. But in VUCB and TDVUCB, the fixed assets have fluctuated. So, the net worth to fixed assets ratio of selected UCBs has registered fluctuating trend during the study period.
Table – 5.4
Solvency Ratios of Selected UCBs in Villupuram District
(In times)

<table>
<thead>
<tr>
<th>Year</th>
<th>VUCB</th>
<th>TKVUCB</th>
<th>TDVUCB</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001-02</td>
<td>0.56</td>
<td>0.063</td>
<td>0.46</td>
</tr>
<tr>
<td>2002-03</td>
<td>0.58</td>
<td>0.16</td>
<td>0.39</td>
</tr>
<tr>
<td>2003-04</td>
<td>0.45</td>
<td>0.26</td>
<td>0.5</td>
</tr>
<tr>
<td>2004-05</td>
<td>0.48</td>
<td>0.22</td>
<td>0.53</td>
</tr>
<tr>
<td>2005-06</td>
<td>0.53</td>
<td>0.22</td>
<td>0.51</td>
</tr>
<tr>
<td>2006-07</td>
<td>0.46</td>
<td>0.22</td>
<td>0.67</td>
</tr>
<tr>
<td>2007-08</td>
<td>0.48</td>
<td>0.23</td>
<td>0.69</td>
</tr>
<tr>
<td>2008-09</td>
<td>0.48</td>
<td>0.22</td>
<td>0.77</td>
</tr>
<tr>
<td>2009-10</td>
<td>0.36</td>
<td>0.2</td>
<td>0.89</td>
</tr>
<tr>
<td>2010-11</td>
<td>0.3</td>
<td>0.27</td>
<td>0.94</td>
</tr>
<tr>
<td>AVG</td>
<td>0.46</td>
<td>0.2</td>
<td>0.63</td>
</tr>
</tbody>
</table>

Sources: Calculated from the annual reports of the selected urban Cooperative banks

C = Cash;
I = Income;
S = Spread = Interest earned – Interest paid;
NW = Net worth;
D = Deposits;
C = Credit or Advance;
TA = Total assets;
FA = Fixed assets
References


