LIQUIDITY AND PROFITABILITY ANALYSIS OF RAMCO CEMENTS LIMITED, TAMIL NADU

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Abstract

Liquidity and Profitability are two important and major aspects of business life. Liquidity is the ability of an organization to meet its financial obligations during the short-term and to maintain long-term debt paying ability. The long-term survival depends on the satisfactory income earned by it. A sound liquidity leads to better profitability. Further, no industry can survive, if it has no liquidity. An industry may exist without making profits but cannot survive without liquidity. An industry not making profits may be treated as a sick unit, but one having no liquidity, may soon meet with its downfall and ultimately closed down. So, there is need of close relationship between liquidity and profitability. A sound and systematic approach to the working capital management should ensure trade of between profitability and liquidity. Managerial decisions relating to cash, receivable, inventory and marketable securities are ultimately reflected in liquidity risk and profitability and turn in the value of the firm.

Keywords: Working Capital, Profitability and Liquidity.

INTRODUCTION

Liquidity has an important relationship with profitability. If we have enough liquid resources, we may be able to get benefit of cash discount on purchases and consequently that will be result in increasing profits. If we cannot pay the creditors for goods in the given period, we have to pay interest on the amount of purchases. Thus, shortage of liquid resources will result in low of cash discount and payment of interest. Both the losses will certainly decrease over profits. Secondly, we may keep the stock at desired manners and that will benefit us in circulation of business activities. Contrary to this, if we are not able to keep sufficient stock due to shortage of liquid resources, then the production cycle may not be continued and that will result in heavy losses. Liquid resources of a business concern for all over to expand huge business activities more, and less in financial. In case of cement industry in India, the management of liquid resources plays a greater role because in comparison to others industries, this industry has capacity to pay its obligations promptly.

STATEMENT OF THE PROBLEM

Liquidity is the ability of an organization to meet its financial obligations during the short - term and to maintain long - term debt - paying ability. The long - term survival depends on satisfactory income earned by it. A sound liquidity leads to better profitability, and in turn reduces the profitability of default risk in the future. The concern of business owners and managers all over the world is to devise a strategy which will help in maintaining liquidity as well as to increase profitability and shareholder's wealth. Liquidity and Profitability are the pre-requisite for the survival of every firm or company. The Finance Manager is always faced with the dilemma of liquidity Vs. profitability as these two concepts conflict in most of the financial decisions. So, the Finance Manager has to watch the relationship between operating risk and profitability of a company also. Hence, this study has been made an attempt to know the relationship between liquidity and profitability of Ramco Cements Limited (RCL).

OBJECTIVES OF STUDY

- The specific objectives of the study are:
- To analyze the short -term financial position through liquidity analysis.
- To examine the profitability of the company over the study period.
- To test the correlation between liquidity and profitability.
- To offer suggestions for the improvement liquidity and profitability position of RCL.

METHODOLOGY

The study was concerned with paper manufacturer and it has been confined to only one Private Sector Limited viz., Ramco Cements Limited, known as RCL This study covers a time period of ten years from 2008 – 2009 to 2017 – 2018. This study is based on secondary data which is collected from annual reports of company, CMIE prowess database and from different websites concerned. The collected data has been tabulated, analysed and interpreted with the help of different financial ratios and statistical tools.

REVIEW OF LITERATURE

Nandi Chandra Kartik (2012) in his paper on "Trends in Liquidity Management and Their Impact on Profitability: A Case Study" makes an attempt to assess the trends in liquidity management and their impact on profitability. An attempt has been made to establish the linear relationship between liquidity and profitability with the help of a multiple regression model. On the basis of overall analysis, it is therefore important to state that the selected company always tries to maintain adequate amount of net working capital in relation to current liabilities so as to keep a good amount of liquidity throughout the study period. A study of liquidity is of major importance to both the internal and the external analysts because of its close relationship with day-to-day operations of a business **Bhunia, (2010)**. Dilemma in liquidity management is to achieve desired tradeoff between liquidity and profitability **Rahmen, & Nasr (2007)** Liquidity requirement of a firm depends on the peculiar nature of the firm and there is no specific rule on determining the optimal level of liquidity that a firm can maintain in order to ensure positive impact on its profitability **Elijelly (2004)** in the study on "Liquidity – profitability tradeoff: An empirical investigation in an emerging market" empirically examined the relation between profitability and liquidity, as measured by current ratio and cash gap (cash conversion cycle) on a sample of joint stock companies in Saudi Arabia. The study found significant negative relation between the firm's profitability and its liquidity level, as measured by current ratio."

DATA ANALYSIS AND INTERPRETATION

I. LIQUDITY ANALYSIS

TABLE 1: CURRENT RATIO *(Rs. in crores)*

Years	Current Assets	Current Liabilities	Ratio
2008-09	913.79	440.38	2.08
2009-10	1135.65	546.24	2.08
2010-11	1098.74	589.93	1.86
2011-12	1,035.77	1,505.32	0.69
2012-13	1,251.83	1,612.40	0.78
2013-14	1,249.54	1,704.68	0.73
2014-15	1,199.67	1,443.22	0.83
2015-16	1,302.06	1,484.38	0.88
2016-17	1,418.59	2,020.53	0.70
2017-18	1,298.28	1,850.89	0.70
Average	**1190.39**	**1319.80**	**1.13**
SD	**147.33**	**576.20**	**0.61**
Growth rate	**42.08**	**320.29**	**-66.20**

CV	**12.38**	**43.66**	**53.69**
r	**+ 0.79**		

Source: Computed from Annual Report

It can be inferred from the above table that current assets increased from 913.79 crores in 2008 – 2009 to Rs1,418.59 crores in 2016 – 2017, registering growth rate of 42.08%. As against this, the total amount of current liabilities increased from Rs. 440.38 crores in 2008 – 2009 to Rs. 2,020.53 crores in 2016 – 2017 depicting and growth rate 320.29%. It could be noted that the current ratio declined from 2.08 times in 2008 – 2009 to 0.70 times in 2017 – 2018. The average current ratio during the study period was 1.13, which is less than the rule of thumb 2:1. It indicates the liquidity position of the concern was not sound. So, the management should concentrate on current ratio in future. There is a positive relationship between current assets and current liabilities of Ramco Cements Limited.

TABLE 2: QUICK RATIO *(Rs. in crores)*

Years	Quick Assets	Quick Liabilities	Quick Ratio
2008-09	723.11	440.38	1.33
2009-10	706.46	546.24	1.32
2010-11	544.68	589.93	1.20
2011-12	657.08	1,505.32	0.36
2012-13	564.01	1,612.40	0.41
2013-14	679.09	1,704.68	0.33
2014-15	753.04	1,443.22	0.47
2015-16	843.16	1,484.38	0.51
2016-17	738.34	2,020.53	0.42
2017-18	679.39	1,850.89	0.40
Average	**93.84**	**1319.80**	**0.67**
SD	**723.11**	**576.20**	**0.42**
Growth rate	**26.23**	**320.29**	**-69.97**
CV	**13.81**	**43.66**	**62.94**
r	**+ 0.23**		

Source: Computed from Annual Report

The ratio of Quick assets to Quick liabilities was high 1.33 in the year 2008 – 2009 and as low as 0.33 in the year 2013 – 2014. As a rule of thumb or as a convention Quick ratio of 1:1 is considered satisfactory. Throughout the study period, the company did not satisfy the standard norms of Quick ratio. So, the management should concentrate on Quick ratio in future. There is a positive relationship between Quick and Quick liabilities of RCL.

TABLE 3: INVENTORY TO CURRENT ASSETS *(Rs. in crores)*

Years	Inventory	Current Assets	Ratio
2008-09	328.89	913.79	35.99
2009-10	412.54	1135.65	36.33
2010-11	392.28	1098.74	35.70
2011-12	491.09	1,035.77	47.41
2012-13	594.75	1,251.83	47.51
2013-14	685.53	1,249.54	54.86
2014-15	520.58	1,199.67	43.39
2015-16	549.02	1,302.06	42.17
2016-17	575.43	1,418.59	40.56
2017-18	559.94	1,298.28	43.13
Average	**511.01**	**1190.39**	**42.71**
SD	**106.93**	**147.33**	**6.09**
Growth rate	**70.25**	**42.08**	**19.83**

CV	**20.93**	**12.38**	**14.25**
r	**+0.77**		

Source : Computed from Annual Report

The ratio of inventories to current assets has increased from 35.99 % to 43.13% during the study period. The highest (54.86%) and the lowest (35.70) ratio were registered in 2013 – 2014 and 2010 – 2011 respectively. The average inventories (Rs. 511.01 crores) for 10 years were less in comparison to the current assets average (Rs. 1190.39 crores). This is also a true increase of standard deviation of current assets (Rs. 147.33 crores). According to the co-variance, the inventories (20.93%) were more variable than the current assets (12.38%) during the study period. Therefore, the management has to take all possible steps to reduce the inventory level in order to increase the sales level. There is a positive relationship between inventory and current assets of RCL.

TABLE 4: CURRENT ASSETS TURN OVER RATIO *(Rs. in crores)*

Years	Sales	Current Assets	Ratio
2008-09	2371.56	913.79	2.60
2009-10	2666.99	1135.65	2.35
2010-11	2482.62	1098.74	2.26
2011-12	3,256.74	1,035.77	3.14
2012-13	3,830.80	1,251.83	3.06
2013-14	3,683.51	1,249.54	2.95
2014-15	3,644.89	1,199.67	3.04
2015-16	3,595.75	1,302.06	2.76
2016-17	4,564.23	1,418.59	3.22
2017-18	4,566.31	1,298.28	3.52
Average	**3466.34**	**1190.39**	**2.89**
SD	**781.24**	**147.33**	**0.40**
Growth rate	**92.54**	**42.08**	**35.52**
CV	**22.54**	**12.38**	**13.72**
r	**+0.86**		

Source : Computed from Annual Report

The sales of RCL increased from Rs. 2371.56 crores in 2008 – 2009 to Rs. 4,566.31 crores in 2017 – 2018 registering a growth rate of 92.54%. The growth rate of sales (92.54%) was more than the growth rate of current assets, which was 42.08% during the study period. An analysis of the above table revels that the ratio varied from 2.35 in 2009 – 2010 to 3.52 in 2017 – 2018, which indicate that the sales were managed efficiently, but the current assets was not utilized to a maximum extent. There is a positive relationship between sales and current assets of RCL.

TABLE 5: WORKING CAPITAL TURNOVER RATIO *(Rs. in crores)*

Years	Sales	Working Capital	Ratio
2008-09	2371.56	473.41	5.01
2009-10	2666.99	589.41	4.52
2010-11	2482.62	508.81	4.88
2011-12	3,256.74	-469.55	-6.94
2012-13	3,830.80	-360.57	-10.62
2013-14	3,683.51	-455.14	-8.09
2014-15	3,644.89	-243.55	-14.97
2015-16	3,595.75	-182.32	-19.72
2016-17	4,564.23	-601.94	-7.58
2017-18	4,566.31	-552.61	-8.26
Average	**3466.34**	**-129.41**	**-6.18**

SD	**781.24**	**469.14**	**8.52**
Growth rate	**92.54**	**-216.73**	**-264.95**
CV	**22.54**	**-362.54**	**-137.89**
r	**-0.90**		

Source: Computed from Annual Report

The Networking capital of RCL decreased from Rs. 473.41 crores in 2008 – 2009 to Rs. -552.61 crores in 2017 – 2018. The amount of net working capital decreased from 2008 – 2009 to 2017 – 2018 registering a growth rate of -216.73%. The growth rate of sales (92.54%) was more than the growth rate of Networking capital which was -216.73% during the study period. The average of sales during 10 years was Rs. 3466.34 crores against networking capital average. The standard deviation of sales was Rs781.24 crores more in comparison with the standard deviation of (Rs. 469.14 crores) net working capital. The co-variance of sales (22.54%) is more variable than Networking capital (-362.54%). The concern has to take all possible steps to avoid negative ratio in future. There is a negative relationship between sales working capital of RCL.

II PROFITABILITY ANALYSIS

TABLE 6: GROSS PROFIT RATIO *(Rs. in crores)*

Years	Gross Profit	Net Sales	Ratio
2008-09	793.85	2371.56	33.47
2009-10	878.07	2666.99	32.92
2010-11	657.31	2482.62	26.48
2011-12	969.77	3,256.74	29.78
2012-13	1047.3	3,830.80	27.34
2013-14	648.76	3,683.51	17.61
2014-15	800.12	3,644.89	21.95
2015-16	1150.31	3,595.75	31.99
2016-17	1238.16	4,564.23	27.13
2017-18	1136.07	4,566.31	24.88
Average	**931.97**	**3466.34**	**27.36**
SD	**208.92**	**781.24**	**5.02**
Growth rate	**43.11**	**92.54**	**-25.67**
CV	**22.42**	**22.54**	**18.35**
r	**+0.68**		

Source: Computed from Annual Report

The above table shows that the ratio of GP to sales was high 33.47 in the year 2008 – 09 and as low as 24.88 in the year 2017 – 18. The growth rate of sales was higher when compared with growth rate of growth profit throughout the study period. The growth rate of growth profit shows a negative (–25.67%). The highest ratio indicates an increase in the selling price of the goods sold without any corresponding increasing in the cost of goods sold. A lower ratio may be a result of unfavorable purchasing policies. From the table, it can be inferred that the ratio fluctuated over a period of time. It shows the poor progress of the company. There is a positive relationship between gross profit and sales of RCL.

TABLE 7: NET PROFIT RATIO *(Rs. in crores)*

Years	Net Profit	Net Sales	Ratio
2008-09	363.52	2371.56	15.33
2009-10	353.68	2666.99	13.26
2010-11	210.98	2482.62	8.50
2011-12	385.11	3,256.74	11.83
2012-13	403.65	3,830.80	10.54

2013-14	137.70	3,683.51	3.74
2014-15	242.35	3,644.89	6.65
2015-16	558.26	3,595.75	15.53
2016-17	649.29	4,564.23	14.23
2017-18	555.66	4,566.31	12.17
Average	**386.02**	**3466.34**	**11.18**
SD	**164.17**	**781.24**	**3.87**
Growth rate	**52.86**	**92.54**	**-20.61**
CV	**42.53**	**22.54**	**34.60**
r	**+0.56**		

Source: Computed from Annual Report

It can be observed from the above table that the net profit ratio of the company was volatile during the study period. The lowest Net profit ratio percent was observed in the year 2013 – 2014, where it was 3.74% and the highest value was observed during the year 2015 – 2016, when it was 15.53 percent. The co-efficient of variation was 34.60%. It showed a fluctuating trend during the study period and a poor performance was observed during the year 2013-14 and 2014-15. There is a positive relationship between Net Profit and Sales of RCL.

TABLE 8: OPERATING PROFIT RATIO *(Rs. in crores)*

Years	Operating Profit	Net Sales	Ratio
2008-09	777.97	2371.56	32.80
2009-10	867.12	2666.99	32.51
2010-11	628.77	2482.62	25.33
2011-12	938.83	3,256.74	28.83
2012-13	1005.91	3,830.80	26.26
2013-14	563.04	3,683.51	15.29
2014-15	713.24	3,644.89	19.57
2015-16	1058.97	3,595.75	29.45
2016-17	1194.65	4,564.23	26.17
2017-18	1099.43	4,566.31	24.08
Average	**884.79**	**3466.34**	**26.03**
SD	**210.88**	**781.24**	**5.47**
Growth rate	**41.32**	**92.54**	**-26.60**
CV	**23.83**	**22.54**	**21.01**
r	**0.62**		

Source: Computed from Annual Report

The operating profit ratio of SPBL showed average progress. During the study period. The lowest ratio (15.29) was observed in the year 2013 – 2014 and the highest ratio (about – 32.80) was evidenced in the year 2008 – 2009. The co-efficient of variance was 21.01 during the study period. There is positive relationship between operating profit and sales of RCL.

TABLE 9: RETURN ON TOTAL ASSETS *(Rs. in crores)*

Years	Net Profit	Total Assets	Ratio
2008-09	363.52	4653.92	7.81
2009-10	353.68	5256.00	6.73
2010-11	210.98	5704.63	3.70
2011-12	385.11	6058.24	6.36
2012-13	403.65	6471.38	6.24
2013-14	137.70	6868.56	2.00
2014-15	242.35	7070.28	3.43
2015-16	558.26	7025.17	7.95
2016-17	649.29	7008.90	9.26

2017-18	555.66	7090.42	7.84
Average	**386.02**	**6320.75**	**6.13**
SD	**164.17**	**869.69**	**2.35**
Growth rate	**52.86**	**52.35**	**0.33**
CV	**42.53**	**13.76**	**38.26**
r	**+0.29**		

Source: Computed from Annual Report

It could be inferred from the table that the growth rate of total assets during the study period 52.35% as against the growth rate of net profit after tax of 52.86%. The average amount of Net profit after tax and total assets value was Rs. 386.02 crores and Rs. 6320.75 crores with Standard division of Rs. 164.17 crores and Rs. 869.69 crores respectively. The co-efficient of variation was lower with 13.76% in case of total assets in comparison with Net Profit after tax which was 42.53%. During the study period Return on Total Assets of RCL showed an average progress. There is positive relationship between net profit after tax and total assets of RCL.

TABLE 10: RETURN ON NET WORTH *(Rs. in crores)*

Years	Net Profit	Net Worth	Ratio
2008-09	363.52	1260.19	28.85
2009-10	353.68	1558.15	22.70
2010-11	210.98	1734.51	12.16
2011-12	385.11	2050.38	18.78
2012-13	403.65	2370.76	17.03
2013-14	137.70	2482.08	5.55
2014-15	242.35	2645.19	9.16
2015-16	558.26	3092.63	18.05
2016-17	649.29	3741.51	17.35
2017-18	555.66	4042.18	13.75
Average	**386.02**	**2497.76**	**16.34**
SD	**164.17**	**914.16**	**6.66**
Growth rate	**52.86**	**220.76**	**-52.35**
CV	**42.53**	**36.60**	**40.77**
r	**+0.64**		

Source: Computed from Annual Report

The highest value of Return on Net Worth was 28.85%, and the least value was about 5.55% and the mean value was observed at about 16.34% and the co-efficient of variation was 40.77%. Hence the Return on Net Worth showed a fluctuating trend over the study period. The Net Worth of RCL gradually increased during the study period from a minimum of Rs. 1260.19 crores to a maximum of Rs. 4042.18 crores, whereas the net profit after tax fluctuated at a minimum value of Rs. 137.70 crores and a maximum value of Rs. 649.29 crores.

TABLE 11: RETURN ON CAPITAL EMPLOYED *(Rs. in crores)*

Years	Net Profit	Capital Employed	Ratio
2008-09	363.52	3854.931	9.43
2009-10	353.68	4437.641	7.97
2010-11	210.98	4270.85	4.94
2011-12	385.11	4557.515	8.45
2012-13	403.65	4863.253	8.3
2013-14	137.70	5176.692	2.66
2014-15	242.35	5636.047	4.3
2015-16	558.26	5543.793	10.07
2016-17	649.29	3397.645	19.11

2017-18	555.66	5242.075	10.6
Average	**386.02**	**4698.04**	**8.58**
SD	**164.17**	**731.77**	**4.53**
Growth rate	**52.86**	**35.98**	**12.41**
CV	**42.53**	**15.58**	**52.82**
r	**-0.23**		

Source: Computed from Annual Report

It could be inferred from the table that the growth rate of capital employed during the study period 35.98% as against the growth rate of net profit after tax of 52.86%. The average amount of Net profit after tax and capital employed value was Rs. 386.02 crores and Rs. 4698.04 crores respectively. The co-efficient of variance was lower with 15.58% in case of capital employed in comparison with net profit after tax which was 42.53%. During the study period ROCE (Return on Capital Employed) of RCL was not well. Hence the management has to take appropriate steps to utilize to the capital in an effective manner. There is a negative relationship between Net profit after tax and capital employed of RCL.

TESTING THE SIGNIFICANCE OF CORRELATION CO-EFFICIENT

To know the impact of liquidity and profitability of the Ramco Cements Limited the researcher used 't' distribution test.

Null Hypothesis (Ho)

1. There is no significant relationship between current ratio and operating profit of the Ramco Limited.
2. There is no significant relationship between current assets to total assets and return on capital employed.

TABLE 12: 't' DISTRIBUTION

Relationship	r	Calculated Value	Degree of Freedom	Table value @ 5% Confidence	Remark
Correlation between Current ratio & operating profit ratio	0.56	1.91	8	2.306	NS
Correlation current assets to total assets & Return on Capital Employed	0.392	1.206	8	2.306	NS

Source: 't' distribution has been performed in MS Excel

Liquidity and profitability ratio of Ramco Cements Limited (RCL) shows an insignificant because, the calculated value of 't' distribution is less than critical value of 't' distribution at 5% level of significance. Hence liquidity is showing an insignificant impact on profitability of the concern.

SUGGESTIONS

Keeping in view the above observations relating to the study. The following measures and suggested which would go a long way to improve the management of liquidity and profitability of Ramco Cements Limited in Tamilnadu.

- The management of the concern should take appropriate steps to reduce inventories in future which may improve the profitability and unnecessary investment of the inventories.
- Net working capital shows an unfavourable condition. So, necessary steps must be taken by the concern to develop the situation and keep up an optimum working capital in future.
- Current Assets trend of the concern was favourable throughout the study period. So, the concern may maintain the same position in the following years.

- Throughout the study period Current Liability trends shows an enormous and it is not good for the firm. So, the management has to stop this growth
- During the study period, the company did not satisfy the current ratios standard norms of 2:1. So, the management should concentrate on to Current Assets so as to pay Current Liability in future.
- In order to improve the liquidity position of the concern, the management net only give concentration to Current Liability but management also give importance to Current Assets which may improve the liquidity position in future.
- In order to improve the Return on Capital Employed, the management has to utilize the capital in the best way. Otherwise, the shareholders will be affected in future.
- The management has to utilize total assets in an effective manner.

CONCLUSION

The efficient working capital management is more crucial factor in maintaining survival, liquidity, solvency and profitability position of any business unit. The profitability position of Ramco Cements Limited has been showing declining trend during the study period. Liquidity position of the company was also not satisfactory during the study period. The correlation between liquidity and profitability was highest in the company which shows a high degree of positive correlation. Thus, profitability position of Ramco Cements Limited was not good due to the adverse liquidity position of the company.

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