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Abstract :

Ratio analysis techniques is most important tool to analyse and interpret the financial health of a NACC Society. The relationship between two figures expressed mathematically is called ratio. This helps directors in decision making. There are four types of ratios i.e. operational ratios, profitability ratios, solvency ratios and productivity ratios. These ratios indicates different financial aspects of NACC Societies. With the help of these ratios we can know so many facts about financial positions of NACC Societies.

Keywords :

Ratio Analysis, Financial position, Techniques, Credit Societies Profitability, Solvency, Productivity etc.

1) Introduction :

The relationship between two figures expressed mathematically is called ratio. It is one of the modern devices used for judging the Conditions disclosed by financial statement. Ratio analysis is useful for evaluating the financial position and performance of the NACC Society. Ratio may be expressed in rates or times, proportions and percentages.

Ratio analysis is most important tools to analyse and interpret the financial health of a NACC Society. This helps directors in decision making. The analysis of financial statement requires methodical, classification of the data given in the financial statement and comparison of the various inters connected figures with each other.

2) Objectives :

- 1) To find out whether the funds have been utilized properly.
- 2) To ascertain the actual profitable efficiency of NACC societies.
- 3) To measure the financial strength at NACC societies.
- 4) To measure the employees performance or productivity of the NACC societies.

3) Methodology :

For the present study secondary data related to Ratio Analysis of NACC societies is collected from the different sources, for that purpose of collection of data annual report of selected NACC societies will be collected. In the year 2016-17 there are 988 NACC societies are registered in Solapur district, out of these only 200 NACC societies are selected for the sample. The percentage of selected NACC societies is 20.24. The stratified random sample method was applied for the selection of NACC societies. The paper covers the period of five years i.e. 2012 -13 to 2016-17.

4) Ratio Analysis, Finding and Suggestions :

In the present study the ratio analysis of selected NACC societies in Solapur district are classified into operational ratios, profitability ratios, solvency ratios and productivity ratios. These are analyzed in the following tables.

4.1 Operational Ratios-

The 'Operational Ratio' shows the proportion of items of income and expenditure to the total income. These ratios show whether the funds have been utilized properly by NACC Societies. Various 'Operational Ratios' of selected NACC Societies are calculated and shows in the Table 4.1 for five years i.e. from 2012 -13 to 2016-17.

Table 4.1

Operational Ratios of NACC Societies for Five Years from 2012-13 to 2016-17
[Taken 2012-13 as Base Year]

Sr. No	Name And Formula of Ratio	2012-13	2013-14	2014-15	2015-16	2016-17	Average
1.	$\frac{\text{Interest Earned}}{\text{Total Income}} \times 100$	99.15	98.89	98.88	98.74	98.66	98.86
2.	$\frac{\text{Interest Paid}}{\text{Total Income}} \times 100$	53.41	55.93	57.87	59.91	58.71	57.16
3.	$\frac{\text{Total Expenditure}}{\text{Total Income}} \times 100$	69.49	72.10	73.04	77.19	74.77	73.31
4.	$\frac{\text{Establishment Expenditure to Total Expenditure Ratio}}{\text{Total Expenditure}} \times 100$	03.48	03.16	02.92	03.08	02.88	03.10

(Source : Primary data Compiled)

Table 4.1 shows that-

Earning of the interest is the main source of income in NACC societies. Interest earned to total income ratio shows the share of interest income in the total income of NACC societies. It is seen that on an average 98.86 percent income received by way of 'Interest Received on loans and advances and Interest received on investment'. However on the other side non interest income of these NACC Societies is very less i.e. 01.14 percent.

'Interest paid to Total Income Ratio' shows that interest paid on total deposits is the main item of expenditure of NACC Societies. This ratio shows the share of interest paid on deposits of NACC Societies. On an average 57.16 percent of total income of NACC Societies is spent on 'Interest Paid on Deposit'.

'Total Expenditure to total Income Ratio' shows the percentage of total expenditure incurred by NACC Societies from there total income. It is shows that on an average 73.31 percent income spent by NACC Societies on total expenditure.

'Establishment Expenditure to Total Expenditure Ratio' shows that the portion of establishment expenditure in the total expenditure of NACC societies. It is shows that during the study period NACC Societies have managed to keep the establishment expenditure on an average 03.10 percent which is very negligible.

4.2 Profitability Ratios-

The Profitability of NACC Societies can be measured on the basis of 'Profitability Ratio'. The Profitability ratio helps us to ascertain the actual efficiency of the NACC societies. In order to ascertain the actual efficiency of NACC Societies some Profitability ratios are measure in Table 4.2.

Table 4.2

Note : Spread = Interest Earned – Interest paid

Net Worth = Capital + Reserves

(Source : Primary data Compiled)

Sr. No	Name And Formula of Ratio	2012-13	2013-14	2014-15	2015-16	2016-17	Average
1.	Net Profit to Total Income Ratio = $\frac{\text{Net Profit}}{\text{Total Income}} \times 100$	30.50	27.89	26.95	22.80	25.22	26.67
2.	Net Profit to spread Ratio = $\frac{\text{Net Profit}}{\text{Spread}} \times 100$	66.68	64.92	65.73	58.72	63.13	63.83
3.	Net Profit to Total Deposit Ratio = $\frac{\text{Net Profit}}{\text{Total Deposit}} \times 100$	06.60	06.32	06.10	05.38	05.98	06.07
4.	Net Profit to Total Assets Ratio = $\frac{\text{Net Profit}}{\text{Total Assets}} \times 100$	04.27	14.03	04.10	03.62	04.10	04.02
5.	Net Profit to Net Worth Ratio = $\frac{\text{Net Profit}}{\text{Net worth}} \times 100$	17.70	16.86	18.88	16.28	19.96	17.93

Table 4.2 shows that-

‘Net Profit to Total Income Ratio’ shows the share of net profit in the total income of NACC societies. The percentage of net profit of NACC Societies is fluctuating between 22.80 percent to 30.50 percent net profit earned by NACC Societies during the study period.

‘Net Profit to Spread Ratio’ shows the relationship that the net profit earned as related to net interest income i.e. spread. This ratio is fluctuating between 58.72 percent to 66.68 percent. It is seen that on an average 63.83 percent share of net profit is earned through spread.

‘Net Profit to Total Deposits Ratio’ indicates the productivity of the deposits mobilized by the NACC societies. This ratio varies from 05.38 percent to 06.60 percent. On an average net profit to total deposits is 06.07 percent during the study period.

‘Net Profit to Total Assets Ratio’ measures the earning capacity of assets. This ratio shows the relationship between net profit to total assets. This ratio is fluctuating from 03.62 percent to 04.27 percent. On an average this ratio is 04.02 percent during the study period.

‘Net Profit to Net worth Ratio’ indicates the percentage of return on the net worth. This ratio varies from 16.28 percent to 19.96 percent. On an average this ratio is 17.93 percent during the study period.

4.3 Solvency Ratios-

The Solvency means the financial ability of the concern to meet its obligations. For the purpose to measure the financial strength of NACC Society, it is necessary to work out the solvency ratio. Table 4.3 shows the different types of Solvency ratios.

Table 4.3
Solvency Ratios of NACC Societies For Five Years, 2012-13 to 2016-17

Note : Spread = Interest Earned – Interest paid
Net Worth = Capital + Reserves
(Source : Primary data Compiled)

Sr. No	Name And Formula of Ratio	2012-13	2013-14	2014-15	2015-16	2016-17	Average
1.	Cash and Bank Balance to Deposit Ratio $\frac{\text{Cash and Bank Balance}}{\text{Total Deposit}} \times 100$	06.23	06.96	05.59	05.75	05.67	06.04
2.	Investment to Deposits Ratio $\frac{\text{Investment}}{\text{Total Deposit}} \times 100$	33.51	32.15	40.10	40.10	42.26	37.62
3.	Advances to Deposit Ratio $\frac{\text{Net Advances}}{\text{Total Deposit}} \times 100$	119.20	110.80	97.09	96.63	91.35	103.01
4.	Spread to Total Assets Ratio $\frac{\text{Net Profit}}{\text{Total Assets}} \times 100$	06.41	06.20	06.25	06.17	06.50	06.30
5.	Net Worth to Fixed Assets Ratio $\frac{\text{Net Worth}}{\text{Fixed Assets}} \times 100$	839.37	721.29	805.90	784.93	774.59	785.21

Table 4.3 shows that-

‘Cash and Bank Balance to Deposits Ratio’ reflects the position of NACC Societies to carry on their business operations smoothly and meet their all obligations. This ratio fluctuated between 05.67 percent to 06.96 percent. On an

average 06.04 percent cash and Bank balance are maintained by the NACC Societies during the Study period.

Investment to Deposits Ratio' shows the relationship between investment and deposits. This ratio ranges from 32.15 percent to 42.26 percent. On an average 37.62 percent deposits are invested in various securities by the NACC Societies during the Study period.

Advances to Deposits Ratio' indicates that how much amount of deposits are utilized for advances. This ratio is also called 'Credit Deposit Ratio'. This ratio is ranges from 91.35 percent to 119.20 percent. On an average 103.01 percent amount of deposits is used in advances by the NACC Societies during the study period.

'Spread to Total Assets Ratio' reveals the proportion of net interest income to total assets. This ratio varies between 06.17 percent to 06.50 percent. On an average 06.30 percent net worth are used in total assets of NACC Societies during the study period.

'Net Worth to Fixed Assets Ratio' shows relationship between net worth and fixed assts. On an average 785.21 percent net worth are employed in fixed assets during the study period.

4.4 Productivity Ratios-

The productivity of NACC Societies can be measured through the performance of their employees during the study period. Table 4.4 shows per employee performance or productivity of the year 2012-13 to 2016-17.

Table 4.4

Productivity per Employee of NACC Societies for Five Years from 2012-13 to 2016-17.
[Rs. In Lacks]

Note: Spread = Interest Earned – Interest paid

Sr. No	Name And Formula of the Productivity	2012-13	2013-14	2014-15	2015-16	2016-17	Average
1.	Per Employee Deposit = $\frac{\text{Total Deposit}}{\text{No. of Employees}}$	07.03	08.13	10.61	11.81	13.22	10.16
2.	Per Employee advance = $\frac{\text{Total Advance}}{\text{No. of Employees}}$	08.38	09.01	10.31	11.41	12.08	10.24
3.	Per Employee Income = $\frac{\text{Total Income}}{\text{No. of Employees}}$	01.52	01.85	02.40	02.79	03.14	02.34
4.	Per Employee Expenditure = $\frac{\text{Total Expenditure}}{\text{No. of Employees}}$	01.06	01.33	01.76	02.16	02.34	01.73
5.	Per Employee Establishment Expenditure = $\frac{\text{Establishment Expenditure}}{\text{No. of Employees}}$	00.05	00.06	00.07	00.09	00.09	00.07
6.	Per Employee spread = $\frac{\text{spread}}{\text{No. of Employees}}$	00.70	00.79	00.99	01.83	01.25	01.11
7.	Per Employee Profit = $\frac{\text{Net Profit}}{\text{No. of Employees}}$	00.46	00.51	00.65	00.64	00.79	00.61

(Source : Primary data Compiled)

Table 4.4 shows that-

‘Per Employee Deposit Ratio’ indicate amount of deposits handled by each employee of NACC Society. The growth rate of this ratio of NACC Societies is Satisfactory. The growth rate of this ratio is increasing during the study period. On an average each employee of NACC Societies has handled Rs. 10.16 lacks deposits during the study period.

‘Per Employee Advance Ratio’ also shows the increasing trend during the study period. It is increasing from Rs. 08.38 lacks to Rs. 12.08 lacks. On an average Rs. 10.24 lacks advance are handled by each employee of NACC society during this period.

‘Per Employee Income Ratio’ gives an idea about the income of NACC Societies in relation to each employee. This ratio also shows the increasing trend during this period. This was increased from Rs. 01.52 lacks in 2012-13 to Rs. 03.14 lacks in 2016-17. On an average Rs. 02.34 lacks income per employee has been earned by NACC Societies during the Study period. It is also a good indication.

‘Per Employee Expenditure Ratio’ show expenditure incurred by NACC societies in relation to per employee. It is shows that the per employee expenditure has increased considerably during the study period. On an average Rs. 01.73 lacks expenditure per employee is incurred by NACC societies during this period but the rate of increase in expenditure is less as compare to rate of increase in income.

‘Per Employee Establishment Expenditure Ratio’ shows the expenditure incurred by the NACC Societies on establishment as related to per employee. This ratio also shows an increasing trend during the study period. This ratio has been increased from Rs. 00.05 lacks in 2012-13to Rs. 00.09 lacks in 2016-17. On an average Rs. 00.07 lacks establishment expenditure per employee is incurred by NACC societies during the study period.

‘Per Employee Spread Ratio’ shows the net interest income per employee have been earned by the NACC societies. This is the key element that determines the amount of profits. This ratio shows increasing trend up to the year 2015-16. It is increased up to Rs. 01.83 lacks up to the year 2015-16. In the year 2016-17, this ratio is decreased by Rs. 00.58 lacks per employee compare to previous year. On an average Rs. 01.11 lacks net interest income per employee have been earned by NACC societies during this period.

‘Per Employee Profit Ratio’ shows that proportion of net profit in relation to each employee of NACC societies. This ratio is also rising during the study period up to the year 2014-15. In the year 2015-16 this ratio is decreased by Rs. 00.01 lacks compare to previous year. Then it is also increasing in the year 2016-17. On an average Rs. 01.11 lacks profits per employee is earned by NACC societies during the study period.

5) Conclusion:

In short the Evaluation of different financial aspects indicates so many facts about the financial position of NACC Societies; it means ratio analysis techniques will be useful to evaluate the different financial performance of NACC Societies.

References:

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***Note: NACC = Non Agricultural Co-Operative Credit**