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C H A P T E R   IV

RATIO ANALYSIS

4.1   INTRODUCTION : :

In order to judge the financial strength of the primary Teacher's Co-Op. Bank Ltd Satara, the technique of ratio analysis has been firstly applied.

To facilitate the study of verious ratios, the financial statements of Bank have been used. The study covers last ten co-operative years i.e. a period from 1985 to 1994. The co-op. year of the Bank used to end on the 30th June, for the years 1985 to 1991 and since 1992, the yearending is 31st march. In order to incorporate this change, the financial statements have been prepared for nine months for the year ending 1991/92.

4.2   MEANING OF RATIO ANALYSIS :

MEANING OF RATIOS : Ratios are simply a means of highlighting in arithmetical terms the relationship between figures drawn from various financial statements. Robert Anthony defines a ratio as—simply one number expressed in terms of another. A great number of ratios can be computed from the basic financial statements.

Ratio analysis means the process of computing, determining and presenting relationship of items and groups of items; in the financial statements. It involves three steps • first, the financial manager selects from the statements those sets of data which are relevant to his objective of analysis and calculates appropriate ratio for

the firm. The second step calls for the comparison either
with the industry standards or with the ratio of the same
firm relating to past. After such comparison the conclusions
may be drawn and presented in the form of reports.

4.3   ADVANTAGES OF RATIO ANALYSIS :

The following are the principal advantages of the
ratio analysis.

1.   Raios simplify the comprehension of financial
statements. They tell the whole story as a heap of financial
data is condensed in them. They indicate the changes in the
financial condition of the business.

2.   Ratio analysis provides data for interfirm or intra-
firm comparison. Comparison cannot be made with absolute
figures. Net profit of one firm cannot be compared with the
net profit of the other firm. But percentages of net
profits can be compared to evaluate the performance.
Similarly performance and efficiency of different departments
in the same firm can be compared with the help of ratios.

3.   They act as an index of the efficiency of enterprise.
As such they serve as an instrument of management control. It
is an instrument for diagnosis of the financial health of an
enterprise. The efficiency of the various individual units
similarly situated can be judged through inter—firm
comparisons.

4.   The ratio analysis can be of invaluable aid to
management in the discharge of its basic function of
forecasting, planning, Coordination, Communication and
control. A study of the trend of strategic ratio may help
the management in this respect. Past ratios indicate trends

in cost, Sales, profit and other relevant facts.

5.   Investment decisions can at times be based on the conditions revealed by certain ratios.

6.   They make it possible to estimate the other figure when one figure is known.

Thus the ratio analysis points out the financial condition of business — whether it is very strong, good, questionable or poor and enables the management to take necessary steps.

4.4   LIMITATIONS OF RATIO ANALYSIS :

Ratios never provide a definite answer to financial problems. There is always the question of judgement as to what significance should be given to the figures. so one must rely upon one's own good sense in making ratio analysis and an analyst must use this technique keeping in mind the following short comings of this technique.

1.   Ratios can be useful only when they are computed in a sufficient large number. A single ratio would not be able to convey anything. At the same time, if too many ratios are calculated, they are likely to confuse instead of revealing any meaningful conclusion.

2.   Ratio analysis suffers from qualitative analysis of financial problems.

3.   Reliability of Ratios depends upon the reliability of data.

4.   While comparing Ratios of the two firms, it must be seen that both of them follow the same accounting plans or bases, otherwise the comparison has no meaning.

5.   Change in prices distort the comparision over a period of years.

6.   Ratios sometimes give misleading picture. It would, therefore, be proper to study absolute figures along with Ratios. Ratio analysis gives just a fraction of information needed for decision making. Therefore one should not depend on information obtained from ratios only. It must always be used in conjunction with that obtained from other sources to ensure comprehensive analysis.

7.   Ratios and precentages have little significance unless they can be compared with or matched against appropriate standards. Unless there are available measuring devices or standards, the analyst will not bee able to determine whether the ratios indicate favourable or unfavourable conditions.

8.   If there is 'Window dressing' the ratios calculated will fail to give the correct picture and will prove to be misleading,

9.   It is not always possible to make future estimates on the basis of the past as it always does not come true.

10.   When an inter—firm comparison is made on the basis of ratio analysis and they differ substantially in size, age and nature of products, ratio analysis can—not give satisfactory results as these factors are not considered here.

4.5   TYPES OF RATIOS :

        Financial Ratios have been classified in several ways i.e. according to nature of items which are re—classified into balance sheet ratios, profit and loss a/c ratios and

Composite Ratios. For the purpose of our study, ratios are grouped and regrouped as follows.

4.5.1   LIQUIDITY RATIOS :

Liquidity refers to theability of the firm to meet its obligations in the short run, usually period of one year.

Liquidity values are generally based. on relationship between current assets and currrent liabilities.

The objective of calculating liquidity ratio is to ascertain the financial position to pay the debts as and when they fall due since cash is used to meet a firm's obligations, it is essential to measure not only the amount of cash that a firm has at a particular time, but also the firm's ability to secure cash at a time when it is needed.

Liquidity ratio have many limitations. A few of the more important are

1.   It depicts liquidity at a particular point in time.

2.   It does not measure the quality of assets.

3.   Since the ratio measures the past, it cannot measure the future solvency of the firm.

4.5.1 (a) CURRENT RATIO OR WORKING CAPITAL RATIO OR 2.1 RATIO :

It is a ratio of current assets to current liabilities. Some have suggested that in order to ensure solvency of a concern, current assets should be at least twice the current liabilities.

$$\text{Current Ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

SIGNIFICANCE : This ratio indicates the solvency of the business i.e. ability to meet the liabilities of the business as and when they fall due.

Though 2:1 ratio is considered desirable. A very high current ratio is also not desirable. Since it means less efficient use of funds and, therefore, this will result in considerably lowering down the profitability of the concern.

It is tobe noted that the mere fact that current ratio is quite hgih does not mean that the Bank will be in a position to meet adequately its short-term liabilities. In fact, the current ratio should be seen in relation to the component of current assets and their liquidity.

Now let us consider the current ratio position of the Bank.

TABLE 4.1.

CURRENT RATIOS OF THE BANK FOR THE FOLLOWING TEN YEARS.

(Rs.in Lakhs)

Year	Current Assets	Current Liabilities	Current Ratio
1984/85	208.53	174.22	1.20
1985/86	346.32	198.98	1.74
1986/87	434.84	247.65	1.76
1987/88	544.98	313.29	1.74
1988/89	677.33	401.18	1.69
1989/90	873.05	612.32	1.43
1990/91	998.93	785.56	1.27
1991/92	1054.26	754.18	1.40
1992/93	1224.05	728.64	1.68
1993/94	1298.62	811.85	1.60
Average	—	—	1.55

SOURCE : Balance Sheet and office record of the Bank.

The current ratio varies from industry to industry and within the same industry from year to year. Short-term obligations as a measure of short-term/current financial liquidity it indicates the rupee of current assets available for each rupee of current liabilities/obligations. The higher the ratio that is the larger the amount of rupee available per rupee of current liabilities. The more the firms ability to meet current obligation and the greater the safety of funds of short-term creditors. If it is less than 2:1 the solvency of the Bank is questionable. It may indicate shortage of working Capital.

Thus, through this ratio, one can judge the ability of a Bank to meet current obligations with a margin of safety.

Table no. 4.1 reveals a stable trend in the current ratio of the Bank during the period covered by our study, except the years 1984-85 and the year 1990-91. The current ratio has been near about 1.50 for all the years, it shows that the Bank has sufficient current assets to meet its current liabilities. The ratio was below the norm 2:1 throughout the period from 1984-85 to 1993-94. The average of this ratio was also below the norm. It is a red signal to the management. It shows that Bank is trading beyond its resources. On the whole, from the creditors point of view the solvancy position of the Bank was not sound for all the years covered by our study because the, ratio was below the 2:1 norm.

The average current ratio was 1.55, which shows

efficient use of funds and therefore this will result in increasing the profitability of the concern. But which shows shortage of working capital and solvency of the Bank is questionable.

On the basis of above analysis it can be concluded that the liquid position of the bank is not very bad but not good also.

4.5.1 (b) QUICK, LIQUID, OR ACID TEST RATIO/ It is also
CALLED NEAR MONEY RATIO OR SOLVENCY RATIO

The current ratio fails to serve as a realistic guide to the solvency of the Bank, as the major portion of the Current Assets may comprise of such assets which cannot be converted immediately in cash (i.e.stock) to meet the immediate liabilities. Therefore, a liquid ratio is used to know the adequacy of funds.

$$\text{Liquid Ratio} = \frac{\text{Quick Assets}}{\text{Quick Liabilities}}$$

The liquid or Quick Ratio indicates the relation of 'Quick Assets' with 'Quick Liabilitis' Quick or Liquid Assets include all current assets, except stock and prepaid expenses whereas liquid liabilities include all current liabilities except overdraft and accrued expenses.

If this ratio is 1:1, it is considered that all claims will be met when they arise.

SIGNIFICANCE : It is a measure of the extent to which liquid resources are immediately available to meet current obligations. In so far as it eliminates investories as part

of current ratio, this ratio is a more rigorous test of liquidity than the current ratio and when used in conjunction with it, gives a better picture of the firms ability to meet its short—term debts out of short—term assets.

This ratio does not take into a/c two important factors viz. certain portions of stocks would be sold over to meet current liabilities and all creditors would not be rquired to be paid at the same time.

PRECAUTION :

Following precaution must be taken if dependable results are tobe obtained.

1. It must be ascertained whether the quick assets and the quick liabilities are properly valued. It must be seen that proper provisions concerning current assets, such as provision for doubtful debts etc. are made.

2. Window—Dressing : It means to show the financial position better than it actually exists.

The analyst must therefore, get himself assured that such window-dressing is not resorted to.

Now let us turn to quick ratio for the purpose analysis of banks financial statements.

TABLE 4.2.

TABLE SHOWING LIQUIDITY/QUICK RATIOS OF THE BANK

(Rs.in Lakhs)

Year	Quick Assets	Quick Liabilities	Ratio
1984/85	207.60	80.97	2.56
1985/86	344.49	108.77	3.17
1986/87	433.04	144.02	3.00
1987/88	542.52	168.56	3.22
1988/89	673.89	225.85	2.98
1989/90	859.11	290.87	2.95
1990/91	988.11	345.25	2.86
1991/92	1048.29	369.74	2.84
1992/93	1213.45	408.88	2.97
1993/94	1288.12	504.94	2.55
Average	—	—	2.91

SOURCE : Balance sheets and office record of the Bank.

All the current assets do not have the same liquidity. Cash is the most liquid asset rather than inventory though it is classified as current, is not easily converted into cash. To offset this weakness, the quick ratio has been developed.

The ideal liquid ratio is considered to be 1:1, which means that the cash yield from the most liquid assets is sufficient to pay of short term liabilities It indicates the ability of business to meet its commitment as an when they fall due for payment.

When it is below the norm i.e., 1:1, then it indicates that quick assets do not cover current liabilities so necessary steps should be taken to obtain additional cash.

Therefore, it is desirable for a concern to have its quick assets equal or more to their current obligations or commitments at all times to avoid any kind of current debts problem.

Table no. 4.2 shows the quick ratio of the Bank for the period covered by our study. Table shows that the quick ratio of the Bank was above the norm i.e., 1:1 for all accounting years from 1984-85 to 1993-94. The average quick ratio of the bank was 2.91. This is also much more than the norm of 1:1. This shows that liquid assets of the bank were sufficient to meet current obligations during the period of study. Therefore the short-term liquidity position of the Bank can be called very good for the period under study.

On the basis of the above analysis it can be concluded that the liquid position of the bank was very good. It indicated the capacity of the bank to pay in excess of current liabilities. From the creditors point of view the situation was favourable but from the shareholders point of view, it indicated inefficient utilisation of liquid resources. The Bank should, therefore employ its liquid resources profitably.

4.5 1 (c) CASH POSITION RATIO :

This ratio is obtained by substracting both the debtors (including bills receivables) and the inventory from the current assets. Thus, it is obtained by dividing cash (of course in hand and at bank) and marketable securities by current liabilities.

$$\text{Cash-position ratio} = \frac{\text{Cash + Marketable Securites}}{\text{Current Liabilities}}$$

If marketable securities are not there then,

$$\text{Cash-position ratio} = \frac{\text{Cash (in hand \& at Bank)}}{\text{Current liabilities}}$$

A raio of 0.75 : 1 is considered to be a good ratio. Such a ratio would imply that firm has enough cash on hand to meet all current liabilities.

TABLE 4.3

CASH POSITION RATIO OF THE BANK

(Rs.in lakhs)

Year	Cash & Bank Balances	Current Liabilities	Ratio
1984/85	29.85	174.22	0.17
1985/86	28.10	198.98	0.14
1986/87	27.50	247.65	0.11
1987/88	30.90	313.29	0.10
1988/89	52.34	401.18	0.13
1989/90	65.21	612.32	0.11
1990/91	63.19	785.56	0.08
1991/92	64.04	754.18	0.09
1992/93	95.10	728.64	0.13
1993/94	117.02	811.85	0.14
Average	—	—	0.12

SOURCE : Balance sheet of the Bank.

On the basis of the above table, it can be found that, the cash position ratio for all the above years was not satisfactoy. (This is because there were negligible amounts of cash balances as compared to current liabilities)

4.5.2 LEVERAGE RATIOS/SAFETY RATIOS :

The purpose of calculating these ratios is to ascertain the stake of the proprietors, vis a vis the creditors. In an undertaking, where the proprietors, funds form a small part, the maximum risk has to be borne by the creditors. Therefore, creditors would like to lend to those

companies where equity is substantial, whereasthe proprietors would prefer to raise funds through debts as this would give them control over the undertaking without substantial stake in the business. In financial terms, a large amount of debt capital related to equity is called high, capital gearing, whereas a large amount of equity capital related to debt is called low capital gearing. During time of good profits, shareholders stand to gain with high capital gearing, because the debt capital is paid fixed interest and all the balance of profit is available to the equity shareholders. But in times of low profits, the payment of fixed interest on high debt capital may absorb all the profits, leaving nothing for the shareholders. So the leverage is favourable during times of high profits and unfavourable when profits are low. Some of the important ratios are discussed and calculated below.

4.5.2(a) PROPRIETORY RATIO OR EQUITY RATIO :

Ratio of tangible net worth to total assets is also called as proprietory ratio or capital to total assets ratio. It is calculated as :

$$\text{Proprietory Ratio} = \frac{\text{proprietors funds(i.e. share capital reserves \& surplus)}}{\text{Total assets or Total Capital}}$$

The ratio establishes the relationship between proprietor's funds and total assets 100% less percentage of this ratio ratio of total liabilities to total assets. If this ratio is 80% it means ratio of total liabilities to total assets 20%.

SIGNIFICANCE : Greater is the percentage of proprietor's fund, the stronger is financial position of the concern . This ratio is normally a test of strength of creditworthiness of

the concern . To the extent the percentage of liabilities increase or the percentage of Capital dwindles, the credit strength of the concern deteriorates. This ratio there-fore should be considered along with thecurrent ratio while considering the solvency of the Concern.

A high proprietory ratio is, however, frequently indicative of over capitalisation and an excessive investment in fixed assets in relation to actual needs. A ratio nearing 100 percent often gives low earnings per share and consequently, a low rate of dividend to shareholders.

A low proprietory ratio on the other hand,is a symptom of under Capitalisation and an excessive use of creditors' funds to finance the business.

TABLE 4.4

PROPRIETORY RATIO OF THE BANK

(Rs. in lakhs)

Year	Proprietory funds	Total assets	Ratio
1984—85	83.02	579.28	0.14
1985—86	96.03	720.99	0.13
1986—87	109.66	901.56	0.12
1987—88	125·21	1127.71	0.11
1988—89	140.52	1376.63	0.10
1989—90	171.32	1803.09	0.10
1990—91	203.04	2213.73	0.09
1991—92	223.60	2305.81	0.10
1992—93	285.61	2589.91	0.11
1993—94	324.05	2992.09	0.11
Average	—	—	0.11

SOURCE : Balance Sheetsof the Bank.

This ratio indicates the extent to which the total assets are being financed by the shareholders and by creditors. This ratio is a varint of debt equity ratio which establishes the relationship between proprietory fund and total assets. It is a useful tool for bankers as it indicates the margin of safety for them. The higher the ratio, the stronger the financial position of the Company. A low ratio will indicate less owned fund and more borrowed funds.

Table no. 4.4 shows that the average of the proprietory ratio is 0.11 for ten years under our study, it indicates that the assets are financed to the extent of 11% by the owner's fund sand the balance is financed by the creditors. Lesser is the percentage, the weaker is the financial position of the bank, as it indicates more dependence on external finance. However a low proprietory ratio is a symptom of under capitalisation and, it indicates greater risk to the creditors since in the event of losses a part of their money may be lost besides loss to the proprietors of the business.

On the basis of the above analysis it can be concluded that the financial position of the bank is weak and credit worthiness of the Bank is not satisfactory.

4.5.2.(b) DEBT TO EQUITY RATIO OF TOTAL LIABILITIES TO PRORIETOR'S FUNDS RATIO :

It is a measure of the relative claims of creditors and owners against the assets of the firm. It is

calculated as under :

$$\text{Debt to Equity ratio} = \frac{\text{Total debt}}{\text{Net worth or owner's Equity}}$$

The term 'Total debt' includes all debts i.e. long term, short term, mortgages, bills, debentures etc. whereas the term net worth means equity Share Capital, preference Share Capital, reserves and surplus i.e. proprietor's Funds or Equity. 1:1 ratio is desirable.

SIGNIFICANCE : It is a measure of financial strength of a concern. Lower the ratio greater is the security available to creditors. A satisfactory current ratio and ample working capital may not always be a guarantee against insolvency, if the total liabilities are inordinately large.

The purpose of this ratio is to derive an idea of the amount of Capital supplied by the owners and of assets, 'cushion' available to creditors on liquidation. Generally 1:1 ratio is acceptable. The greater the interest of the owners as compared with that of the creditors, the more satisfactory is the financial structure of the business, because in such a situation the management is less handicapped by interest charges and debt repayment requirements.

A company having a stable profit can afford to operate on a relatively high debt—equity ratio; whereas in the case of a company having an unstable profit, a high debt—equity ratio reflects a speculative situation. Too much reliance on external equities may indicate under—capitalisation, whereas too much reliance on internal equities may lead to over—capitalisation.

TABLE 4.5

DEBT TO EQUITY RATIO OF THE BANK

(Rs. in lakhs)

Year	Total debt	Net worth	Ratio
1984—85	448.23	83.02	5.40
1985—86	562.79	96.03	5.86
1986—87	705.05	109.66	6.43
1987—88	885.56	125.21	7.07
1988—89	1082.71	140.52	7.71
1989—90	1442.99	171.32	8.42
1990—91	1786.60	203.04	8.80
1991—92	1832.28	223.60	8.19
1992—93	2005.34	285.61	7.02
1993—94	2305.89	324.05	7.12
Average	—	—	7.20

SOURCE : Balance Sheets of the Bank.

The debt equity ratio is the ratio of the amount invested by outsiders to the amount invested by the owners of the business. The debt equity ratio is an important tool of financial analysis to appraise the financial structure of a firm. It has important implication from the point of view of the creditors, owners and the firm itself. The ratio reflects the relative contribution of creditors and owners of business in its firm's financing.

The generally accepted standard of this ratio is 1:1. A high ratio suggests that the claims of creditors greater than those of the owners. While a low ratio implies a smaller claim of creditors. A very high ratio is unfavourable from the firms point of view. The debt equity ratio indicates the margin of safety to the creditors and about possible losses in the event of liquidation. This ratio is also important for judging the financing policy of the management as to whether they are following an over —

conservative policy of financing. The ideal norm of the ratio is 100%, that is the total debt should not exceed the owned fund in the business.

Table no.4.5 shows the debt equity ratio of the Bank, for the period covered by the study.

It is clear that the debt equityratio for all the years under study was above the norm of 1:1. The average of this ratio (7.20 times) was more than the norms. This suggests that the claims of the creditors are greater than those of the owners. The use of debt capital to the above extent is not justified particularly when its liquid resources are weak. The reason is, a major portion of liquid resources is consumed in payment of interest and repayment of debts, from the creditor's point of view, the situation is highly unsatisfactory as the owner's cover for protecting the creditor's fund is low; they have a lower cushion against possible loss in liquidation. For improving the position, bank should increase the employment of own funds.

On the basis of the above analysis, it can be concluded that the financial structure and policy of he bank was not good.

4.5.2(c) FIXED ASSETS RATIO :

This ratio is also called fixed assets to Tangible Net Worth or capital to Fixed Assets Ratio. It is calculated as under :

$$\text{Fixed Assets Ratio} = \frac{\text{Depreciated value of Fixed assets}}{\text{Proprietor's funds}} \times 100$$

SIGNIFICANCE : Normally a proprietor should provide all the funds required to purchase fixed assets. If the ratio exceeds 100%, it indicates that the company has used short term funds for acquiring fixed assets. This policy may not be desirable. To the extent the fixed assets exceed the amount of capital and reserves, the working capital is depleted. When the amount of proprietors' fund exceeds the value of fixed assets i.e. When the percentage is less than 100, a part of the net working capital is supplied by the shareholders, provided that there are no other non-current assets. Though, it is not possible to lay down a rigid standard as regards the percentage of capital which should be invested in fixed assets in each industry, there always is a maxim which should not be exceeded. So that the harmony among the fixed assets,, debtors and stock is not disturbed. The ratio should generally be 65%.

TABLE 4.6

FIXED ASSETS TO TANGIBLE NET WORTH RATIO OF THE BANK
(Rs. in lakhs)

Year	Depreciated value of fixed assets	Proprietors · funds	Ratio (in percentage)
1984–85	15.28	83.02	18.41
1985–86	14.51	96.03	15.11
1986–87	14.11	109.66	12.87
1987–88	17.96	125.21	14.34
1988–89	17.83	140.52	12.69
1989–90	21.26	171.32	12.41
1990–91	24.37	203.04	12.00
1991–92	35.80	223.60	16.01
1992–93	38.79	285.61	13.58
1993–94	41.48	324.05	12.80
Average	—	——	14.02

SOURCE : Balance sheetsof the Bank.

This raio is device to find out the percentage of fixed assets financed by the owners of the firm. The fixed assets by their nature require capital which is more or less permanently sunk in them. Hence, the management should be very cautious in deciding about investment in fixed assets.

This ratio is an important tool for judging the margin of safety for long—term creditors. Excessive reliance on long—term creditor's funds show the weakness in the financial structure. The lower the ratio, the greater

the margin in safety for long-term creditors. If the ratio exceeds 100%, the indication is that a part of the borrowed funds has been used for financing fixed assets and the remaining part is being used for financing the working capital. In case the ratio less than 100%, the indication is that the working capital is financed by all the long term borrowed funds plus the amount of the own funds to the extent to which percentage is less than 100.

It will be seen from the table no.4.6 that the fixed assets to net worth ratio in the bank was less than 100%. Thus, the long-term financialposition of the Bank can be said to be on a sound footing as the ratio remained lower than the norm in all the years under the study. The average for this ratio was also less than the norm of 65%.

On the basis of the above analysis, it can be concluded that the margin of safety for long-term creditors is greater and it indicates that the working capital is financed by long term borrowed funds plus the amount of owned funds to the extent, which is the percentage less than 100.

4.5.2 (d)   INTEREST COVERAGE RATIO :

This is also called   fixed charge coverage Ratio or debt service Ratio.

The ratio shows as to how many times (Say 10 times 15 times etc) the interest charges are covered by the funds that are ordinarily available to pay the interest charges. The standard for coverage fixed is six to seven times. The

weakness of the ratio would indicate difficulty in securing additional funds from outside sources. However, too high ratio may mean that very conservative use of debt is being made by the firm. A lower ratio indicates excessive use of debt and points out that the firm should improve that operating efficiency or repay the debt to improve the coverage. Normally standard ratio is taken to be 6to7 times. This ratio is calculated as under.

$$\text{Interest coverage ratio} = \frac{\text{Net profit before interest \& Taxes}}{\text{Total interest charges on long-term debts}}$$

$$= \text{No. of Times}$$

TABLE 4.7

FIXED CHARGE COVERAGE RATIO OF THE BANK.

(Rs. in lakhs)

Year	Net profit before interest & Taxes	Total interest charges on long term debts	Ratio (intimes)
1984/85	33.78	29.09	1.16
1985/86	46.81	39.07	1.20
1986/87	61.25	50.52	1.21
1987/88	75.81	62.79	1.21
1988/89	93.38	77.04	1.21
1989/90	113.23	93.49	1.21
1990/91	136.41	115.06	1.19
1991/92	140.44	106.33	1.32
1992/93	228.63	165.46	1.38
1993/94	233.26	179.70	1.30
Average	—	—	1.24

SOURCE : Financial statement of the Bank.

Table No. 4.7 shows that the average of the interest Coverage Ratio of the Bank is 1.24 for last ten years, and this is below the standard norm of 6 or 7 times. Ofcourse, for all the ten years, the ratios are below the standard norm. It means that organisation cannot easily meet its interest burden.

On the bais of the above analysis it can be concluded that the financial position of the bank is weak.

4.5.3 ACTIVITY RATIOS :

They are also called efficiency or performance ratios or Assets management ratios. The purpose of these ratios is to judge how effectively the company is utilising the facilities at its command. All the ratio are calculated on the basis of the cost of sales. They are also known as Turnover Ratios, as they express the frequency with which a unit of capital invested in fixed assets, stocks etc. produces sales. Some of the important activity ratios are discussed and calculated below :

4.5.3 (a) DEBTORS TURNOVER RATIO :

Since sundry debtors constitute an important item of current assets, the amount of the accounts receivable at any particular time should not exceed a reasonable proportion of net sales. This proportion is expressed as a ratio, which is computed as under .

$$\text{Debtors Turnover ratio} = \frac{\text{Accounts receivable (i.e. Sundry debtors and B/R}}{\text{Average daily sales}}$$

OR

$$\text{Debtors Turnover ratio} = \frac{\text{Accounts Receivables}}{\text{Net sales}} \times 365 \text{ (or360)}$$

$$= \text{No. of days}$$

SIGNIFICANCE : It is an enabling deviceto find outas to how many days average sales are tied up in the value of amounts owing by debtors according to the balance sheet. It is also an excellent supplementary cheek to be used for judging the adequacy of current rato.

A rule of thumb is that the collection period should not exceed $1\frac{1}{3}$ times the regular payment period e.g. if regular payment period is 30 days, then average collection period should not exceed 40 days.

Changes in the ratio indicate changes in the company's credit policy or changes in its ability to collect its receivables.

The lower this ratio is with reference to usual credit terms, the less likely is the receivable accounts to contain old and vaueless amounts. Where this ratio is high, the greater must be the allowance for loss of value in the liquidation of receivables and the higher must be the current ratio in order to protect creditors.

The objective of the comparision implied in the debtors turnover ratio is to learn how old the accounts are and partly to learn how fast cash will flow from their collections. If the credit period is 30 days and the ratio

shows 60 days, it shows that at least half the accounts are overdue as 60 days sales are locked up in trade debtors. This situation is thought of as over-investment in receivables and may be the result of over-extension of credit, lack of effective collection policies of the collection department, etc. Thus this ratio is an index of the number of days for which the period of credit is allowed or in other words, it indicates the number of days for which accounts remain uncollected.

For calculang debtors turnover ratio of the bank, loans given by the bank are sub-divided in to following three catagaries:

1.   Short-term loans

2.   Medium-term loans

3.   Long-term loans   .

It may not be possible to calculate debtors turnover ratios of the bank, for medium term loans given by the bank. because that will give misleading results due to following reasons.

1.   Recovery period allowed by the bank for various medium-term loans given by the Bank is not uniform.

2.   Amount of medium-term loans given by the Bank differ each year. Therefore the average daily sales for each of the year under study will be totally different.

3.   Medium term loans given by the bank are repayable by the members and non members in monthly instalment.

For the same reasons, it may not be possible to calculate debtors turnover ratio of the Bank for long term loans.

Therefore we will concentrate on debtors turnover ratio of the Bank for short term loans.

TABLE NO. 4.8

SHORT TERM LOAN'S DEBTORS TURNOVER RATIO OF THE BANK

(Rs. in lakhs)

Year	A/c Receivable	Net sales	Ratio (No.of days)
1984/85	104.48	195.62	194.95
1985/86	244.28	254.57	350.25
1986/87	314.99	334.63	343.58
1987/88	398.55	415.67	349.97
1988/89	492.99	463.32	388.37
1989/90	604.97	598.80	368.76
1990/91	675.54	816.57	301.96
1991/92	752.55	453.52	448.03
1992/93	865.61	821.27	384.70
1993/94	834.84	1043.62	291.98
Average	—	—	342.26

SOURCE :   Annual Reports and office record of the Bank.

The debtors turnover ratio matches net credit sales ofa firm to recorded trade debtors thereby indicating the rate at which cash is generated by turnover of debtors, since debtors constitute a major element of current assets. The credit and collection policy of the business. Must be under continuous watch. The amount of trade debtors at the end of the accounting period should not exceeda reasonable proportion of net sales and debtors turnover ratio is an enabling device to find out as to how many days average

sales are tied up in the value of amounts owing by debtors according to the balance sheet.

Liquidity position of the firm depends upon the quality of debtors to a large extent.

It is also known as average collection period, because this ratio tells us the average time lag between sales and collection of debts. The receivable turnover and average collection period are related as follows :

$$\text{Average Collection period} = \frac{365 \text{ days}}{\text{Receivable turnover ratio}}$$

OR

$$\text{Average collection period} = \frac{\text{Receivables}}{\text{Net sales}} \times 365$$

Generally, the higher the value of debtors turnover ratio, the more efficient is the management of assets; Obviously, the shorter the average collection period, the higher the receivable turnover ratio, and vice versa.

TABLE 4.8

Generally, bank allows 365 days regular payment period to their short-term debtors and the table shows that is 342.26 days on average, the actual collection period. It means that there is a shorter average collection period than theregular payment period allowed by bank. So the receivable turnover ratio is higher. When we observe the table we see that there is a shorter average collection period of all years, except for the year 1991-92. The higher receivable turnover ratio means the more efficient management of assets.

On the basis of the above analysis it can be concluded that the management of assets is effective. However, shorter the average collection period better the quality of debtors, as a short-term collection period implies the prompt payment by debtors.

For the purpose of finding out the quality of debtors, we will prepare the statement showing percentage of overdues to total loans receivable by the bank.

TABLE NO. 4.9

STATEMENT SHOWING PERCENTAGE OF OVERDUES TO TOTAL

LOANS RECEIVABLE BY THE BANK

(Rs. in lakhs)

Year	Over-dues (No. of years)				Total over dues	Total loans receivable.	Percentage of overdues to total loa receivable.
	Less than 1	1to2	2to3	3&above			
1984.85	2.09	0.22	—	0.06	2.37	442.20	0.54
1985.86	5.15	0.14	—	0.02	5.31	557.15	0.95
1986.87	1.95	0.12	0.05	—	2.12	715.02	0.30
1987.88	1.83	0.09	0.06	0.05	2.03	898.21	0.23
1988.89	1.64	0.02	0.03	0.06	1.75	1095.32	0.16
1989.90	2.55	0.11	0.03	0.10	2.79	1430.48	0.20
1990.91	1.82	0.31	0.04	—	2.17	1781.38	0.12
1991.92	4.38	0.60	0.13	0.03	5.14	1850.90	0.28
1992.93	4.43	1.61	0.23	0.11	6.38	2053.17	0.31
1993.94	1.76	2.68	0.93	0.15	5.52	2346.86	0.24
Average	—						0.33

SOURCE : Annual Reports of the Bank.

The above table shows the percentage of overdues to total loans receivable by the Bank, for the period under study.

It is seen that the average of this percentage of overdues to total loans receivable is 0.33 for ten years. It indicates that there were negligible amounts of overdues as compared to total loans receivable by the bank. When we study the table, we notice that, maximum overdues are for a period less than one year category except for the year 1993-94. The maximum overdues for 1993-94 are from one year to two years old category It indicates better quality of debtors and good liquid position of the bank.

On the basis of the above analysis it can be concluded that the banks debtors quality and liquid position was good and collection policies of the bank were effective.

4.5.3 (b) TOTAL ASSETS TURNOVER RATIO :

The ratio is arrived at as under :

$$\text{Total Assets Turnover Ratio} = \frac{\text{Sales}}{\text{Total Assets}}$$

$$= \text{No. of Times}$$

The ratio indicates the sales generated per rupee of investment in total assets. Thus it aims to point out the efficiency or inefficiency in the use of total assets or capital employed. Increase in ratio indicates that more revenue is generated per rupee of total investment in assets . Some analyst take only tangible assets and in that

case the ratio is arrived at by dividing sales by tangible assets only. For instance, goodwill, patents, Trade marks etc. are not taken into account. Normally a standard ratio is taken as 2 times the total assets.

TABLE NO. 4.10

TOTAL ASSETS TURNOVER RATIO OF THE BANK

(Rs. in lakhs)

Year	Sales/loans	Total assets	Ratio
1984-85	477.13	579.28	0.82
1985-86	623.65	720.99	0.87
1986-87	819.78	901.56	0.91
1987-88	1018.30	1127.71	0.90
1988-89	1135.05	1376.63	0.83
1989-90	1466.95	1803.09	0.81
1990-91	2000.43	2213.73	0.90
1991-92	1111.04	2305.81	0.64
1992-93	2011.94	2589.91	0.78
1993-94	2556.73	2992.09	0.85
Average	—	—	0.83

SOURCE : Annual Reports of the Bank.

Tabale no 4.10 shows that the average of total assets turnover ratio is 0.83 for the period of study. This is below the standard norm 2.1. It implies that the efficiency of the total assets employed is less than desirable.

On the basis of the above analysis, it can be concluded that the efficiency of the total assets employed is less and

they are not utilised fully and profitably. For overcoming this situation it has to take steps to increase the sales and utilise the assets properly and profitably.

4.5.3 (c) FIXED ASSETS TURNOVER RATIO :

The ratio is arrived at as under.

$$\text{Fixed Assets Turnover ratio} = \frac{\text{Sales}}{\text{Net fixed Assets}}$$

$$= \text{No. of times.}$$

SIGNIFICANC : The ratio measures the efficiency in the utilisation of fixed assets. This ratio indicates whether the fixed assets are being fully utilised or not. It is an important measure of the efficient working and earning capacity of the business. A high ratio is an index of the overtrading while a low ratio suggests idle capacity and excessive investment in fixed assts. Normally a standard ratio is taken as five times.

TABLE NO.4.11

FIXED ASSETS TURNOVER RATIO OF THE BANK.

(Rs. in lakhs)

Year	Sales	Net fixed assets	Ratio (No. of times)
1984-85	477.13	15.28	31.23
1985-86	623.65	14.51	42.98
1986-87	819.78	14.11	58.10
1987-88	1018.30	17.96	56.70
1988-89	1135.05	17.83	63.66
1989-90	1466.95	21.26	69.00
1990-91	2000.43	24.37	82.09
1991-92	1111.04	35.80	41.38
1992-93	2011.94	38.79	51.87
1993-94	2556.73	41.48	61.64
Average	—	—	55.87

SOURCE : Annual Reports of the Bank.

The above table shows the fixed assets turnover ration of the Bank for the period of study.

We gather that the average of this ratio is 55.87 for the last t en years. This is more than the standard norm 5:1. However, for all the ten years, the ra tios are above the standard norm. It means that the efficiency of the fixed assets employed is good and they are utilised fully and proftably. But very high fixed assets trunover ratio can be an index of overtrading.

4.5.4. PROFITABILITY RATIOS:

The profitability reflects the final results of business operations. Profitability ratio depict the capacity of the unit to generate profits and its rate of return.

There are two types of profitability ratios, profit margin ratios and rate of return ratios. The former shows the relationship between profit and sales. The two popular profit margin ratios are .gross profit margin ratio and net profit margin ratio.

The rate of return ratios, on the other hand, reflect the relationship between profit and investment. The important measures in this category are net income to total asseets ratio, return on investment and return on equity. Some of the important profitability ratios are discussed and calculated below.

4.5.4(a) NET PROFIT RATIO :

Net profit is that proportion of net sales which remains to the owners or the share-holders after all costs, charges and expenses including income tax, have been deducted. It is calculated as under :

$$\text{Net profit ratio} = \frac{\text{Net profit (after taxes)}}{\text{Net sales}} \times 100$$

It differs from the ratio of operating profits to net sales in as much as it is calculated after adding non-operating incomes, like interest, dividends on investments etc., to operating profits and deducting non-operating expenses, such as loss on sale of old assets, provision for legal expenses etc. from such profits.

The ratio is widely used as a measure of overall profitability and is very useful to the proprietor. Reading it along with the operating ratio gives an idea of the efficiency as well as profitability of the business to a Limited extent.

TABLE NO. 4.12

NET PROFIT RATIO OF THE BANK.

(Rs. in lakhs)

Year	Net profit (after taxes)	Net sales/loans	Ratio (inpercentage)
1984-85	4.61	477.13	0.97
1985-86	7.67	623.65	1.23
1986-87	10.67	819.78	1.30
1987-88	12.97	1018.30	1.27
1988-89	16.30	1135.05	1.44
1989-90	19.72	1466.95	1.34
1990-91	21.32	2000.43	1.07
1991-92	34.08	1111.04	3.07
1992-93	63.15	2011.94	3.14
1993-94	53.52	2556.73	2.09
Average	—	—	1.69

SOURCE : Annual Reports of the Bank.

This ratio shows the earning left for share holders as a percentage of net loans (sales) provided. It measures the over all efficiency of the unit.

Table No. 4.12 shows the net profit margin of the Bank, for the period of study.

Bank has been earning profit for all the ten years. The percentage of profits shows increasing trend from 1984-85 to 1989-90 and during the next year the profit rate has fallen down. During the next two years the profit percentage again shows an improvement but again it has decreased during the subsequent year from the above table it is concluded that, for the year 1990-91 and 1993-94 the unit had not maintained effective cost control programme.

On the basis of the above analysis it can be concluded that the overall profit earning capacity of the Bank is good. It indicates that the Bank had effective cost control programme.

4.5.4 (b) RETURN ON SHAREHOLDERS INVESTMENT RATIO :

The formula used is as follows :

$$\text{Return on shareholders Investment Ratio} = \frac{\text{Net profit (after taxes \& Interest)}}{\text{Shareholders funds or equity}}$$

Shareholders equity includes equity capital, preference Share Capital and reserves & surpluses (less accumulated losses if any) . It is also termed as net worth.

The ratio shows how well the firm has used the resources of the owners. This ratio is a measure of the profitability of an enterprise. The realisation of a

satisfactory net income is the major objective of a business and the ratio shows the extent to which this objective is being achieved . It should be compared with the ratio of similar companies.

The business can service only when the return on capital employed is more than the cost of capital employed in the business.

LIMITATIONS OF RETURN ON SHAREHOLDERS INVESTMENT RATIO :

Some of the important limitations are as follows :

1. Manipulation Possible : ROI is based on earnings and investments. Both these figures can be manipulated by management by adopting varying accounting policies regarding depreciation inventory valuation, treatment of provisions etc. the decision in respect of most of these matters is arbitrary and subject to whims of the management.

2. Different basis for computation of profit and investments:

For example, fixed assets may be taken at gross or net values, earnings may be taken before or after tax, etc.

3. Emphasis on short term profits : ROI emphasises the generation of short-term profits. The firm may achive this objective by cutting down cost such as those on research and development or sales promotion. Cutting down of such costs without any justification may adversely affect the profitability of the firm in the long-run, though ROI may indicate better performance in the short-run.

4. POOR MEASURE : ROI is a poor measure of a firm's performance since it is also affected by many extraneous and non-controllable factors. Often the present return is the result of the wisdom or folly of the past management thus, the present management cannot take credit or be held responsible for the doings of their predecessors.

5. Undue Significance to Capital Resources : ROI gives undue significance to capital resources whereas profits may be the result of contributions of various other inputs particularly human resources. However, their role is not clearly visible in the computation of ROI.

6. Mars Initiative : ROI, when used as measure for evaluation of the performance of managers, may mar their initiative. Managers who are satisfied with the present ROI tend to become conservative and may not take any initiative to expand due to the fear of decrease in the ROI. This would result in non-exploitation of the available a pportunities and resources.

On account of the above limitations, it can be said that ROI is not an adequate measure for judging the financial performance of a business under taking. This will prove to be a good yardstick for measuring a firms performance if it is based on figures calculated over a period of time instead of an figures for one or two years. Moreover, it will give better results if the firm has an effective system of budgetory control.

TABLE NO. 4.13

RETURN ON SHAREHOLDERS INVESTMENT

(ls.in Lakhs)

Year	Net Profit (after taxes & Interest)	Shareholders fund or equity	Ratio
1984–85	4.61	83.02	0.0555
1985–86	7.67	96.03	0.0799
1986–87	10.67	109.66	0.0973
1987–88	12.97	125.21	0.1036
1988–89	16.30	140.52	0.1160
1989–90	19.72	171.32	0.1151
1990–91	21.32	203.04	0.1050
1991–92	34.08	223.60	0.2032
1992–93	63.15	285.61	0.2211
1993–94	53.52	324.05	0.1652
Average	—	—	0.1262

SOURCE : Annual Reports of the Bank.

The most commonly used measure of profitability is to relate the profit output with the capital input and thus compute the rate of return on Capital Investments the term investment can be classified in the following way :

1. Return on Shareholders Investment.

2. Return on Capital Employed.

3. Return on equity capital.

At this stage we are concerned with the return on shareholders investment which is known as return on shareholders equity or, return on net worth.

Return on net worth is an effective device to measure earnings on net worth from the owners point of view. The calculation of this ratio is meaningful in the sense that it measure, the residue of income which really belongs to the own i.e. net profit after tax. The earnings of a satisfactory return is the most desirable objective of any business. Therefore, this ratio is, of grate interest to the present as well as prospective shareholders and also great concern to management.

A low rate of return may indicate that the concern is not very successful because of inefficient and ineffective financial or general management, unfavourable general business conditions or over investment in fixed assets.

A high rate of return, on the other hand may be a result of efficient management throghout the organisation, has favourable general business conditions, shareholders or the owners benefit to the extent to the cost of borrowed funds is less than the return earned by the concern on these funds.

The rate of return can be improved by making the best use of borrowed funds as the lenders are paid interest at a fixed rate only and it also reduces the tax liability whereas the earnings realized by making use of borrowed funds are at a rate higher than the net cost of these funds

and the savings. Thus, effected, increase the profits desirable to equity shareholders.

Table no. 4.13

Above table contains results of the return on shareholders equity during the period under referance.

Table shows that the average rate of return on investment ratio is o.1262 for ten years under study. When we observe the table we see that, throughout the first nine years there has been increasing trend in the ratio from 0.0555 in 1984-85 to 0.2211 in 1992-93. But during the year 1993-94 the ratio has decreased to 0.1652. The above trend indicates that the management has utilised the funds effectively which was provided by the shareholders.

4.6 COMPARISON :

To get a comparative idea, we will compare Return on shareholders Investment ratio of this Bank with the ratio of anather primary Teacher's Co—op Bank. We have selected the Ahmadnagar District primary Teacher's Co—op. Bank Ltd; Ahmadnagar for the purpose of making . comparison. Accordingly, we will calculate the Return on shareholders investment ratio of Ahmadnagar district primary Teacher's Co—op. bank Ltd. Ahmadnagar for the year 1992-93 and 1993-94.

TABLE NO. 4.14

RETURN ON SHAREHOLDERS INVESTMENT RATIO OF THE AHMADNAGAR

DISTRICT PRIMARY TEACHER'S CO-OP. BANK LTD, AHMADNAGAR.

(Rs. in lakhs)

Year	Net profit(after Taxes & Interest)	shareholders fundor equity	Ratio
1992-93	37.87	230.13	0.1646
1993-94	38.53	259.09	0.1487
Average	—	—	0.1567

SOURCE : Annual Reports of the Ahmadnagar district primary Teacher's co-op bank Ltd; Ahmadnagar.

The table, no. 4.13 shows that the average return on shareholders investment ratio of the primary Teacher's co-op. Bank Ltd Satara is o.1932 for the two years 1992-93 and 1993-94. While table no. 4.14 shows that the average ratio of the Ahmadnagar district primary Teacher's co-op. Bank Ltd, Ahmadnagar is 0.1567 for the same period. Thus, the profitability of the primary Teachers' co-op Bank Ltd, Satara secures to be better than the Ahmadnagar District primary Teacher's co-op. Bank Ltd. Ahmadnagar.

From the above, it can be concluded that the return on shareholders investment ratio of the primary Teacher's co op Bank Ltd; Satara is better than that of the Ahmadnagar District primary Teacher's co-op Bank Ltd; Ahmadnagar.

TABLE NO. 4.15

SUMMARY OF THE RATIOS OF THE BANK

Sr. No.	Types of Ratios	Years										Average
		1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	
1	LIQUIDITY RATIOS :											
1.1	Current Ratio	1.20	1.74	1.76	1.74	1.69	1.43	1.27	1.40	1.68	1.60	1.55
1.2	Liquid Ratio/Acid test Ratio	2.56	3.17	3.00	3.22	2.98	2.95	2.86	2.84	2.97	2.55	2.91
1.3	Cash Position Ratio	0.17	0.14	0.11	0.10	0.13	0.11	0.08	0.09	0.13	0.14	0.12
2	LEVERAGE RATIOS :											
2.1	Proprietory Ratio	0.14	0.13	0.12	0.11	0.10	0.10	0.09	0.10	0.11	0.11	0.11
2.2	Debt to Equity Ratio	5.40	5.86	6.43	7.07	7.71	8.42	8.80	8.19	7.02	7.12	7.20
2.3	Fixed assets to tangible net worth Ratio	18.41	15.11	12.87	14.34	12.69	12.41	12.00	16.01	13.58	12.80	14.02
2.4	Interest coverage Ratio	1.16	1.20	1.21	1.21	1.21	1.21	1.19	1.32	1.38	1.30	1.24
3	ACTIVITY RATIOS :											
3.1	Debtors turnover Ratio	194.95	350.25	343.58	349.97	388.37	368.76	301.96	448.03	384.70	291.98	342.26
3.2	Total assets turnover Ratio	0.82	0.87	0.91	0.90	0.83	0.81	0.90	0.64	0.78	0.85	0.83
3.3	Fixed assets turnover Ratio	31.23	42.98	58.10	56.70	63.66	69.00	82.09	41.38	51.87	61.64	55.87
4	PROFITABILITY RATIOS:											
4.1	Net Profit Ratio	0.97	1.23	1.30	1.27	1.44	1.34	1.07	3.07	3.14	2.09	1.69
4.2	Return on Shareholders Investment Ratio	0.0555	0.0799	0.0973	0.1036	0.1160	0.1151	0.1050	0.2032	0.2211	0.1652	0.1262