

SOLVENCY POSTION IN CO-OPERATIVE BANKS
A study Related to BDCC Bank Ltd. Bijapur



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Short Profile

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ABSTRACT:

Capital adequacy in relation to economic risk is a necessary condition for the long term soundness of banks. As banks carry on the business on a wide area network basis. By establishing cooperative banks by providing permission and controlled under governing rules of the RBI, The cooperative banks carry their activities to reach the obligation of agriculture people by providing timely financial assistance them. The growth and development of these banks depends upon the capital structure and sound lending policy and proper solvency. The RBI presently has its supervisory mechanism by way of on-site inspection and off-site monitoring on the basis of the audited balance sheet of a bank to create confidence among the stakeholder of the banks.

KEYWORDS

Solvency Postion, Co-Operative Banks, Capital adequacy, economic risk.

INTRODUCTION:

Co-operative Banks work on principles of self-help and mutual cooperation for benefit of members. Co-operative Banks are created by persons belonging to the same local or community to mobilize funds by their deposits in proper way as per the Banking rules and make them empower. The growth and development of Co-operative Banks depend upon solvency position. Managing the solvency position is not an easy task because the Co-operative Banks provide financial help to agriculture sector basically from rural area. Some of the Co-operative banks are quite forward looking and have developed sufficient core competence to challenge state and private sector banks.

Financial Statements are prepared for decision making which provides a summarized view of financial position and operation Banks. The reputation and good will of the Banks depend upon the solvency status of the banks. The stakeholder should take keen interest to maintain proper solvency by paying liabilities in time and recover dues in time by effective strategy. The solvency of the Banks are measured under gearing ratio or capital structure or leverage ratio to know the ability to repay the principal amount and interest when due.

The present study is devoted on The Bijapur District Central Co-operative Bank Ltd, Bijapur (Vijayapur) to an in-depth analysis by adopting the technique of ratios to assess easily and more effectively for judging the performance of the banks in relation to earning capacity, short term financial strength and ability of such Banks to pay off its long term liabilities.

The Bijapur District Central Co-operative Bank Ltd. Bijapur (Vijayapur) is functioning in the Mumbai-Karnataka area. In recently Bijapur is renamed as Vijayapur. The VDCC Bank was established in the year 1919 to provide more and more financial assistance to agriculture sector. Now a day it has extended its credit to other sector also. Before the year 2000-2001 the BDCC Bank Bijapur working under one district name as Bijapur than the BDCC Bank Bijapur separated From Bagalakot District. After division of 10 years the Bank maintains proper stability by providing services to their customers. During the year 2012-13 the Bank has own capital of Rs.141.31 Crores, Deposits of Rs.797.56 Crores with working capital of Rs.1414.10 Crores and the Bank has achieved the margin of profit of Rs.509.46 Lakhs after paying the tax to the Government. The Bank also follows schemes of the Government to provide better services to the nation. The BDCC Bank has 29 branches to extend the services to the customers and having 25002 members as on 31-03-2013. The Bank has awarded by the State Government recently for the best performance in the field of co-operative sector by providing financial assistance to agriculture and its allied activities. In this paper an attempt is made to know how the Bank has maintained the solvency the position in repayment of long term and short solvency position in the Bank. Therefore the effort is made to know the solvency position by adopting some ratios.

OBJECTIVES:

The followings are the objectives of the study

- 1.To know the short term liquidity of the bank
- 2.To assess the relationship between term debt and shareholder's fund
- 3.To know the ability of the Bank to pay interest out of its profits.
- 4.To offer proper suggestions to maintain solvency

METHODOLOGY

The present study is purely based on secondary information collected from the records of the Bank. Annual reports are major source of information apart from other books referred to the study. The study is restricted to The Bijapur District Central Co-operative Bank Ltd, Bijapur (Vijayapur). This is one of the leading Cooperative Bank in this region. The collected information is analyzed by using various statistical tools like percentage and ratios.

The annual reports of the bank from 2007-08 to 2012 -13 are used for the analysis. The present study is based on annual reports which contain the detailed information relating to solvency position of the BDCC Bank Ltd, Bijapur. There are two types of solvency that is short term solvency and long term solvency.

(A) SHORT TERM LIQUIDITY RATIOS

Liquidity ratios indicate the short term financial position as well as short term solvency of the bank. The importance of adequate liquidity in the sense of the ability of a firm to meet current/short term obligation when they became due for payment can hardly be overstressed. In fact, liquidity is a prerequisite for the very survival of an institution. The liquidity measures the ability of firm to meet its short-term obligation and reflect the short-term financial strength of a firm. The following ratios which indicate the liquidity of a firm are:

1. CURRENT RATIO

Current ratio may be defined as the relationship between current assets and current liabilities. This ratio also known as working capital ratio is measure of general liquidity and is most widely used to make the analysis of a short-term financial position or liquidity of a firm. It is calculated by dividing the total of current assets by current liabilities.

CURRENT RATIO= CURRENT ASSETS / CURRENT LIABILITIES

A relatively high current ratio is an indication of that firm is liquid and has the ability to pay its current obligations an time as and when they become due. On the other hand, a relatively low current ratio represents that the liquidity position of the firm is not good and the firm shall not be able to pay of current liabilities in time without facing difficulties. An increase in the current ratio represents improvement in the liquidity of position of a firm while a decrease in the current ratio indicates that there has been deterioration in the liquidity position of the firm. As a convention the minimum of 'two to one ratio' is referred as banker's rule of thumb or arbiter standard of liquidity for a firm. A ratio equal or near to rule of thumb of 2:1 that's current assets double the current liabilities is considered to be satisfactory.

CURRENT RATIO

YEAR	CURRENT ASSETS	CURRENT LIABILITIES	RATIO
2004-05	25596.23	6356.98	4.02:1
2005-06	30691.08	8802.49	3.48:1
2006-07	38318.56	14679.75	2.61:1
2007-08	88948.75	14862.40	5.98:1
2008-09	53156.93	26636.61	2.00:1
2009-10	52547.80	16379.56	3.20:1
2010-11	71618.05	25539.45	2.80:1
2011-12	92406.78	33906.69	2.72:1
2012-13	76556.49	45492.38	1.68:1

Source: Calculated from the figures of annual reports of DCC Bank Bijapur from 2004-05 to 2012-13

The table reveals that the bank has maintained best ratio in the above all years. Bank has maintained sufficient current assets to meet current liabilities continuously. From 2004-05 to 2012-13 the said ratio has more than ideal ratio of 2:1. During the year 2007-08 the bank has highest ratio (5.98:1) and lowest ratio maintained in the year 2012-13 (1.68:1). It means that the bank has high liquid ability and it shows that bank is in a good position to meet its current obligations in time.

2. ACCID TEST /QUICK RATIO:

Quick ratio also known as Acid test or Liquid ratio is a more rigorous test of liquidity than the current ratio. The term liquidity refers to the ability of a firm to pay its short term obligations as and when they become due.

QUICK/ LIQUID/ ACID TEST RATIO= LIQUID ASSETS / CURRENT LIABILITIES

Quick assets are cash in hand, cash at bank, bills receivables, sundry debtors, marketable securities, temporary investments etc. Current liabilities are outstanding expenses, bills payable, sundry creditors, short- term advances, income tax payable, dividends payable, and bank overdraft etc. Usually, a high acid test ratio is an indication that the firm is liquid and has the ability to meet its liquid liabilities in time and on the other hand a low quick ratio re presents that the firm's liquidity position is not good. An ideal ratio of 1:1 is considered satisfactory.

QUICK RATIO

YEAR	QUICK ASSETS	QUICK LIABILITIES	RATIO
2004-05	7390.34	6356.98	1.16:1
2005-06	8945.57	8802.49	1.01:1
2006-07	11478.41	14679.75	0.78:1
2007-08	13479.58	14862.40	0.90:1
2008-09	16770.05	26636.61	0.63:1
2009-10	15131.77	16379.56	0.92:1
2010-11	19268.76	25539.45	0.75:1
2011-12	22252.08	33906.69	0.65:1
2012-13	8789.60	45492.38	0.19:1

Source: Calculated from the figures of annual reports of DCC Bank Bijapur from 2004-05 to 2012-13

From the above table, it is clear that the bank has maintained quick assets sufficient to meet quick liabilities during the years 2004-05 and 2005-06. But the position is reverse from 2006-07. It has not maintained the ideal ratio of 1:1. Though the current ratio is very high in all the years, quick ratio is lagging. It is suggested that bank must maintain the ideal ratio of 1:1 in coming next years for maintaining sound financial position. In the last year 2012-13 the ratio stood lowest of 0.19:1 is the not good sign of the bank.

3. ABSOLUTE LIQUID RATIO OR CASH RATIO

Absolute liquid assets are cash in hand, cash at bank, marketable securities or temporary investments. The acceptable norm for this ratio is 0.5:1. It means Re.1 worth absolute liquid assets are considered adequate to pay Rs 2 worth current liabilities in time as all the creditors are not accepted to demand at the same time and then cash may also be realized from debtors and inventories.

$\text{Absolute liquid ratio} = \frac{\text{absolute liquid assets}}{\text{current liabilities}}$

ABSOLUTE LIQUID RATIO

YEAR	ABSOLUTE LIQUID ASSTES	CURRENT LIABLITIES	RATIO
2004-05	707.50	6356.98	0.11:1
2005-06	855.10	8802.49	0.10:1
2006-07	1112.91	14679.75	0.08:1
2007-08	1295.36	14862.40	0.09:1
2008-09	1637.55	26636.61	0.06:1
2009-10	1539.15	16379.56	0.09:1
2010-11	1893.31	25539.45	0.07:1
2011-12	2177.38	33906.69	0.06:1
2012-13	2975.12	45492.38	0.07:1

Source: Calculated from the figures of annual reports of DCC Bank Bijapur from 2004-05 to 2012-13

The above table shows that the absolute liquid ratio in almost all the years recorded lowest value, the ideal ratio is 0.5:1 but the bank failed to maintain an ideal ratio. The bank has to improve short term solvency position in the coming years.

4. DEFENSIVE INTERVAL RATIO

It is a ratio that measures the number of days a company can operate without having access to non-current assets. This ratio compares the assets to the liabilities instead of comparing assets to expenses. Defensive Interval Ratio is a good way to find out if the company is good investment for you or not. It is also called as Defensive Interval Period.

$\text{DIR} = \frac{\text{Liquid Assets}}{\text{Daily Operational Expenses}}$

Daily Operational Exp/No of days in a year.

Operational Expenses are management expenses and operating expenses.

DEFENSIVE INTERVAL RATIO

Year	Absolute Liquid Assets	Daily Operational Exp	No of days
2004-05	707.50	452.99/365=1.24	570
2005-06	855.10	700.98/365=1.92	445
2006-07	1112.91	783.75/365=2.14	519
2007-08	1295.36	1002.66/365=2.75	470
2008-09	1637.55	1010.71/365=2.76	593
2009-10	1539.15	958.85/365=2.62	587
2010-11	1893.31	1760.00/365=4.82	388
2011-12	2177.38	1188.12/365=3.25	669
2012-13	2975.12	1880.12/365=5.15	577

Source: Calculated from the figures of annual reports of DCC Bank Bijapur from 2004-05 to 2012-13
The table shows that the defensive interval period in almost all the years having sufficient days to manage the assets, it is the high efficiency of the bank.

(B) LONG TERM SOLVENCY RATIOS

The term solvency refers to the ability of a firm to meet its long term obligations. The long term obligations of a firm includes debenture holders, financial institutions providing medium and long term loans and other loans. Accordingly long term solvency ratio indicates a firm's ability to meet the fixed interest and costs and repayment schedules associated with its long term borrowings. The following ratios serve the purpose of determining the solvency of the concern.

1. DEBT –EQUITY RATIO:

It is also known as external-internal ratio Is calculated to measure the relative claims of outsiders and the owners against the firm's assets. This ratio indicates the relationship between the external equities or the outsider's funds and the internal equities or the share holder's funds.

$\text{Debt-Equity ratio} = \frac{\text{outsiders funds}}{\text{share holders funds}}$

The outsider's funds include all debts or liabilities to outsiders, whether long- term or short –term debt is to be considered. The shareholders' funds consist of equity share, preference share capital, capital reserves, revenue reserves and reserves representing accumulated profits and surpluses like reserves for contingencies, sinking funds, etc. the accumulated losses and deferred expenses, if any, should be deducted from the total to find out shareholders' funds, it is called net worth and the ratio may be terms as debt to net worth ratio.

The ideal ratio is 2:1.

Debt – Equity Ratio

YEAR	OUTSIDE LIABILITIES	SHARE HOLDERS' FUNDS	RATIO
2004-05	7370.15	4061.23	1.81:1
2005-06	9916.15	4787.27	2.07:1
2006-07	15834.00	5335.26	2.96:1
2007-08	15639.85	5378.54	2.90:1
2008-09	27064.79	6184.12	3.98:1
2009-10	16540.37	6454.07	2.56:1
2010-11	25553.53	7202.31	3.54:1
2011-12	37691.70	8245.63	4.57:1
2012-13	47613.13	9490.44	5.01:1

Source: Calculated from the figures of annual reports of DCC Bank Bijapur from 2004-05 to 2012-13

From the above table the ratio of debt equity indicate that the DCC Bank Bijapur has maintained sufficient long-term solvency. During the above 9 years period, the calculated ratios are more than ideal ratio of 2:1. It means that the bank has ability to have more outside liability then share holder fund. The Bank is carried down its business activity on outsider's funds. During the year 2004-05 the ratio recorded 1.81:1 and highest ratio recorded 5.01:1 in the year 2012-13.

2.LONG TERM DEBT TO SHAREHOLDER FUND RATIO

The ratio attempts to measure the relationship between long term debts and share holder funds. In other words, this ratio measures the relative claims of long term creditors on the one hand and owners on the other hand.

LTD TO SF RATIO= Long term debts / share holders' funds

The ratio of 1:1 is generally acceptable. The lower ratio shows that the firm has to worry in meeting its fixed obligations. This ratio also indicates the extent to which a company has to depend upon outsiders for its financial requirements.

LONG TERM DEBT TO SHAREHOLDERS' FUNDS RATIO

YEAR	LONG TERM DEBT	SHAREHOLDERS' FUND	RATIO
2004-05	918.33	4061.23	0.23:1
2005-06	1121.53	4787.27	0.23:1
2006-07	1053.67	5335.26	0.24:1
2007-08	698.33	5378.54	0.13:1
2008-09	382.73	6184.12	0.06:1
2009-10	144.38	6454.07	0.02:1
2010-11	1011.38	7202.31	0.14:1
2011-12	3785.00	8245.63	0.46:1
2012-13	509.82	9490.44	0.05:1

Source: Calculated from the figures of annual reports of DCC Bank Bijapur from 2004-05 to 2012-13

From the above table it is clear that the ratio indicates in all the above years lower the ideal ratio of 1:1. A very low ratio is not considered satisfactory for the shareholders because it indicates that the firm has not been able to use low cost outsiders' funds to magnify their earnings. During the year 2011-12 the ratio recorded highest of 0.46:1 in the entire study period.

The solvency of the Bank is measured by knowing the relationship between total liabilities to total assets. Generally, lower the ratio of total liabilities to total assets, more satisfactory or stable is long-term solvency position of a form.

SOLVENCY RATIO = TOTAL LIABILITIES / TOTAL ASSETS X 100

TOTAL LIABILITIES TO TOTAL ASSETS RATIO

YEAR	TOTAL LIABILITIES	TOTAL ASSETS	%
2004-05	7370.15	34528.83	21.34
2005-06	9916.15	41121.18	24.11
2006-07	15834.00	50099.24	31.60
2007-08	15639.85	55600.62	28.12
2008-09	27064.79	73547.28	36.79
2009-10	16540.37	76632.99	21.58
2010-11	25553.53	97093.63	26.31
2011-12	37691.70	121290.70	31.07
2012-13	47613.13	142513.99	33.40

Source: Calculated from the figures of annual reports of DCC Bank Bijapur from 2004-05 to 2012-13

From the above table, the ratio in all years has lower percentage and these ratios stood as per ideal value. It shows that the bank has most solvency position and satisfactory. During the year 2008-09 recorded highest percentages that is 36.79 and lowest percentage is recorded during the year 2004-05 that is 21.34

3. FIXED ASSETS TO NET WORTH RATIO OR FIXED ASSETS TO PROPRIETOR'S FUNDS

The ratio establishes the relationship between fixed assets and shareholder's funds, that's share capital plus reserves, surpluses and retained earnings. The ratio of fixed assets to net worth indicates the extent to which shareholders' funds are sunk into the fixed assets. Generally, the purchase of fixed assets should be financed by shareholders equity including reserves surpluses and retained earnings. If the ratio less than 100% it implies that owners funds are more than total fixed assets and part of the working capital is provided by the shareholders. When the ratio is more than 100% it implies that owner's funds are not sufficient to finance the fixed assets and the firm has to depend upon outsiders to finance the fixed assets.

FIXED ASSETS TO NETWORTH RATIO= FIXED ASSETS /SHAREHOLDERS' FUNDS X 100

FIXED ASSETS TO NET WORTH RATIO

YEAR	FIXED ASSETS	SHAREHOLDERS FUND	%
2004-05	341.95	4061.23	8.42
2005-06	312.96	4787.27	6.53
2006-07	301.80	5335.26	5.66
2007-08	348.86	5378.54	6.49
2008-09	396.55	6184.12	6.41
2009-10	295.51	6454.07	4.58
2010-11	296.31	7202.31	4.11
2011-12	329.95	8245.63	4.00
2012-13	389.70	9490.44	4.10

Source: Calculated from the figures of annual reports of DCC Bank Bijapur from 2004-05 to 2012-13

From the above table all the value from 2004-05 to 2012-13 recorded lower percentage. The DCC bank Bijapur has maintained satisfactory level relating to fixed assets to share holders' fund and the bank has huge capacity to hold fixed assets. During the year 2004-05 the highest value 6.53 and lowest value is 4.00 during the year 2011-12.

4. RATIO OF CURRENT ASSETS TO PROPRIETORS FUNDS

The ratio is calculated by dividing the total of current assets by the amount of shareholders funds. The ratio indicates the extent to which proprietors funds are invested in current assets. There is no rule of thumb' for this ratio and depending upon the nature of business there may be different ratios for different firms. The following table reveals the relation of current assets to proprietors' fund.

RATIO OF CURRENT ASSETS TO PROPRIETORS FUNDS

YEAR	CURRENT ASSETS	SHAREHOLDERS' FUNDS	RATIO
2004-05	25596.23	4061.23	6.30
2005-06	30691.08	4787.27	6.41
2006-07	38318.53	5335.26	7.18
2007-08	88948.25	5378.54	16.54
2008-09	57156.93	6184.12	9.24
2009-10	52547.80	6454.07	8.14
2010-11	71618.08	7202.31	9.94
2011-12	92406.78	8245.63	11.21
2012-13	96556.49	9490.44	10.17

Source: Calculated from the figures of annual reports of DCC Bank Bijapur from 2004-05 to 2012-13
The above table reveals that the amount invested in current assets is 6.3 times of proprietors fund in 2004-05 whereas; it rose to 10.17 times in the year 2012-13.

5. DEBT SERVICE RATIO OR INTEREST COVERAGE RATIO

Net income to debt service ratio or simply debt service ratio is used to test the debt-servicing capacity of a firm. The ratio is also known as interest coverage ratio or fixed charges cover or times interest earned. This ratio calculated by dividing the net profit before interest and taxes by fixed interest charges.

Debt Service Ratio or Interest Coverage = Net Profit/ Fixed Interest Charges

Interest Coverage Ratio

YEAR	NET PROFIT	FIXED INTEREST CHARGES	RATIO
2004-05	402.64	1515.29	0.27
2005-06	583.23	1446.93	0.40
2006-07	579.14	1763.74	0.33
2007-08	546.92	2192.28	0.25
2008-09	634.26	2828.01	0.22
2009-10	444.02	3634.32	0.12
2010-11	1215.47	4024.96	0.30
2011-12	694.97	6386.67	0.11
2012-13	929.52	7812.13	0.12

Source: Calculated from the figures of annual reports of DCC Bank Bijapur from 2004-05 to 2012-13

It is evident from the above table is that Interest coverage ratio of the bank is unsatisfactory. It is less than 1 in all years. The amount of profit earned by the bank is insufficient to meet the regular interest burden. This situation is dangerous for the bank. The bank has to have more income in order to cover the interest and to meet the aspirations of shareholders.

SUMMARY AND CONCLUSION:

As a Co-operative Bank it is doing its best to serve the agricultural sector and allied activities by providing financial assistance and government schemes to build a strong economic country. The Bank has achieved the objectives for which it was established. Even then, it is necessary for every institution to maintain proper stability in finance for stagnant growth in the Bank. For this purpose following suggestions are recommended based on the above study.

1. As concerned to current ratio, the bank has maintained standard ratio 2:1 in every year and in the last year it is declining. Therefore bank does not lose its liquidity and maintain stability over the ratio.
2. The Quick and Absolute Liquid Ratios of the Bank have not maintained ideal position. Therefore Bank should deal with quick convertible security by giving services to the customers.
3. The Bank has maintained better position in Debt-Equity Ratio in almost all the year whereas the Long-

term Debts concern Bank has low performance. Therefore the Bank should approach to Financial Institution to get long-term loan to meets its obligation in mean time.

4.The bank has maintained more assets than liabilities; it means the risk of dealing with outside liabilities is less. Therefore Bank should depend more upon outside liabilities than assets.

5.The Bank has lower rate of profit to meet its interest. Therefore Bank should work hard to make more profit by utilizing its resources effectively and efficiently.

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