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LIQUIDITY MANAGEMENT OF SELECT CEMENT COMPANIES OF ANDHRA PRADESH - (A COMPARATIVE STUDY)

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ABSTRACT

Liquidity is one of the most important desired goals of an organization. The importance of adequate liquidity in the sense of the ability of an enterprise to meet current/short term obligations when they become due for payment can hardly be over-stressed. In fact, liquidity is a pre-requisite for the very survival of an enterprise. The short-term creditors of the firm are interested in the short-term solvency or liquidity of a firm. But, liquidity implies from the view point of utilization of the funds of the firm that funds are idle or they earn very little. A proper balance between the two contradictory requirements, i.e. liquidity and profitability, is required for efficient working capital management. So in this perspective, the present study is undertaken to examine and evaluate the liquidity management of select cement companies of Andhra Pradesh. In our case, Motaal's Ultimate Rank Test shows that the liquidity position of Deccan Cements is sounder as compared to other companies.

KEYWORDS: Current Assets, Current Liabilities, Current Ratio, Liquidity, Net Working Capital

INTRODUCTION

Liquidity is one of the most important desired goals of an organization. The importance of adequate liquidity in the sense of the ability of an enterprise to meet current/short term obligations when they become due for payment can hardly be over-stressed. In fact, liquidity is a pre-requisite for the very survival of an enterprise. The short-term creditors of the firm are interested in the short-term solvency or liquidity of a firm. But, liquidity implies from the view point of utilization of the funds of the firm that funds are idle or they earn very little. A proper balance between the two contradictory requirements, i.e. liquidity and profitability, is required for efficient working capital management. So in this perspective, the present study is undertaken to examine and evaluate the liquidity management of select cement companies of Andhra Pradesh. The liquidity of the select units has been analyzed by computing current ratio, quick ratio, liquid funds to current assets ratio, net working capital to current assets ratio and finally, comparative liquidity positionamong select units has been made by allotting ranks to them as per the Motaal's Ultimate Rank Test.

REVIEW OF LITERATURE

A brief review of the different researches in the field is attempted in the following paragraphs.

Agarwal (1988) devised the working capital decision as a goal programming problem, giving primary importance to liquidity, by targeting the current ratio and quick ratio. The model included three liquidity goals, two profitability goals, and, at a lower priority level, four current asset sub-goals and a current liability sub-goal (for each component of working capital). In particular, the profitability constraints were designed to capture the opportunity cost of excess liquidity (in terms of reduced profitability).

Hrishikes (1995) in his book on “*Total Management by Ratios*” says that problem of liquidity management is more acute for companies which are growing at a fast rate. The rising cash flow (profit) curves gives a euphoric feeling of “all being well everywhere’’, which makes the managers to press the growth button faster. What they lose sight of is the real cash position of the company which might be showing a downward trend and hence, pushing the company the slowly and then vigorously towards a severe liquidity crisis despite the company making high profit. Unfortunately, once an enterprise-manager presses the growth buttons, it is difficult for them to retract the steps. The continuous erosion of liquidity ultimately makes a high-growth company sick. There is nothing wrong in making profit, in fact, that is the purpose of business, but unless there is cash coming through profit, an enterprise will soon be dead.

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.”

Singh and Pandey (2008) suggested that, for the successful working of any business organization, fixed and current assets play a vital role, and that the management of working capital is essential as it has a direct impact on profitability and liquidity. They studied the working capital components and found a significant impact of working capital management on profitability for Hindalco Industries Limited.

Sherin (2010) in her article on “Liquidity v/s profitability - Striking the right balance” writes about the implications of liquidity and profitability in a pharmaceutical company. A firm is required to maintain a balance between liquidity and profitability while conducting its day to day operations. Investments in current assets are inevitable to ensure delivery of goods or services to the ultimate customers. A proper management of the same could result in the desired impact on either profitability or liquidity.

Brahma (2011) conducted a study to examine and evaluate the importance of liquidity management on profitability as a factor accountable for poor financial performance in the private sector steel Industry in India.

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.

OBJECTIVES OF THE STUDY

- To assess the management of working capital and its adequacy,
- To study and compare the liquidity position of the companies under the study and
- To find out the areas of weakness in liquidity management and offer suggestions for improvement, if any.

RESEARCH METHODOLOGY

Sample under Study

Samples of six cement companies of Andhra Pradesh have been purposefully selected for the study. They are:

- Anjani Portland Cements Ltd. (APCL)
- Bheema Cements Ltd. (BCL)
- Deccan Cements Ltd. (DCL)
- NCL Industries Ltd. (NCL)
- Panyam Cements and Mineral Industries Ltd. (PCMIL)
- Sagar Cements Ltd. (SCL)

Scope of the Study

The present study is restricted to the above mentioned six select cement companies of Andhra Pradesh.

Period of the Study

The study was performed on data of 10 years from 2003-04 to 2012-13.

Data Collection

To achieve the aforesaid objectives data is gathered from secondary sources like annual reports of select cement companies, journals, related other research papers, websites etc.

Tools of Analysis

To analyze the data, ratios and Motaal's Ultimate Rank Test are used for the present study.

LIMITATIONS OF THE STUDY

- The study covers the period from 2003-04 to 2012-13. The changes that took place before and after this

  Period were not taken into consideration,
- The data are secondary in nature and any bias in them is reflected in the analysis and the conclusion of the study.

DATA ANALYSIS

In order to study the liquidity position of all the companies, the liquid ratios, amount invested in liquid assets, working capital and other related ratios were calculated and depicted in the following tables:

Anjani Portland Cements Ltd. (APCL

Table -1 gives a detailed description of liquidity position of APCL

Current Assets have shown a growth rate of 805.93% with S.D. and C.V of Rs.39.48 crores and 72.83% respectively. The growth rate of current liabilities was 1804.83% with a standard deviation of Rs.44.07 crores and a CV of 104.09%. The growth rate of working capital was -72.41% with a SD of Rs.10.53 crores and a CV of 88.71%. From this, it can be said that the growth rate of net working capital was negative as the growth rate of current liabilities is more than that of current assets. So, from this we say that the company should take necessary steps to increase the quantum of current assets so as to maintain positive net working capital. The quick assets have registered a growth rate of 920.88% with a SD of Rs. 27.81crores and a CV of 73.22%.

Table 1

Anjani Portland Cements Ltd. (Apcl)							(Rs. In Crores)		
Year	Current Assets	Current Liabilities	Net Working Capital	Quick Assets	Current Ratio	Quick Ratio	Net Working Capital to Current Assets (%)	Inventory to Current Assets (%)	Quick Assets to Current Assets (%)
2004	14.17	6.63	7.54	8.67	2.14	1.31	53.21	38.81	61.19
2005	13.48	7.01	6.47	7.94	1.92	1.13	48.00	41.10	58.90
2006	16.69	6.73	9.96	10.79	2.48	1.60	59.68	35.35	64.65
2007	29.72	13.40	16.32	19.30	2.22	1.44	54.91	35.06	64.94
2008	41.40	25.37	16.03	30.38	1.63	1.20	38.72	26.62	73.38
2009	40.48	21.38	19.10	32.12	1.89	1.50	47.18	20.65	79.35
2010	57.30	19.63	37.67	44.96	2.92	2.29	65.74	21.54	78.46
2011	89.65	88.49	1.16	55.87	1.01	0.63	1.29	37.68	62.32
2012	110.79	108.44	2.35	81.23	1.02	0.75	2.12	26.68	73.32
2013	128.37	126.29	2.08	88.51	1.02	0.70	1.62	31.05	68.95
Mean	54.21	42.34	11.87	37.98	1.83	1.26	37.25	31.45	68.55
Growth	114.20	119.66	-5.46	79.84	-1.12	-0.61	-51.59	-7.76	7.76
Growth Rate %)	805.93	1804.83	-72.41	920.88	-52.34	-46.56	-96.96	-19.99	12.68
S.D.	39.48	44.07	10.53	27.81	0.62	0.48	24.28	6.9	6.90
C.V. (%)	72.83	104.09	88.71	73.22	33.88	38.10	65.19	21.94	10.07

It is observed, current ratio and quick ratio have registered a negative growth i.e. -52.34% and -46.56% respectively. The negative growth in both the ratios indicates that the liquidity position of the company has been degraded over the years. The average current ratio of the company was 1.83 which is less than the ideal rule of thumb i.e. 2. So, the company should maintain the standard ratio. Though the average quick ratio (1.26) above the required, the growth rate of this is negative due to the increase in current liabilities is more than that of current assets.

When the overall liquidity position of the company is studied by applying Motaal's Comprehensive Test of Liquidity, we found that working capital to current assets ratio has shown a negative growth of 96.96%. This indicates that the growth rate of current liabilities was more as compared to the growth rate of current assets and hence the working capital is decreasing slowly and slowly. This aggressive approach in the working capital might be the policy of the firm to enhance the profitability but no doubt it endangers the liquidity position of the company. The negative growth in stock to current assets ratio(-19.99) can be treated as a positive action towards liquidity management assuming that the company was reducing its inventory level to the extent possible so as to free up the money tied up with the inventories. The quick asset to current ratio has also registered a positive growth of 12.68% during the study period, which is an indication of company's concern and steps to maintain liquidity.

To conclude, the liquidity position of the company is not that much satisfactory as it ought to be. So, the Company should take enough steps to increase the level of liquidity position.

Bheema Cements Ltd. (BCL)

Table 2 gives an overview of the position of BCL. It is evident from the table that, as the growth rate in current liabilities(1030.17%) is more than that of current assets(857.47%), the growth rate in net working capital(-61.67%) is negative. So, the company is to take action to maintain positive net working capital. The growth rate in quick assets is 711.41% with a S.D. of Rs.20.54 crores and a C.V. of 62.72%.

When the liquidity ratios of ACC Cements were analyzed, we found that both current ratio and quick ratio have registered a negative growth i.e. -15.13% and -28.21% respectively. The negative growth in both the ratios indicates that the liquidity position of the company has been degraded over the years. Though, the average current ratio (2.35) and the average quick ratio(1.44) are more than the ideal rule of thumb i.e. 2 and 1, the growth rate in that ratios is negative as current liabilities are grown faster than that of current assets which indicates an unsatisfactory liquidity position of the company during the years of study. Moreover, a higher CV percentage i.e. in case of current ratio 45.53% and in quick ratio 44.44% is also an indication of instability in the liquidity position of the company.

Table 2

Bheema Cements Ltd. (Bcl)							(Rs. In Crores)		
Year	Current Assets	Current Liabilities	Net Working Capital	Quick Assets	Current Ratio	Quick Ratio	Net Working Capital to Current Assets (%)	Inventory to Current Assets (%)	Quick Assets to Current Assets (%)
2004	11.38	9.58	1.80	7.45	1.19	0.78	15.82	34.53	65.47
2005	15.09	6.16	8.93	9.16	2.45	1.49	59.18	39.30	60.70
2006	18.37	8.65	9.72	12.10	2.12	1.40	52.91	34.13	65.87
2007	28.59	9.45	19.14	19.14	3.03	2.03	66.95	33.05	66.95
2008	38.24	12.54	25.70	21.99	3.05	1.75	67.21	42.49	57.51
2009	78.74	27.40	51.34	57.54	2.87	2.10	65.20	26.92	73.08
2010	67.56	14.44	53.12	37.58	4.68	2.60	78.63	44.38	55.62
2011	83.86	45.06	38.80	40.57	1.86	0.90	46.27	51.62	48.38
2012	92.83	77.19	15.64	61.51	1.20	0.80	16.85	33.74	66.26
2013	108.96	108.27	0.69	60.45	1.01	0.56	0.63	44.52	55.48
Mean	54.36	31.87	22.49	32.75	2.35	1.44	46.97	38.47	61.53
Growth	97.58	98.69	-1.11	53.00	-0.18	-0.22	-15.19	9.99	-9.99
Growth Rate (%)	857.47	1030.17	-61.67	711.41	-15.13	-28.21	-96.02	28.93	-15.26
S.D.	34.22	33.11	18.32	20.54	1.07	0.64	25.21	6.93	6.93
C.V. (%)	62.95	103.89	81.46	62.72	45.53	44.44	53.68	18.01	11.26

When the overall liquidity position of the company is analyzed by applying Motaal's Comprehensive Test of Liquidity, we found that working capital to current assets ratio has shown a negative growth of 96.02. This indicates that the growth rate of current liabilities was more as compared to the growth rate of current assets and hence the working capital is decreasing slowly and slowly. This aggressive approach in the working capital might be the policy of the firm to enhance the profitability but no doubt it endangers the liquidity position of the company.

The positive growth in stock to current assets ratio which is 28.93% is a bad sign for the company because it indicates that investment in inventories are increasing gradually, which has to be stopped.

The quick asset to current ratio has also registered a negative growth of 15.26% during the study period, which shows that company's liquid assets position has also deteriorated subsequently during the period of study, though the current assets position is satisfactory.

To conclude, the company should take serious steps to increase the level of quick ratio by investing money in liquid resources and investment in inventories should be curtailed to the extent possible.

Deccan Cements Ltd. (DCL)

Table 3 gives an overview of the position of DCL. From the table, we observed that the growth rate in current assets (1339.28% with a S.D. of Rs. 126.46 crores and a C.V. of 96.87%) is more than that of current liabilities (266.28% with a S.D. of Rs. 33.66 crores and a C.V. of 55.55%). Hence, the growth rate in net working capital also is increased in a similar way.

Table 3

Deccan Cements Ltd. (Dcl)							(Rs. In Crores)		
Year	Current Assets	Current Liabilities	Net Working Capital	Quick Assets	Current Ratio	Quick Ratio	Net Working Capital to Current Assets (%)	Inventory to Current Assets (%)	Quick Assets to Current Assets (%)
2004	33.81	26.66	7.15	28.03	1.27	1.05	21.15	17.10	82.90
2005	29.63	25.35	4.28	23.08	1.17	0.91	14.44	22.11	77.89
2006	40.31	25.24	15.07	35.09	1.60	1.39	37.39	12.95	87.05
2007	75.65	27.72	47.93	70.07	2.73	2.53	63.36	7.38	92.62
2008	103.40	57.86	45.54	94.02	1.79	1.62	44.04	9.07	90.93
2009	137.47	92.30	45.17	114.68	1.49	1.24	32.86	16.58	83.42
2010	102.30	44.30	58.00	75.79	2.31	1.71	56.70	25.91	74.09
2011	137.40	96.91	40.49	103.85	1.42	1.07	29.47	24.42	75.58
2012	158.80	111.90	46.90	109.71	1.42	0.98	29.53	30.91	69.09
2013	486.62	97.65	388.97	91.12	4.98	0.93	79.93	81.27	18.73
Mean	130.54	60.59	69.95	74.54	2.02	1.34	40.89	24.77	75.23
Growth	452.81	70.99	381.82	63.09	3.71	-0.12	58.78	64.17	-64.17
Growth Rate (%)	1339.28	266.28	5340.14	225.08	292.13	-11.43	277.92	375.26	-77.41
S.D.	126.46	33.66	107.83	32.79	1.09	0.48	19.27	20.13	20.13
C.V. (%)	96.87	55.55	154.15	43.99	53.96	35.82	47.13	81.27	26.76

The growth rate in quick assets (225.08% with a S.D. of Rs. 32.79 crores and a C.V of 43.99%) is also increased but not that much of current assets and less than that of current liabilities.

The growth rate in current ratio is 292.13% with a S.D. of Rs. 1.09 crores and a C.V. of 53.96% where as the growth in quick assets is negative of 11.43 with a S.D. of Rs. 0.48 crores and a C.V. of 35.82%. From this it is said that the increase in current assets is not due to the increase in quick assets but it is due to the increase in inventory. The average current ratio and quick ratio are 2.02 and 1.34 respectively. They are more than the ideal rule of thumb i.e. 2 and 1. This indicates the satisfactory level of liquidity position.

When the overall liquidity position of the company is analyzed by applying Motaal's Comprehensive Test of Liquidity, we found that working capital to current assets ratio has shown a positive growth of 277.92. This indicates that the growth rate of current assets was more as compared to the growth rate of current liabilities and hence the working capital is increased. The positive growth in stock to current assets ratio which is 375.26% is a bad sign for the company because it indicates that investment in inventories are increasing gradually, which has to be stopped.

The quick asset to current ratio has registered a negative growth of77.41 % during the study period, which shows that company's liquid assets position has also deteriorated subsequently during the period of study, though the current assets position is satisfactory.

To conclude, the company should take serious steps to increase the level of quick ratio by investing money in liquid resources and investment in inventories should be curtailed to the extent possible.

NCL Industries Ltd. (NCL)

Table 4 gives an overview of the position of NCL Industries Ltd.

Table 4

Ncl Industries Ltd. (Ncl)							(Rs. In Crores)		
Year	Current Assets	Current Liabilities	Net Working Capital	Quick Assets	Current Ratio	Quick Ratio	Net Working Capital To Current Assets (%)	Inventory to Current Assets (%)	Quick Assets to Current Assets (%)
2004	41.39	46.28	-4.89	21.66	0.89	0.47	-11.81	47.67	52.33
2005	43.08	43.28	-0.20	22.50	1.00	0.52	-0.46	47.77	52.23
2006	58.97	51.15	7.82	35.78	1.15	0.70	13.26	39.33	60.67
2007	85.10	64.78	20.32	53.39	1.31	0.82	23.88	37.26	62.74
2008	142.07	70.73	71.34	106.63	2.01	1.51	50.21	24.95	75.05
2009	146.07	78.66	67.41	105.37	1.86	1.34	46.15	27.86	72.14
2010	142.26	63.17	79.09	97.82	2.25	1.55	55.60	31.24	68.76
2011	171.89	52.06	119.83	119.04	3.30	2.29	69.71	30.75	69.25
2012	178.57	273.32	-94.75	119.82	0.65	0.44	-53.06	32.90	67.10
2013	147.83	291.68	-143.85	91.49	0.51	0.31	-97.31	38.11	61.89
Mean	115.72	103.51	12.21	77.35	1.49	1.00	9.62	35.78	64.22
Growth	106.44	245.40	-138.96	69.83	-0.38	-0.16	-85.50	-9.56	9.56
Growth Rate (%)	257.16	530.25	-2841.72	322.39	-42.70	-34.04	-723.96	-20.05	18.27
S.D.	50.41	90.20	73.19	37.70	0.82	0.61	49.85	7.35	7.35
C.V. (%)	43.56	87.14	599.43	48.74	55.03	61.00	518.35	20.54	11.45

From the table, it is observed that the growth in net working capital is negative i.e. -2841.72 with a S.D. of Rs. 73.19 crores and a C.V. of 599.43. This is due to the growth rate in current liabilities (530.25% with a S.D. of Rs.90.20 and a C.V. of 87.14) is more than that of current assets (257.16% with a S.D. of Rs. 50.41 crores and a C.V. of 43.56%). The quick assets are shown a growth rate of 322.39 with a S.D. of Rs 37.70 crores and a C.V. of 48.74. The growth rate in current ratio and quick ratio are negative with 42.70 and 34.04 indicating unsatisfactory level of liquidity position. So the company has to take steps to increase investment in liquid assets. The average current ratio and quick ratio are 1.49 and 1.

When the overall liquidity position of the company is analyzed by applying Motaal's Comprehensive Test of Liquidity, we found that working capital to current assets ratio has shown a negative growth of 723.96 . This indicates that the growth rate of current liabilities was more as compared to the growth rate of current assets and hence the working capital is decreasing slowly and slowly. This aggressive approach in the working capital might be the policy of the firm to enhance the profitability but no doubt it endangers the liquidity position of the company.

The negative growth in stock to current assets ratio(-20.05) can be treated as a positive action towards liquidity management assuming that the company was reducing its inventory level to the extent possible so as to free up the money tied up with the inventories. The quick asset to current ratio has also registered a positive growth of 18.27 % during the study period, which is an indication of company's concern and steps to maintain liquidity.

To conclude, the liquidity position of the company is not that much satisfactory as it ought to be. So, the Company should take enough steps to increase the level of liquidity position.

Panyam Cements and Mineral Industries Ltd. (PCMIL)

Table 2 gives a detailed description of liquidity position of PCMIL.

Table 5

Panyam Cements & Minerals Ltd. Pcmil)							(Rs. In Crores)		
Year	Current Assets	Current Liabilities	Net Working Capital	Quick Assets	Current Ratio	Quick Ratio	Net Working Capital to Current Assets(%)	Inventory to Current Assets (%)	Quick Assets to Current Assets %)
2004	27.47	60.34	-32.87	21.32	0.46	0.35	-119.66	22.39	77.61
2005	23.39	65.28	-41.88	16.4	0.36	0.25	-179.00	29.88	70.12
2006	8.05	84.38	-76.33	5.23	0.1	0.06	-948.20	35.03	64.97
2007	38.26	110.16	-71.9	30.93	0.35	0.28	-187.92	19.16	80.84
2008	80.42	112.95	-32.53	68.7	0.71	0.61	-40.45	14.57	85.43
2009	133.81	42.12	91.68	120.59	3.18	2.86	68.52	9.88	90.12
2010	148.59	52.96	95.64	130.5	2.81	2.46	64.37	12.17	87.83
2011	146.31	52.54	93.77	127.34	2.78	2.42	64.09	12.97	87.03
2012	149.96	109.26	40.71	121.94	1.37	1.12	27.15	18.68	81.32
2013	117.33	114.47	2.86	97.6	1.02	0.85	2.44	16.82	83.18
Mean	87.36	80.45	6.92	74.06	1.31	1.13	-124.87	19.16	80.85
Growth	89.86	54.13	35.73	76.28	0.56	0.50	122.10	-5.57	5.57
Growth Rate (%)	327.12	89.71	108.7	357.79	121.74	142.86	102.04	-24.88	7.18
S.D.	55.34	27.53	65.13	48.75	1.11	1.00	289.86	7.6	7.60
C.V. (%)	63.65	34.22	941.18	65.83	84.73	88.50	232.14	39.67	9.40

It is evident from the table that the net working capital has shown a positive growth rate with 108.70%(S.D. of Rs.65.13 crores and C.V. of 941.18%) due to the growth rate in current assets (327.12% with a S.D. of Rs.55.34 crores and a C.V. of 63.65%) is more than that of current liabilities (89.71% with a S.D. of 27.53 crores and a C.V. of 34.22%). Quick assets also have registered a positive growth rate of 357.79 with a S.D. of Rs.48.75 crores and a C.V. of 65.83% indicating the good liquidity position of the company.

The current ratio and quick ratio also have shown the positive growth rate with 121.74% and 142.86% respectively. The average current ratio (1.31) is less than the standard rule i.e. 2 and the average quick ratio is more than required.

When the overall liquidity position of the company is analyzed by applying Motaal's Comprehensive Test of Liquidity, we found that working capital to current assets ratio has shown a positive growth of 102.04. This indicates that the growth rate of current assets was more as compared to the growth rate of current liabilities and hence the working capital is increased. The negative growth in stock to current assets ratio(-24.88) can be treated as a positive action towards liquidity management assuming that the company was reducing its inventory level to the extent possible so as to free up the money tied up with the inventories. The quick asset to current ratio has also registered a positive growth of 7.18 % during the study period, which is an indication of company's concern and steps to maintain liquidity.

To conclude, the overall liquidity position of the company is good.

Sagar Cements Ltd. (SCL)

Table 1 gives a detailed description of liquidity position of SCL.

Table 6

Sagar Cements Ltd. (Scl)							(Rs. In Crores)		
Year	**Current Assets**	**Current Liabilities**	**Net Working Capital**	**Quick Assets**	**Current Ratio**	**Quick Ratio**	**Net Working Capital to Current Assets (%)**	**Inventory to Current Assets (%)**	**Quick Assets to Current Assets (%)**
2004	28.85	20.4	8.45	19.63	1.41	0.96	29.29	31.96	68.04
2005	32.19	21.36	10.83	24.14	1.51	1.13	33.64	25.01	74.99
2006	23.64	22.84	0.8	16.99	1.04	0.74	3.38	28.13	71.87
2007	39.12	36.57	2.55	32.48	1.07	0.89	6.52	16.97	83.03
2008	61.24	49.39	11.85	53.74	1.24	1.09	19.35	12.25	87.75
2009	126.1	57.52	68.58	83.57	2.19	1.45	54.39	33.73	66.27
2010	136.68	80.37	56.31	87.82	1.70	1.09	41.20	35.75	64.25
2011	173.01	98.27	74.74	115.47	1.76	1.18	43.20	33.26	66.74
2012	202.93	262.75	-59.82	117.24	0.77	0.45	-29.48	42.23	57.77
2013	221.9	232.12	-10.22	156.68	0.96	0.67	-4.61	29.39	70.61
Mean	104.57	88.16	16.41	70.78	1.37	0.97	19.69	28.87	71.13
Growth	193.05	211.12	-18.67	137.05	-0.45	-0.29	-33.90	-2.57	2.57
Growth Rate (%)	669.15	1034.9	-220.95	698.17	-31.91	-30.21	-115.74	-8.04	3.78
S.D.	73.01	83.54	38.45	46.29	0.41	0.27	24.40	8.44	8.44
C.V. (%)	69.82	94.76	234.31	65.40	29.93	27.84	123.93	29.23	11.87

It is evident from the table that the growth rate in net working capital is negative(220.95% with a S.D. of Rs. 38.45 crores and a C.V. of 234.31%) due to the growth rate in current liabilities(1034.90% with a S.D. of Rs.83.54 crores and a C.V. of 94.76%) is more than that of current assets(669.15% with a S.D. of Rs. 73.01 and a C.V. of 69.82%). The quick assets have registered a positive growth of 698.17% with a S.D. of Rs.46.29 crores and a C.V. of 65.40, but it is not that much of current liabilities.

The growth rate in current ratio and quick ratio is negative with -31.91 and -30.21 respectively. The average current ratio (1.37) and quick ratio (0.97) are less than the rule of thumb i.e. 2 and 1 which indicates the liquidity position is not up to the expectation.

When we tried to find out the overall liquidity position of the company by applying Motaal’s Comprehensive Test of Liquidity, we found that working capital to current assets ratio has shown a negative growth of 115.74%. This indicates that the growth rate of current liabilities was more as compared to the growth rate of current assets and hence the working capital was decreasing slowly and slowly The negative growth in stock to current assets ratio (8.04) can be treated as a positive action towards liquidity management assuming that the company was reducing its inventory level to the extent possible so as to free up the money tied up with the inventories. The quick asset to current ratio has also registered a positive growth of 3.78 during the study period, which is an indication of company’s concern and steps to maintain liquidity.

To conclude, the present liquidity position of the company is not that much satisfactory as it ought to be. Company should take enough steps to increase the level of working capital, to increase the current ratio and quick ratio. Current assets should be increased at a faster rate as compared to current liabilities.

MOTAAL'S COMPREHENSIVE TEST OF LIQUIDITY

Motaal prescribes a comprehensive test for determining the soundness of a firm as regards liquidity position. According to him, a process of ranking is used to arrive at a more comprehensive measure of liquidity in which the following three ratios are combined in a point score:

- Working Capital (WC) to Current Asset Ratio = $\frac{\text{Working Capital}}{\text{Current Assets}} \times 100$
- Stock to Current Asset Ratio = $\frac{\text{Inventory}}{\text{Current Assets}} \times 100$
- Quick Assets to Current Asset Ratio = $\frac{\text{Quick Assets}}{\text{Current Assets}} \times 100$

Current Assets

The higher the value of both working capitals to current asset ratio and liquid resources to current asset ratio, relatively the more favorable will be the liquidity position of a firm and vice-versa. On the other hand, lower the value of stock to current assets ratio, relatively the more favorable will be the liquidity position of the firm. The ranking of the above three ratios of a firm over a period of time is done in their order of preferences. Finally, the ultimate ranking is done on the basis of the principle that the lower the points score, the more favorable will be the liquidity position and vice-versa.

Table 7

Motaal's Comprehensive Test of Liquidity

Sl. No.	Company	Net Working Capital to Current Assets Ratio (%)	Rank	Inventory to Current Assets Ratio (%)	Rank	Quick Assets to Current Assets Ratio(%)	Rank	Total (4+6+8)	Ultimate Rank
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	APCL	37.25	3	31.45	4	68.55	4	11	4
2	BCL	46.97	1	38.47	6	61.53	6	13	5
3	DCL	40.89	2	24.77	2	75.23	2	6	1
4	NCL	9.62	5	35.78	5	64.22	5	15	6
5	PCMIL	-124.87	6	19.16	1	80.85	1	8	2
6	SCL	19.69	4	28.87	3	71.13	3	10	3

The table 7 presents Motaal's Comprehensive Test of Liquidity. This table reveals that Deccan Cements Ltd. is awarded Rank-I, indicating the most liquid company among the six . Panyam Cements & Mineral Industries Ltd. and Sagar Cements Ltd. have ranked second and third respectively. Among the remaining three, Anjani Portland Cements Ltd. got fourth rank and Bheema Cements Ltd. and NCL Industries Ltd. got 5th rank and 6th rank respectively , indicating the most unfavorable liquidity position.

CONCLUSIONS

- In conclusion we can say that
- In all the cases the growth rate of current liabilities are much more than the growth rate of current assets, which in long run will affect the working capital position of the company adversely ultimately affecting the liquidity position of the companies. Hence, companies should ensure that the current assets and current liabilities grow at a similar rate.
- In some cases we have came across with negative working capital. No doubt, in these days many companies are using negative working capital and getting a good amount of profits and good return on capital also. Negative working capital indicates lower cost of working capital (another way is higher profitability), but at the same time, it indicates poor liquidity (worried situation for the creditors, etc.) or we can say company is overburdened with current liabilities, which is not good for any situation (specially in a period of recession, etc).

- Companies should always see that they maintain the ideal current and liquid ratio, which is not there in case with the companies we have studied.
- Last but not the least, companies should ensure that the percentage of inventories in current assets is as low as possible.

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