CHAPTER – IV

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CHAPTER IV

LIQUIDITY SOLVENCY AND PROFITABILITY OF KOYANA CO-OPERATIVE BANK LTD, KARAD.

4.1 : INTRODUCTION :-

Financial statements are account balances arrayed in effective and meaningful order so that the facts and concepts they portray may be readily interpreted and used as bases for decisions by all people who are interested in the affairs of business. The persons interested in the analysis of financial statements can be grouped under three heads.

i) Owners or Investors.

ii) Creditors.

iii) Financial Executives.

Although all these three groups are interested in the financial conditions and operating results of an enterprise, the primary information that each seeks to obtain from these statements differs, reflecting the purpose that the statement is to serve.

The trade creditors, commercial bankers, the institutional lenders etc. are interested in short term solvency or liquidity of the company. They are mostly concerned with the ability of a borrowing enterprise to meet its financial obligations timely.

Long term creditors, lending institutions, debenture holders etc. are interested in the long term solvency of the enterprise. As they are concerned with the ability of a borrowing enterprise to pay interest and redeem loans within a specified time.

Investors in shares are primarily interested in knowing the profitability of the business. As they are concerned with the dividend payments and capital appreciation possibilities.

AS financial strength of any business enterprise can be better judged by liquidity, profitability and solvency position, an attempt is made in this chapter to analyses and judge the liquidity, solvency and profitability position of Koyana Co-operative Bank Ltd., Karad.

4.2. :- Liquidity of Koyana Co-operative Bank Ltd., Karad.

Liquidity is defined as the ability to realise value in money, the most liquid of assets. It refers to the ability of a firm to meet current/short term obligations. When they become due for payment. Liquidity is a prerequisite for the very survival of a firm. The ratios known as liquidity ratios are useful in measuring the liquidity of the firm. The liquidity ratios measure the ability of a firm to meet its short term obligations and reflect the short term financial strength/solvency of a firm.

The ratios applied to judge the liquidity or the short term solvency are :-

4.2.1 :- Current Ratio :-

Current ratio measures the solvency of the company in the short term. It is also called as working capital ratio is most widely used of all analytical devices based on the balance sheet. It matches current assets of the firm to its current liabilities.

The current ratio indicates the liquidity of current assets. A business enterprise should not suffer from lack of liquidity and also has to take care that excess amount is not tied up in liquid assets. Generally a current ratio of 2:1 is considered as satisfactory.

Current assets normally include cash in hand or at bank, Marketable securities other short term high quality investments, bills receivable, prepaid expenses work in progress & Debtors and inventories.

While current liabilities are composed of S. Creditors, Bills payable, outstanding and accrued expenses, income tax payable, bank overdraft.

In case of banking institutions current assets will include. Cash in hand or at bank, marketable securities, other short term high quality investments, short term loans while current liabilities are composed of current deposits, savings deposits, matured time deposits, interest payable

Formula :-

$$\text{Current Ratio} = \frac{\text{Current Assets.}}{\text{Current Liabilities.}}$$

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

Table No. 4.1 :Table showing current ratio of the bank for the years 2002-07

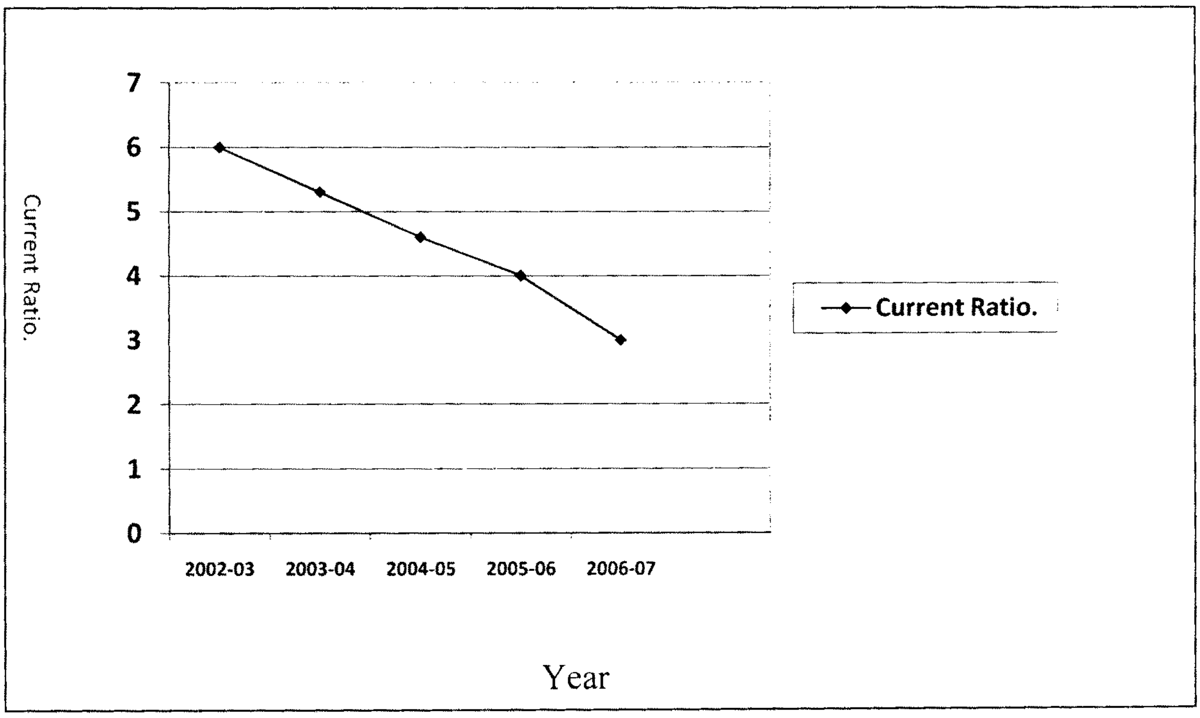
(Rs. In Lakhs.)

Year	Current Assets	Current Liabilities	Current Ratio.
2002-03	1293.19	435.77	6
2003-04	1439.61	644.79	5.3
2004-05	1797.23	750.32	4.6
2005-06	2108.78	964.78	4
2006-07	2099.10	716.18	3

(Source : Audited Financial Statements)

Chart No. 4.1 :-

Line Chart showing current ratio of the bank for the year 2002-07



Conclusions :-

1) Current Assets show an increasing trend except during 2007.

2) Current liabilities also show an increasing trend during the period under study.

3) Current ratio of the bank shows a decreasing tend. The ratio is highest i.e. 6 during. 2003 and lowest i.e.3 during 2007

4) The current ratio is much higher than the standard of 2:1 during the initial 4 years under study afterwards it has decreased during 2007. But still it is higher than the standard.

5) A high Current ratio indicates that the bank has maintained excess liquidity and excessive amount is tied up in current assets.

4.2.2 : Quick Ratio/Acid test Ratio :-

The Acid test ratio /Quick ratio is also termed as liquid ratio, is concerned with the relationship between liquid assets and current liabilities. Liquid assets would include cash, debtors, after providing for bad and doubtful debts and securities which can be realized without difficulty.

It is supplementary measure of liquidity and places more emphasis on immediate conversion of assets in to cash without loss of value. This ratio is a better test of financial strength than the current ratio as it gives no consideration to inventory which may be very slow moving.

Similarly as emphasis is on the ready availability of cash for payment, prepaid expenses are excluded from quick assets

In case of banking institutions, liquid assets will include cash bank balance & marketable securities and it eliminates receivables

A quick ratio of 1:1 has usually been considered favorable since for every rupee of current liabilities there is a rupee of quick/ liquid assets.

Formula :-

$$\text{Liquid Ratio} = \frac{\text{Liquid Assets.}}{\text{Current Liabilities.}}$$

Table No. 4.2 :-Table showing Liquid ratio of the bank for the years 2002-07

(Rs. In Lakhs)

Year	Liquid Assets	Current Liabilities	Liquid Ratio.
2002-03	967.63	435.77	4.5
2003-04	966.37	644.79	3.6
2004-05	1247.73	750.32	3.2
2005-06	1509.81	964.78	2.8
2006-07	1335.50	716.98	1.9

(Source : Audited financial statements)

Conclusions :-

1) Liquid assets of the bank shows fluctuating trends it was Rs. 967.64 lakhs during 2003, it shows a slight decrease during 2004, afterwards in the next two years it shows a increase but again it has decreased during 2007.

2) Liquid ratio shows a decreasing trend the ratio is much higher than the standard of 1.1 during the entire period under study. The liquid ratio is 4.5 during 2004. Afterwards it has decreased and come to 3.6 and 3.2 during 2004 & 2005; the decreasing trends continued and the ratio came to 2.8 and 1.9 during 2006 and 2007. The situation has improved but still it is higher than the standard.

3) A higher Liquid ratio indicates that the bank has more liquid assets and excessive cash is tie up in liquid assets which can be invested profitably.

4.3 :- Solvency position of Koyana Co-operative Bank Ltd., Karad.

Shareholders, debenture holders, long term creditors are concerned with the long term financial prospects. The long term financial solvency of any business can be better judged by testing its ability to meet its long term financial commitments i.e. Interest standing charges and principal amount.

It deals with the efficiency or inefficiency of a business in utilizing the funds i.e. long term loans, debentures, shares. The long term financial soundness of any business is examined by calculating ratios popularly known as leverage or capital structure ratios. Normally the following ratios are analyzed to judge the long term solvency.

a) Debt –Equity Ratio.

b) Proprietary Ratio.

c) Interest coverage Ratio

The Koyana Co-operative bank ltd. Karad. is a urban Co-operative bank & a service institution, the ratios mentioned above will not be applicable for determining its long term solvency position and even if worked out it will give misleading results. Therefore, to assess the long term solvency of the bank following ratios are analyzed.

1. Capital funds and risk assets ratio (CRAR Ratio)
2. Net NPA percentage
3. Credit deposits ratio (CD ratio)

4.3.1. Capital funds and risk assets Ratio (CRAR)

CRAR ratio determines the solvency of the bank; it determines the adequacy of capital The CRAR ratio depicts the percentage of capital funds in relation of risk weighted assets of the bank. The capital fund element is classified into tier I and tier II capital elements,Tier I Capital is the core capital and it includes. Paid up capital less intangible assets, losses and reserve & surplus like statutory reserves, Capital reserves, other reserves & surplus in profit & loss a/c. and Tier II capital element include undisclosed reserves, revaluation reserves, General provisions and loss reserves, investment fluctuation reserves/ funds and hybrid debt capital instruments & subordinated debts.

Risk assets include adjusted value of risk assets i.e. on balance sheet items and adjusted value of non-funded and off balance sheet items the risk weights are determined considering the risk involved in that assets.

The bank has to maintain minimum 9% capital funds of its risk weighted assets and off balance sheet items. Generally banks prefer to invest the funds in government securities having zero risk weights because of its insufficient capital base.

$$\text{CRAR Ratio} = \frac{\text{Capital funds}}{\text{Total risk weighted assets}} \times 100$$

Table No. - 4.3 Table of showing CRAR Ratio of the bank

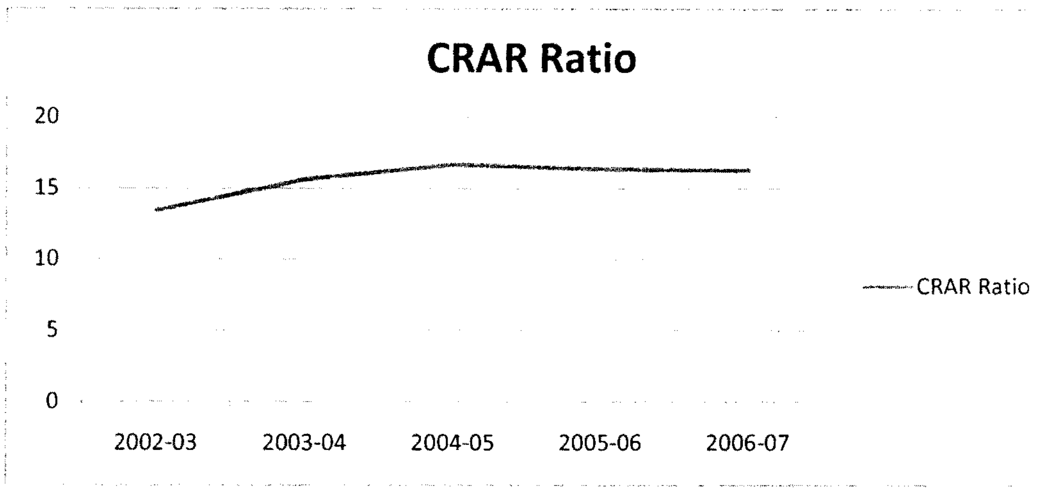
(Rs. In Lakhs)

Years	Capital Funds		Total	Risk weighted assets	CRAR Ratio
	Tier I	Tier II			
2002-03	185.06	7.75	192.81	1435.92	13.43%
2003-04	203.08	17.74	220.82	1411.88	15.64%
2004-05	239.04	26	265.04	1587.44	16.70%
2005-06	278.58	10.50	289.08	1765.27	16.38%
2006-07	296.10	14.80	310.90	1908.96	16.29%

(Source: official records of Koyana co-op bank ltd. Karad.)

Chart No. 4.2:-

Line Chart showing current ratio of the bank for the year 2002-07



Observation –

1. Capital funds of the bank show an increasing trend over the period under study.
2. Risk assets also show an increasing trend for the entire period under study.
3. The CRAR ratio of the bank shows an increase up to the year 2005 afterwards is shows a slight decrease during 2006 & 2007.
4. CRAR ratio of the bank is at a satisfactory level. It is more than 9% for the entire period understudy and the ratio is highest of more than 16% for the years 2005 – 07.
5. The CRAR ratio indicates that the bank has adequate capital funds in relation to risk assets.

4.3.2 Net N.P.A. percentage –

The new financial reforms are taking place in the banking sector small banks are being merged into the larger banks and the main reason for this restructure is failure on the part of the bank to fulfill the norms of the reserve bank of India regarding recovery. N.P.A. etc. That is why study of net N.P.A. of the bank is crucial while considering the solvency position of the bank.

Net N.P.A. percentage is the percentage of net non-performing assets as to net advances of the bank. Net advances of the bank are arrived at after deducting the total N.P.A. provisions held from the gross advances. And Net N.P.A.S is arrived at after deducting provision held for N.P.A & DICCG/ECGC claims received and part payment on N.P.A. received from the gross N.P.A.S.

Non Performing assets –

Narsimham committee appointed for analyzing the problems and suggest remedies regarding the co-operative sector explained the concept non-performing assets. According to them, the basic principle/regarding the non-performing assets is that the outstanding income of interest on any loan account should not be considered as income till it is actually received. Therefore the loan account that is not capable of generating income should be regarded as the non- performing assets.

Assets Classification –

Reserve bank of India has made mandatory the concept of NPA to the urban co-operative societies or banks from 1993. Any loan account that is not generating income for more than 12 months should be regarded as the non performing assets. Societies should not charge interest on such account another important thing regarding NPA is while deciding the NPA account the security should not be considered. But while providing for N.P.A. the market value of the security should be considered.

If the installment of the loan or the amount of interest is not credited in the account by 31st march then the NPA assets should be classified according to duration as under.

1. **Standard Assets -**

The account on which the installment and the amount of interest is regularly credited is considered as the standard or good account. It remains in the standard category upto 6 months after that if no transaction takes place on the account it becomes substandard. The bank has to make 0.25 % provision for the standard assets.

2. **Substandard assets –**

   The account on which the installment or the amount of interest is not credited from 6 months to 18 months is considered as the substandard asset. Provision of 10% is to be made regarding these assets.

3. **Doubtful assets –**

   The account on which any type of income is not collected for more than 18 months is regarded as the doubtful assets. Doubtful assets are further classified in 3 categories.

   i) **Doubtful for 1 year –**

      The asset is considered doubtful for 1 year if the installments or interest is pending on the account for 12 months. a provision of 20% is to be made for doubtful assets.

ii) **Doubtful for 2 year –**

The asset is considered doubtful for 2 years if the installments or interest is pending on the account for 24 months, a provision of 30% has to be made for these assets.

iii) **Doubtful for 3 years –**

The asset is considered doubtful for 3 years if the installments or interest is pending on the account for more than 24 months, a provision of 50% has to made for these assets.

4. Loss assets –

The asset is termed as the loss asset, if any loan carries no security or if the internal auditor terms the asset so. E.g. if the stock of any type of goods is hypothecated against any loan as security and on scrutiny, it is found that the security offered does not exist, the standard asset can also become a los asset. The bank has to make a provision 100% for loss assets.

As per the guidelines of R.B.I banks should keep their Net N.P.A. percentage within 10%

$$\text{Net N.P.A. Percentage} = \frac{\text{Net NPAS}}{\text{Net Advances}} \times 100$$

Now let us consider the N.P.A Percentage of the Koyana Co-operative Bank ltd. Karad.

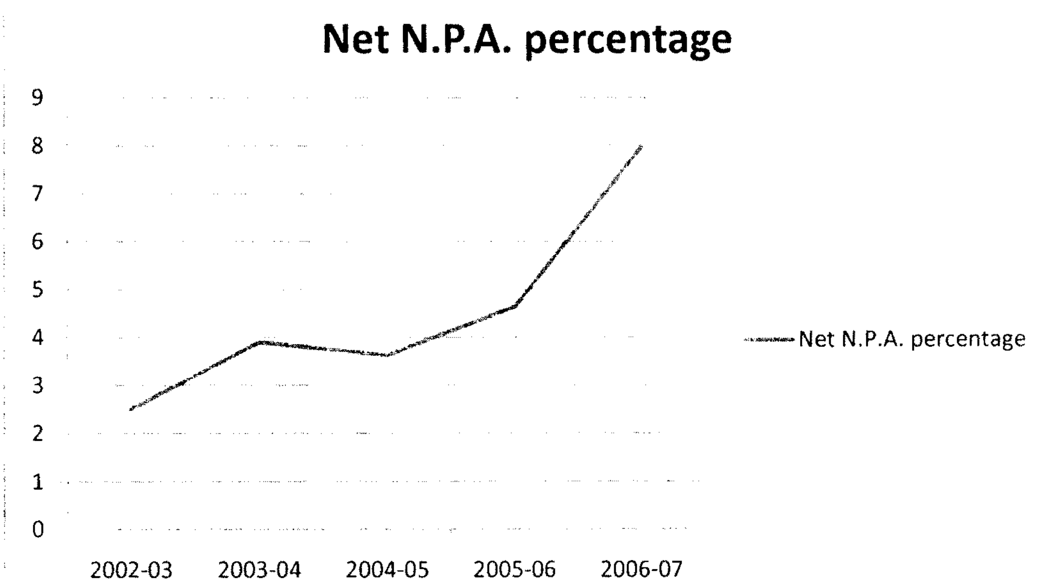
Table No. 4.4 - Table showing Net N.P.A. percentages of the bank

(Rs. In lacs)

Year	Net N.P.As	Net Advances.	Net N.P.A. percentage
2002-03	23.93	952.67	2.51
2003-04	49.12	1258.28	3.90
2004-05	54.01	1485.99	3.63
2005-06	77.66	1672.81	4.64
2006-07	159.34	1996.06	7.98

(Source: official records of Koyana Co-op bank ltd. Karad.)

Chart No. 4.3 Line chart showing Net N.P.A. percentage of the bank



Observations –

1. The net N.P.As and net advances of the bank show an increasing trend during the period under study.

2. The net N.P.A. percentage shows an increasing trend except in the year 2005 during which it shows a slight in decrease.
3. The net N.P.A. percentage is lowest i.e. 2.5% during 2003 and highest i.e. 7.98% during 2007 which indicates a substantial increase in Net N.P.A. during the period under study.
4. The net N.P.A percentage is less than 10 % during the whole period under study, which indicates that net N.P.A. percentage is within the limit, but the N.P.A. percentage shows an increasing trend and it is highest during 2007, therefore bank should try to improve the recovery of advances & lower the N.P.A. percentage in the forthcoming years.

4.3.3 Credit deposits ratio : (CD Ratio) -

Banks help to mobilise the financial surpluses of an economy and transfer them to areas of financial deficit, these are the main functions of the bank, and therefore it is necessary to calculate the percentage of loans & advances to the deposits of the bank. Credit deposit ratio calculates the ratio of total advances to total deposits of the bank. The credit deposit ratio should be 65% to 70%.

$$\text{Credit deposit Ratio} = \frac{\text{Total advances}}{\text{Total deposits}} \times 100$$

Table No. 4.5 – Table showing credit deposit ratio of the bank for the years 2002-07.

(Rs. In lacs)

Year	Total Advances	Total Deposits	Credit deposit Ratio
2002-03	960.41	1785.72	53.78%
2003-04	1270.14	2060.97	61.63%
2004-05	1502.99	2509.65	59.89%
2005-06	1699.41	2885.63	58.89%
2006-07	2038.56	3002.25	67.90%

(Source: Audited Financial Statements)

Observations –

1. Total Advances & deposits of the bank show an increasing trend.
2. The credit deposit ratio shows a clearly fluctuating trend. it was 53.78% during 2003, it shows increase during 2004 but afterwards it shows a decline during 2005 & 2006 then again it shows increase and came to 67.90% during 2007.
3. The CD ratio is lower than the standard norm of 65% during the entire period under study except during 2007. This low CD ratio indicates that the advancement of loans of the bank is low during these years.
4. The CD ratio is at satisfactory level during 2007, the bank should try to maintain and increase the percentage in the coming years.

4.4 :- Profitability of Koyana Co-operative Bank Ltd., Karad.

The management of the firm is eager to measure its operating efficiency. Similarly the owners invest their funds in the expectation of reasonable returns. The operating efficiency of a firm and its ability to ensure adequate returns to its shareholders/owners depends ultimately on the profits earned by it. The profitability of a firm can be measured by its profitability ratios.

The profitability of the firm is the net result of a large number of policies and decisions. The profitability ratios show the combined effects of liquidity, asset management and debt management on operating results. Profitability ratios are measured with reference to sales incomes, capital employed, total assets employed and shareholders funds etc.

The profitability can be assessed on the basis of a number of ratios out of which the following have been selected to judge the profitability of Koyana Co-operative bank ltd. Karad.

a) Interest Income to working funds Ratio.
b) Non – Interest income to working funds Ratio.
c) Operating profit to working funds Ratio.
d) Net interest margin Ratio.
e) Return on assets.

4.4.1 :- Interest Income to working funds Ratio :-

Interest income is the important source of income for any bank. Interest income includes interest received on loans, investments and on deposits with other banks. The working funds of the bank are arrived at after deducting the bills for collection being B/R as per contra, branch adjustment & N.P.A. Interest receivable from the total assets of the bank. It is necessary to calculate the ratio of this interest income to the working funds of the bank.

This ratio is calculated as

$$\frac{\text{Interest Income}}{\text{Working funds}} \times 100$$

Table 4.6:- Table showing ratio of interest income to working funds.

(Rs. In Lakhs.)

Year	Interest Income	Working funds	Interest Income to working funds ratio
2002-03	220.11	2025.22	10.87
2003-04	248.85	2331.24	10.67
2004-05	275.86	2838.43	9.72
2005-06	308.04	3273.75	9.41
2006-07	314.19	3440.53	9.13

(Source : Audited Financial Statements)

Observations -

1) Working funds show an increasing trend over the period understudy.

2) The Ratio of Interest Income to working funds shows a continuous decreasing trend. The ratio is highest of 10.87% during 2003, and lowest of 9.13% during 2007.

3) The ratio indicates that the working funds are efficiently used in the bank to earn a satisfactory interest income but the bank should try to maintain the percentage in the coming years.

4.4.2 :- Non-Interest Income to working funds Ratio :-

Accepting deposits and advancing loans is the main function of any bank. There are various subsidiary functions which are performed by the Bank. Bank provides clearing facilities and demand draft facilities to their customers and thereby earns commission. This income forms a part of total income.

Formulla

$$\frac{\text{Non Interest income}}{\text{Working funds}} \times 100$$

Table No. 4.7:- Table showing ratio of non-interest income to working funds.

(Rs. In Lakhs)

Year	Non-Interest Income	Working funds.	Ratio of Non-Interest Income to Working funds.
2002-03	15.23	2025.22	0.75%
2003-04	15.38	2331.24	0.66%
2004-05	4.23	2838.43	0.15%
2005-06	2.11	3273.75	0.06%
2006-07	4.04	3440.53	0.12%

(Source : Audited Financial Statements)

Observations -

1) The ratio of non-interest income to working funds shows a decreasing trend except during 2007. It is highest of 0.75% and 0.66% during 2003 & 2004 resp. but afterwards it shows a decline and came to lowest of 0.06% during 2006. Again it shows a slight increase and came to 0.12% during 2007.

2) The ratio is satisfactory during the initial years, but the bank has failed to maintain the percentage, as a result of decrease in non-interest income.

4.4.3 Operating profit to working funds Ratio -

The profitability of the bank is measured by establishing relation of operating profit with the working funds of the bank. Operating profit is the net profit before provisions the ratio indicates the return on the working funds of the bank.

The ratio is calculated by using the following formulla.

$$\frac{\text{Operating profit}}{\text{Working funds}} \times 100$$

Table No. 4.8:- Table showing operating profit to working funds ratio of the bank for the years 2002-07.

(Rs. In Lakhs)

Year	Operating Profit	Working funds.	Ratio of operating profit to working funds.
2002-03	30.24	2025.22	1.49
2003-04	27.89	2331.24	1.20
2004-05	32.04	2838.43	1.13
2005-06	45.86	3273.75	1.40
2006-07	40.98	3440.53	1.19

(Source : Audited Financial Statements)

Observations –

1. The ratio of operating profit to working funds show decreasing trend except in the year 2006 during which it shows an increase, due to a substantial increase in operating profit.
2. The ratio is at a satisfactory level for the entire period under study, which indicates that the working funds are efficiently employed to earn a satisfactory return.

4.4.4 : Net interest Margin Ratio :-

Net Interest Margin of the bank is the difference between net interest income and net interest expenses. As the difference between interest income & interest expenses is the profit of the bank, it is necessary to calculate the net interest margin in relation to working funds of the bank.

Formulla

$$\frac{\text{Net interest Margin}}{\text{Working funds}} \times 100$$

Table No. 4.9:- Table showing net Interest Margin of the bank for the years 2002-07

(Rs. In Lakhs)

Year	Net Interest Margin	Working funds.	Net Interest Margin ratio
2002-03	42.73	2025.22	2.11%
2003-04	45.05	2331.24	1.93%
2004-05	59.02	2838.43	2.08%
2005-06	76.05	3273.75	2.32%
2006-07	77.65	3440.53	2.26%

(Source : Audited Financial Statements)

Observations –

1. The net Interest Margin shows an increasing trend over the period under study.
2. The ratio of net interest margin shows a fluctuating trend.
3. The ratio is more than 2% for the entire period understudy except in the year 2004 during which it is somewhat low at 1.93%.

4. The net interest margin ratio is at a satisfactory level which indicates that the bank has earned a satisfactory net interest margin.

4.4.5 : Return on Total Assets :-

The profitability of the firm is measured by establishing relation of net profit after tax with total assets of the organization. This ratio indicates efficiency of utilization of assets in generating revenue.

$$\text{Return on Total Assets :- } \frac{\text{Net Profit after Tax}}{\text{Total Assets.}} \times 100$$

Table No. 4.10 : Table showing return on total Assets of the bank for years 2002-07

(Rs. In Lakhs)

Year	Net Profit after Tax	Total Assets	Return on total Assets.
2002-03	18.30	2243.88	0.82
2003-04	15.69	2706.97	0.58
2004-05	15.96	3209.72	0.50
2005-06	20.38	3733.37	0.55
2006-07	5.36	3519.78	0.15

(Source : Audited Financial Statements)

Observations -

1. The return on total assets shows a decreasing trend except during 2006.

2. The return on total assèts is satisfactory during the initial years but it started declining and came to 0.15% during 2007 as a result of substantial decrease in net profit, it indicates inefficiency in assets utilization

General Conclusions –

1. The liquidity ratios indicate that the liquidity position of the bank is sound but it has maintained excess liquidity. It has made excessive investment in current & liquid assets.

2. The solvency position of the bank is satisfactory as indicated by the solvency ratios. The bank has sufficient capital funds in relation to its risk weighted assets. And also the net N.P.A percentage is within the limit of 10% but still the bank has to improve its recovery position, as the N.P.A. percentage shows increasing trend and is highest during 2007.

3. The credit deposit ratio shows a satisfactory position only in 2007, during which it is more than 65%. The bank has to maintain and increase this percentage in the coming years by advancing medium & long term loans.

4. A high liquidity ratio and a low CD Ratio indicate that the bank has preferred to invest the funds in government securities having higher liquidity and lower risk weights.

5. The profitability ratios depict a satisfactory position of profit. It indicates that the working funds of the bank are employed efficiently to earn a satisfactory interest income & operating profit, but still there is scope for the bank to increase its profitability by using the excess liquid assets for advancement of loans and investing them in most profitable channels.

Thus the analysis of liquidity, solvency & profitability of Koyana co-operative bank Ltd. Karad judged with the help of ratio analysis represents a satisfactory position.