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Research Paper

Ratios Used to Measure the Financial Performance of the Employees' Credit Cooperative Societies

Commerce

KEYWORDS : ECCS, ratio analysis, liquidity, profitability, solvency, efficiency, leverage, productivity.

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ABSTRACT

Positive financial planning and management, both are the primary elements to the successful operation of any cooperatives. Positive financing means the requirement of both equity and borrowed capital. It also comprises the analysis of financial records for proper financial controls. This study tries to pinpoint those financial ratios which are very useful to measure the financial soundness and stability of the Employees' Credit Cooperative Societies (ECCS). ECCS is one of the types of Non-agricultural Credit Cooperative Societies. The ECCS performs for the benefits of employees' or workers' that get a regular monthly salary. The primary objective of the ECCS is to grant loans & advances to their members at a very reasonable rate of interest. Ratio analysis is an important tool to understand and examine the profitability, liquidity and solvency position of the ECCS. ECCS management should find financial ratios to be an important tool in performing this management function.

Introduction:

The Employees' Credit Cooperative Society (ECCS) is one of the types of Non-agricultural Credit Cooperative Societies. The ECCS performs for the benefits of employees' or workers' that get a regular monthly salary. The employees have no any other source of income except salary. Out of their monthly salary they have to fulfil their basic needs. After meeting basic requirement, there is no adequate balance left to meet the causal expenditure such as education/marriage of the son or daughter, buying land/building, medical expenditure, etc. For meeting expenses, they necessitate loan. Loan is needed to meet such casual requirements of the employees. Generally, all public and private banks cannot approve loan to employees without any security deposit.

Hence, ECCS is necessary to meet casual requirements other than recurring requirements of the employees. The employees of the firm can take loan facility with reasonable rate of interest from ECCS without any security deposit. The salary/wages of the employees/workers is considered as the mortgage for loan. Most of all the employees/workers join the ECCS as a member to take loans as the same are granted very quickly.

Importance of the Study:

The present study is most significant because it throws light on many important aspects related to applications of ratio analysis. This study covers the uses of different financial ratios to measure the financial performance of the ECCS. This will be helpful for improving the overall performance of these ECCS and also will guide others. The topic is chosen with a view to study the financial efficiency of the ECCS.

Objectives:

The main objectives of study are to evaluate the ratios used to measure the financial performance and factors affecting financial performance of ECCS.

The following are the objectives of the study:

1. To understand and examine the profitability, liquidity, operational efficiency and solvency position of the ECCS.
2. To analyse different important ratios which are very useful to improve the financial performance of the ECCS.

Review of Literature:

Dash (2003) exposed the financial performance of Nawanagar Cooperative Bank through different financial ratios by using secondary data based on financial statements and annual reports of the bank. The study recommended the bank to give new magnitude to its functioning.

Rao (2007) observed the performance of cooperative in the course of Profitability, Solvency and Operational efficiency ratios analysis by using secondary data based on audited annual reports of the DCCB, Eluru, Andhra Pradesh for a period of thirteen years from 1991-92 to 2003-04.

Anand S.K. (1981) used the solvency, stock turnover, working capital and profitability ratios to assess the financial situation and performance of the state consumers' cooperative federation, Maharashtra.

S.S. Hugar (1986), measured financial analysis of 19 District Central Cooperative Banks in Karnatak for a period of five years from 1978-79 to 1982-83. The author exercised Ratio Analysis method to test the credit disbursed, working capital position, deposit mobilization, operating efficiency, recoveries and profitability of the DCCBS.

N. Narayanasamy and S.R. Ramachandran (1987) assessed the profitability performance of the district central cooperative bank in Tamil Nadu. The variables taken for the study were: profits, interest earned and paid, operating expenses, and income of business. They used ratio analysis technique such as spread ratio, burden ratio and profitability ratio to judge the profitability performance of the bank.

C.V. Babu (1997) analysed the liquidity, profitability and business strength of three urban cooperative banks in Thrissur district of Kerala state for a period of ten years from 1980-81 to 1989-90. For the purpose of analysis, the author used the various ratios such as profitability ratios, cash asset to deposit ratio, liquid assets to deposit ratio, owned fund to borrowed fund ratio, credit-deposit ratio, and overdue - demand ratio.

Background of Financial Analysis:

The ratio analysis is unanimously accepted method of analyzing the financial statements. The ratio analysis provides guidance and clues. Ratios are used in inter-organization and intra- organizations comparison. Thus, one of the best and popular tools of financial analysis is the ratio analysis. Ratio analysis tool is used for interpretation of the financial performance of the ECCS.

Analysis and Interpretations of Ratios:

The ratios are categorised under the six broad categories i.e. Liquidity, Solvency, Coverage, Profitability, Operational efficiency and Productivity ratios. The financial analysis of the ratios and the general observations are as follows:

1. Liquidity Ratios: Liquidity refers to the ability to pay in cash the obligations that are due. If the sufficient liquidity is not maintained by the ECCS, then it is considered technically insol-

vent and faces the financial discomfiture of re-negotiating its obligations to creditors. A higher financial liquidity would generally mean a lower risk of technical insolvency showing capability of ECCS to pay the current debts as and when they become due. To measure the liquidity performance of the ECCS, the following ratios may be calculated.

I) Current Ratio:
This ratio is the sign of the ECCS obligation to meet its short-term liabilities. It is a key of the ECCS financial stability since it depicts the extent to which the Current Asset exceeds Current Liabilities. A very high ratio is not desirable which means less efficient use of funds, current assets are lying idle which results in lowering down the profitability of the ECCS. A very low current ratio of ECCS means that the ECCS is not maintaining enough cash balances. The industry standard ideal ratio is 2:1, which means creditors will be able to get their payment in full. Thus,

Current Ratio = Current Asset / Current Liabilities

II) Net Working Capital:
Net working capital (NWC) indicates the excess of current assets over current liabilities. Although NWC is not a ratio, but it is widely used as a measure of ECCS's liquidity position. An ECCS should have sufficient NWC in order to pay the claims of the members and recurring needs of the ECCS. The greater is the amount of NWC, the greater is the liquidity of the ECCS. Insufficient NWC is the indicator of financial problems for an ECCS.

III) Liquid Assets to Total Assets Ratio (%):
The liquid assets included cash-in-hand, cash balances with other banks, short term deposits and call deposits. Total assets included cash and balances with other banks, investments, advances, fixed assets and other assets. Thus,

Liquid Assets to Total Assets Ratio = (Liquid Assets / Total Assets) x 100

IV) Liquid Assets to Total Deposits Ratio (%):
The liquid assets refer cash-in-hand, cash balances with other banks, short term deposits and call deposits. Total deposits include all types of deposits accepted by the banks. Thus,

Liquid Assets to Total Deposits Ratio = (Liquid Assets / Total Deposits) x 100

2. Capital Structure/Leverage/Solvency Ratios:
These ratios examine the long term solvency of the ECCS. The term "solvency" refers to the ability of an ECCS to meet its long term obligations. The long term solvency of an ECCS may be defined as financial ratios which examine the long term solvency of an ECCS as reflected in its ability to assure the long-term creditors with regard to periodic payment of interest and repayment of principle on maturity. The following ratios serve the purpose of determining the solvency of the ECCS.

I) Debt- Equity Ratio:
The Debt Equity ratio is the essential and the most recurrent measure to examine the indebtedness of the ECCS. It specifies the percentage of funds being financed through borrowings. It is determined to find out the soundness of the long term financial policies of the ECCS. It is also recognized as external to internal equity ratio. The ratio specifies the proportion of owner's stake in ECCS. Extreme liabilities tend to cause insolvency. This ratio indicates the proportion between shareholders' funds and the long-term borrowed funds. The greater the ratio higher is the risk to the lenders. A low debt equity ratio implies the use of more equity than debt. Thus,

Debt- Equity (D/E) Ratio = Total Debt/Shareholder' Equity

II) Debt to Capital Employed Ratio:
This ratio refers to examine the relationship between outsiders' funds and capital employed. The outside debts are related to the total capitalisation of the ECCS and not merely to the shareholders' capital. Thus,

Debt to Capital Ratio = Total Debt / Capital Employed

3. Coverage Ratios:
These ratios measure the relationship between what is normally available from operations of the ECCS and the claims of the outsiders. These ratios are calculated from the information available in Profit and Loss Account of the ECCS. The claims of an ECCS are met out of operating profits. These claims consist of (a) interest on loan, (b) dividend, and (c) amortisation of principle. The ability to service the obligations of the long-term creditors is indicated by coverage ratios. The important coverage ratios are: interest coverage and dividend coverage.

I) Interest Coverage Ratio:
This ratio indicates the debt serving capacity of an ECCS as fixed interest on long-term loan is concerned. This ratio depicts how many times the interest charges are covered by the EBIT (Earning before interest and tax) out of which they will be paid out. From the point of view of creditor, the greater is the ability of the ECCS to handle fixed-charge liabilities and more assured is the payment of interest to the creditors. Whereas, a low ratio is a danger signal the ECCS is using excessive debt and does not have the ability to meet assured payment of interest to the creditors. Thus,

Interest Coverage = EBIT / Interest

II) Dividend Coverage Ratio:
This ratio measures the capacity of an ECCS to pay dividend on shares to its members. It shows the safety margin available to the shareholders of the ECCS. As a rule, the higher the coverage, the better it is from the point of view of the shareholders. Thus,

Dividend Coverage = Net Profit / Dividend

4. Profitability Ratios:
The primary motive of the ECCS is to earn profit that is crucial for the survival and growth of the ECCS. The profit is earned with the help of money invested in ECCS. It is essential to observe how much profit has been earned. This is possible using profitability ratios. These ratios are the most important and reliable indicators to measure the financial performance of the ECCS because the ECCS may raise their profits by utilizing additional resources. These ratios check the current operating performance and efficiency of the ECCS. These ratios are very helpful for the management to take remedial measures if there is a declining trend. The study of profitability ratio is enormously important for management, which is accountable for the fundamental sources of the ECCS. The following ratios serve the purpose of determining the profitability of the ECCS.

I) Net Profit as percentage of Total Income:
Profitability of ECCS can be computed through the net profit as percentage of total income earned by the ECCS. This ratio signifies the income generating capacity of the ECCS. Net profit is the balance of profit as per profit and loss account of the ECCS and total income includes interest and other miscellaneous receipts of the ECCS. This is expressed as a percentage. The primary objective of computing this ratio is to find out the overall profitability. Higher the net profit ratio, better it is for the ECCS. Thus,

Net Profit to Total Income (%) = (Net Profit / Total Income) x 100

II) Net Profit as percentage of Total Expenses:
To measure of profitability of ECCS, net profit as percentage of total expenses ratio is widely used. With this ratio we will be able to analyze what is the percentage of profits out of total expenses. If the ratio is increasing that means there is balanced increase in Net profits and total expenses and Net profits are rising more proportionately then total expenses. Thus,

Net Profit to Total Expenses (%) = (Net Profit / Total Expenses) x 100

III) Net profit as percentage of Working Capital:
The most popular analytical tool to determine the ECCS profitability is the ratio of net profit as percentage of working capital. This ratio signifies the efficiency with which an ECCS deploys its working capital so as to maximize its profits. This profitability ratio serves as a key to the degree of asset deployment of ECCS. Thus,

Net profit to Working Capital (%) = (Net Profit / Working Capital) x 100

IV) Earning per Share (EPS) Ratio:
It shows the profitability of the ECCS on per share basis. A trend analysis EPS of the ECCS helps in deciding whether the equity share capital is being effectively used or not. It also helps in estimating the ECCS capacity to pay dividend to its equity shareholders. Thus,

EPS=Net Profit available to shareholders / Number of shares outstanding

V) Dividend per Share (DPS):
The amount of profits distributed to share holders per share is known as Dividend per Share (DPS). DPS depends upon the statutory provisions relating to compulsory appropriation of profits. Thus,

DPS = Dividend paid to the shareholders' / Number of shares outstanding

VI) Dividend Payout Ratio (D/P):
It is the ratio between the DPS and the EPS of the ECCS, i.e. it refers to the proportion of EPS that has been allocated by the ECCS as dividend. Thus,

D/P = (DPS / EPS) x 100

VII) Return on Ordinary Shareholders' Equity (Net Worth) Ratio:
This ratio is used to judge whether the ECCS has earned a satisfactory return for its equity-holders or not. The profitability of an ECCS from the shareholders' point of view should be measured in terms of the return to the ordinary shareholders'. Thus,

Return on Equity Fund = Net Profit / Ordinary Shareholders' Equity

VIII) Return on Capital Employed (ROCE):
This ratio explains the relationship between profits earned by the ECCS and capital employed in the ECCS. The term capital/ fund employed signifies to the long term sources of the funds. This ratio indicates the profitability of the ECCS capital investments. It is a yardstick of the earning capacity of the ECCS and shows the best possible utilization of the assets or resources employed. Thus,

Return on Capital Employed= Net Profit / Capital Employed

5. Operating Efficiency Ratios:

Under this category Interest Earned to Total Income, Interest Paid to total Income, Total Expenses to Total Income, Total Income to Working Capital and Total Expenses to Working Capital may be considered.

I) Total Income to Working Capital Ratio:
It indicates the velocity or utilization of the working capital of the ECCS during a year. This ratio is also known as Working Capital Leverage Ratio. This ratio signifies whether or not Working Capital has been effectively utilized in making income. The higher the Working Capital Turnover ratio, the lower is the investment in the working capital and higher would the profitability. Thus,

Working Capital Turnover Ratio = (Total Income / Net Working Capital) x 100

II) Interest Earned to Total Income Ratio:
Interest earnings relate to funds based on income and represents the income from pure ECCS business. It shows how far working funds are effectively utilized for profit making. Thus,

Interest Earned to Total Income Ratio = (Interest Earned / Total Income) x 100

III) Interest Paid to total Income Ratio:
Interest expenditure relates to funds based on expenditure and represents the cost of funds to the ECCS. It is an indicator of the rate at which a bank incurs expenditure by borrowing funds. Thus,

Interest Paid to Total Income Ratio = (Interest Paid / Total Income) x 100

IV) Total Expenses to Working Capital Ratio:
This ratio expresses the effective management of funds. It shows the operational efficiency of the ECCS. Thus,

Total Expenses to Working Capital Ratio (%) = (Total Expenses / Net Working Capital) x 100

V) Interest Expenses to Total Expenses Ratio:
This ratio interest expenses as a percentage of total indicates that how much interest amount is paid out of total expenses. It shows the operational efficiency of the ECCS. Thus

Interest Expenses to Total Expenses Ratio = Interest Expenses / Total Expenses

VI) Spread to Working Capital (%):
Spread is the difference between interest earned and interest paid by the ECCS. Spread performs a very important role in determining the operating efficiency of ECCS. Spread Ratio is computed as the difference between the interests earned a percentage of working funds and interest paid as percentage of working capital. This ratio is very valuable to recognize how the ECCS are maintaining the funds to meet the expenses of management and administration. Thus,

Spread to Working Capital Ratio = Spread / Working Capital

VII) Burden to Working Capital (%):
The non-interest expenditure not covered by non-interest income is known as burden. This is used to meet the expenses for manpower and other expenses of ECCS. It is to be noted that the non-interest expense cannot be reduced. Thus,

Burden as Percentage of Working Capital = Burden / Working Capital

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6. Productivity Ratios:
These ratios are used to measure the efficiency in asset management, operating efficiency and ability to ensure adequate return to its shareholders. The following ratios were employed to assess the productivity of the ECCS.

I) Credit-Deposit Ratio (o/o):
This ratio of credit advanced to deposits mobilised is defined as a credit-deposit ratio. This ratio examined the extent of utilisation of resources by the ECCS. Thus,

Credit-Deposit Ratio = (Advances Outstanding / Deposits outstanding) x 100.

II) Overdue Interest Suspense to Total Advances Ratio (%):
The portions of the bad and doubtful assets (advances) as disclosed by the ECCS are taken as non-performing assets. Total advances included long term, medium and short term advances. Thus,

Overdue Interest suspense to Total Advances Ratio = (Overdue Interest suspense / Total Advances) x 100.

III) Yield on Advances Ratio (%):
This ratio is calculated to measure the yield on advances granted by the ECCS. Thus,

Yield on Advances Ratio= (Total Interest received on Advances / Total Advances) x 100.

IV) Total Business per Employee:
Total business included both total deposits and total advances. Total number of employees included total number of staff engaged in ECCS as well as all subordinate staff. Thus,

Total Business per Employee Ratio = (Total Business / No. of Employees)

Conclusion:
Ratio analysis is a universally accepted tool which used to analyze the financial performance of ECCS. The above discussion regarding ratio analysis enables the management to identify the nature and causes of changes in profits, solvency, activity and profitability over the period of time and this helps in pinpointing the direction of action required for altering the prospects of the ECCS in future. Moreover, it gives the information to take decisions for planning and control of activities of the ECCS.

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