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WORKING CAPITAL MANAGEMENT IN CEMENT INDUSTRY – A STUDY WITH SPECIAL REFENRENCE TO LIQUIDITY MANAGEMENT OF SELECT COMPANIES IN ANDHRA PRADESH., INDIA

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ABSTRACT

LIQUIDITY is regarded as one of the most important desired goals of an organization. Cement industry is not an exemption from this. The significance of adequate liquidity in the sense refers the ability of an enterprise to cater to the 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 management of working capital. It is in this perspective; the present study is undertaken to examine and evaluate the liquidity management of select cement companies of Andhra Pradesh.

KEYWORDS

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

INTRODUCTION

The aim of working capital management is to manage a firm's current assets e.g., debtors, receivables, cash in hand, cash at bank, stock etc. and firm's current liabilities viz. Creditors‟, bills payable etc. in an effective manner. If it is not maintained efficiently, it is likely to become insolvent and may also become bankrupt. The current assets should be large enough to cover current liabilities in order to ensure a reasonable margin of safety. Each of the current assets must be managed efficiently in order to maintain the liquidity of a concern while not keeping too high level of any one of them so that the cost increases. Each of short- term sources of finance must be continuously manageable to ensure that they are obtained and used in the best possible way. Proper management of working capital is very important for the success of a concern. It also aims at protecting the purchasing power of assets and maximizing the return on investment.

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. It is indispensable to have a proper balance between the two contradictory requirements, i.e., liquidity and profitability, is required for efficient working capital management. It is at the junction the present study is undertaken to examine and evaluate the liquidity management of select cement companies of Andhra Pradesh. 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 position among select units has been made by allotting ranks to them as per the Motaal's Ultimate Rank Test.

OVERVIEW OF LITERATURE

A brief review of the different researches in the related field is attempted to arrivate at meaningful inferences.

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.

Singhania's (2010) study "Financial Leverage and Investment Opportunities in India: A Empirical study", concluded that there is an inverse relationship between the debt Ratio of the companies and their growth, the liquidity ratio and the interest coverage ratio and that there was a positive correlation between the size of the company and the debt ratio, a significant difference of capital structure between companies with more than 50 percent debt level than those with less than that

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

Mustafa's (2011) Scholarly work, "Analyzing the Impact of Working Capital Management on the Profitability of SMEs in Pakistan", reveals that an efficient management of working capital has a more profound impact on profitability of small enterprises than on the performance of larger companies since a substantial proportion of the total assets of small and medium firms is constituted of the current assets and a fraction of their total liabilities is consisted of the current liabilities.

Nandi Chandra Kartik (2012) in his paper on "Trends in Liquidity Management and Their Impact on Profitability: A Case Study" attempted 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 inferred 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

The specific objectives of the study are:

- To analyse the management of working capital in cement companies.
- To study and compare the liquidity position of the select companies under the study and
- To trace out the weak sports in liquidity management and offer suggestions for improvement of liquidity.

RESEARCH METHODOLOGY

The following section spells out the research methodology adapted for the study for analysis.

Sample Design

Six sample cement manufacturing units have been selected.

1. NCL Industries Limited (NCL)
2. Panyam Cements & Mineral Limited (PCMIL)
3. Sri Chakra Cements Limited (SCCL)
4. Hemadri Cements Limited (HCL)
5. Sagar Cements Limited (SCL)
6. KCP Limited (KCP)

Scope of the Study

The present study is restricted to the above mentioned six select cement companies of Andhra Pradesh and focusses on different aspects as regards to liquidity management of the sample units of cement industry.

Period of the Study

The period of the study covers 10 years from 2011-12 to 2020-21.

Data Collection

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

LIMITATIONS OF THE STUDY

The study has the following limitations:

- The study covers the period from 2011-12 to 2020-21. 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 the data may reflect may in the analysis and the conclusion of the study. However, proper steps were taken to ensure authenticity of data and information.

LIQUIDITY MANAGEMENT IN SELECT CEMENT COMPANIES – AN ANALYSIS

In order to study the liquidity status of the select companies, the liquid ratios, amount invested in liquid assets, working capital calculated and other related ratios were also computed and analysed so as to arrive at concrete inferences:

NCL Industries Limited (NCL)

Table-1gives an overview of the position of NCL. Current Assets have shown a growth rate of 90.90 percent with S.D. and C.V of Rs.7785.32 lakhs and 33.57 percent respectively. The growth rate of current liabilities was 12.11percent with a standard deviation of Rs.4740.19lakhs and a CV of 16.91 percent. The growth rate of working capital was -136.38 percent with a SD of Rs.6088.46 lakhs and a CV of -125.62 percent. 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. It may be concluded 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 96.76 percent with a SD of Rs. 6007.24 lakhs and a CV of 38.47 percent.

Table:1 NCL Industries Limited (NCL) (Rs. In Lakhs)

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 (%)
2011-12	17,856.67	27332.31	-9,475.64	11982.12	0.65	0.44	-53.06	32.90	67.10
2012-13	14,783.96	29168.22	-14,384.26	9149.62	0.51	0.31	-97.30	38.11	61.89
2013-14	15,593.53	24721.94	-9,128.41	9855.72	0.63	0.40	-58.54	36.80	63.20
2014-15	16,610.74	25225.77	-8,615.03	10277.35	0.66	0.41	-51.86	38.13	61.87
2015-16	20,479.44	30285.58	-9,806.14	13265.06	0.68	0.44	-47.88	35.23	64.77
2016-17	22,896.95	21796.99	1,099.96	15808.15	1.05	0.73	4.80	30.96	69.04
2017-18	22,349.45	21981.52	367.93	14441.68	1.02	0.66	1.65	35.38	64.62
2018-19	32,834.56	32603.61	230.95	24372.09	1.01	0.75	0.70	25.77	74.23
2019-20	34,391.83	36596.07	-2,204.24	23433.73	0.94	0.64	-6.41	31.86	68.14
2020-21	34,087.90	30641.06	3,446.84	23575.44	1.11	0.77	10.11	30.84	69.16
Mean	23,188.50	28,035.31	-4,846.80	15,616.10	0.83	0.55	-29.78	33.60	66.40
Growth	16,231.23	3,308.75	12,922.48	11,593.32	0.46	0.33	63.18	-2.06	2.06
Growth Rate (%)	90.90	12.11	-136.38	96.76	70.28	75.51	-119.06	-6.26	3.07
S. D	7785.32	4740.19	6088.46	6007.24	0.22	0.17	36.51	3.89	3.89
C.V (%)	33.57	16.91	-125.62	38.47	26.64	30.79	-122.59	11.58	5.86

Sources: Annual reports

It is observed, that current ratio and quick ratio have registered a positive growth i.e.,70.28 percent and 75.51 percent respectively. The positive growth in both the ratios indicates that the liquidity position of the company has been constant over the years. The average current ratio of the company was 0.83 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 (0.55) below 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 119.06 percent. 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 (-6.26) 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 3.07 percent 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 & Mineral Limited (PCMIL)

Table 2 displays a detailed description of liquidity position of PCMIL. From the table we observed that the growth rate in current liabilities 394.52 percent is more than that of current assets 39.33 percent, the growth rate in net working capital 8661.90 percent is negative. So, the company is to take action to maintain positive net working capital. The growth rate in quick assets is 78.73 percent with a S.D. of Rs.2922.29 lakhs and a C.V. of 39.63 percent.

It is found that both current ratio and quick ratio have registered a negative growth i.e., -71.83 percent and -63.86 percent 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 (0.52) and the average quick ratio (0.41) are less 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 52.13 percent and in quick ratio 49.47 percent is also an indication of instability in the liquidity position of the company.

Table-2 Panyam Cements & Mineral Limited (PCMIL) (Rs. In Lakhs)

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 (%)
2011-12	10475.52	10,925.58	-450.06	7,673.67	0.96	0.70	-4.30	26.75	73.25
2012-13	8464.62	11,447.96	-2,983.34	6,491.74	0.74	0.57	-35.24	23.31	76.69
2013-14	7124.2	10,958.55	-3,834.35	5,381.50	0.65	0.49	-53.82	24.46	75.54
2014-15	7645.79	14,196.07	-6,550.28	5,363.73	0.54	0.38	-85.67	29.85	70.15
2015-16	9341.32	17,547.17	-8,205.85	7,327.52	0.53	0.42	-87.84	21.56	78.44
2016-17	13834.92	17,102.58	-3,267.66	11,358.83	0.81	0.66	-23.62	17.90	82.10
2017-18	7547.12	20,034.72	-12,487.60	5,798.35	0.38	0.29	-165.46	23.17	76.83
2018-19	7066.01	28,383.93	-21,317.92	5,986.18	0.25	0.21	-301.70	15.28	84.72
2019-20	5,519.56	51,912.94	-46,393.38	4,638.97	0.11	0.09	-840.53	15.95	84.05
2020-21	14,595.19	54,029.00	-39,433.81	13,715.00	0.27	0.25	-270.18	6.03	93.97
Mean	9,161.43	23,653.85	-14,492.43	7,373.55	0.52	0.41	-186.84	20.43	79.57
Growth	4,119.67	43,103.42	-38,983.75	6,041.33	-0.69	-0.45	-265.89	-20.72	20.72
Growth Rate (%)	39.33	394.52	8661.90	78.73	-71.83	-63.86	6188.75	-77.45	28.28
S. D	2987.37	16324.90	16200.77	2922.29	0.27	0.20	251.35	6.85	6.85
C.V (%)	32.61	69.02	-111.79	39.63	52.13	49.47	-134.53	33.53	8.61

Sources: Annual reports

When the overall liquidity position of the company is analyzed by applying Motaal's Comprehensive Test of Liquidity, it is found that working capital to current assets ratio has shown a negative growth of 6188.75. 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 to 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 which is -77.45 percent is a good sign for the company because it indicates that investment in inventories is decreasing gradually, which has to be continued.

The quick asset to current ratio has also registered a positive growth of 28.28 percent during the study period, which shows that company's liquid assets position has also constant 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.

Sri Chakra Cements Limited (SCCL)

From the table-3, it is observed that the growth rate in current assets (80.83 percent with a S.D. of Rs. 1590.88 lakhs and a C.V. of 36.45 percent) is more than that of current liabilities (9.87 percent with a S.D. of Rs. 926.79 lakhs and a C.V. of 20.79 percent). Hence, the growth rate in net working capital also is decreased -137.66 percent.

It is apparent that the growth rate in quick assets (107.36 percent with a S.D. of Rs. 1476.10 lakhs and a C.V of 48.71 percent) is also increased but not that much of current assets and less than that of current liabilities. The growth rate in current ratio is 64.67 percent with a S.D. of Rs. 0.49 lakhs and a C.V. of 47.88 percent whereas the growth in quick assets is positive of 88.73 with a S.D. of Rs. 0.44 lakhs and a C.V. of 61.44 percent. The average current ratio and quick ratio are 1.03 and 0.72 respectively. They are less than the ideal rule of thumb i.e., 2 and 1. This indicates the not satisfactory level of liquidity position.

Table-3 Sri Chakra Cements Limited (SCCL) (Rs. In Lakhs)

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 (%)
2011-12	2,941.36	4,358.06	-1,416.70	1913.07	0.67	0.44	-48.16	34.96	65.04
2012-13	2,332.33	3,811.05	-1,478.72	1365.29	0.61	0.36	-63.40	41.46	58.54
2013-14	2,661.14	4,724.51	-2,063.37	1726.15	0.56	0.37	-77.54	35.13	64.87
2014-15	3,562.80	4,809.79	-1,246.99	2303.88	0.74	0.48	-35.00	35.34	64.66
2015-16	4,494.79	3,263.22	1,231.57	2971.55	1.38	0.91	27.40	33.89	66.11
2016-17	7,721.68	3,595.48	4,126.20	6547.92	2.15	1.82	53.44	15.20	84.80
2017-18	5,002.00	3,726.00	1,276.00	3339.00	1.34	0.90	25.51	33.25	66.75
2018-19	5009.00	5057.00	-48.00	3034.00	0.99	0.60	-0.96	39.43	60.57
2019-20	4594.88	6440.92	-1,846.04	3136.76	0.71	0.49	-40.18	31.73	68.27
2020-21	5321.73	4788.20	533.53	3966.89	1.11	0.83	10.03	25.46	74.54
Mean	4,364.17	4,457.42	-93.25	3,030.45	1.03	0.72	-14.89	32.58	67.42
Growth	2,380.37	430.14	1,950.23	2,053.82	0.44	0.39	58.19	-9.50	9.50
Growth Rate (%)	80.93	9.87	-137.66	107.36	64.67	88.73	-120.81	-27.18	14.61
S. D	1590.88	926.79	1937.48	1476.10	0.49	0.44	43.88	7.46	7.46
C.V (%)	36.45	20.79	-2077.68	48.71	47.88	61.44	-294.80	22.90	11.07

Sources: Annual reports

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 120.81 percent. It evident that the growth rate of current assets was less as compared to the growth rate of current liabilities and hence the working capital is decreased. The negative growth in stock to current assets ratio which is -27.18 percent is a good sign for the company because it indicates that investment in inventories is decreasing gradually, which has to be continued.

The quick asset to current ratio has registered a positive growth of 14.61 percent during the study period, which shows that company's liquid assets position constant during the study period, 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.

Hemadri Cements Limited (HCL)

Table 4 gives an overview of the that term liquidity position of HCL Industries Ltd in provided in trends. It is observed that the growth in net working capital is negative i.e., -9.27 percent with a S.D. of Rs. 410.12 lakhs and a C.V. of 28.67. This is due to the growth rate in current liabilities (-5.07 percent with a S.D. of Rs.162.86 lakhs and a C.V. of 10.08 percent) and that of current assets (-7.25 percent with a S.D. of Rs. 424.08 lakhs and a C.V. of 13.92 percent). The quick assets are shown a growth rate of -724.25 percent with a S.D. of Rs 482.54 lakhs and a C.V. of 21.00 percent. The growth rate in current ratio and quick ratio are negative with 2.30 percent and 17.32 percent 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 1.90 and 1.43.

Table-4 Hemadri Cements Limited (HCL) (Rs. In Lakhs)

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 (%)
2011-12	3,826.29	1,835.63	1,990.66	3,367.85	2.08	1.83	52.03	11.98	88.02
2012-13	2,868.44	1,363.32	1,505.12	2,237.38	2.10	1.64	52.47	22.00	78.00
2013-14	3,324.16	1,612.96	1,711.20	2,598.66	2.06	1.61	51.48	21.83	78.17
2014-15	2,675.08	1,690.81	984.27	1,883.78	1.58	1.11	36.79	29.58	70.42
2015-16	3,097.75	1,530.31	1,567.44	2,267.47	2.02	1.48	50.60	26.80	73.20
2016-17	2973.31	1,427.55	1,545.76	2,190.67	2.08	1.53	51.99	26.32	73.68
2017-18	3,041.36	1,501.40	1,539.96	2,230.64	2.03	1.49	50.63	26.66	73.34
2018-19	2,635.73	1,837.32	798.41	1,831.56	1.43	1.00	30.29	30.51	69.49
2019-20	2,467.91	1,613.47	854.44	1,722.31	1.53	1.07	34.62	30.21	69.79
2020-21	3,548.76	1,742.63	1,806.13	2,643.60	2.04	1.52	50.89	25.51	74.49
Mean	3,045.88	1,615.54	1,430.34	2,297.39	1.90	1.43	46.18	25.14	74.86
Growth	-277.53	-93.00	-184.53	-724.25	-0.05	-0.32	-1.13	13.53	-13.53
Growth Rate (%)	-7.25	-5.07	-9.27	-21.50	-2.30	-17.32	-2.17	112.88	-15.37
S. D	424.08	162.86	410.12	482.54	0.27	0.28	8.64	5.53	5.53
C.V (%)	13.92	10.08	28.67	21.00	14.06	19.30	18.70	21.98	7.38

Source: annual reports.

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 2.17. 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 112.88 percent is a bad sign for the company because it indicates that investment in inventories is increasing gradually, which has to be stopped.

The quick asset to current ratio has also registered a negative growth of 15.37 Percent 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.

Sagar Cements Ltd (SCL)

Table-5 gives an overview of the position of SCL. From the table, we observed that the growth rate in Current Assets have shown a growth rate of 105.73 percent with S.D. and C.V of Rs.10320.11lakhs and 34.50 percent respectively. The growth rate of current liabilities was 49.5311 percent with a standard deviation of Rs.7589.46 lakhs and a CV of 27.44 percent. The growth rate of working capital was -141.12 percent with a SD of Rs.10566.21lakhs and a CV of 466.90 percent. Quick assets also have registered a positive growth rate of 177.65 percent with a S.D. of Rs.9807.72 lakhs and a C.V. of 43.56 percent indicating the good liquidity position of the company. The current ratio and quick ratio also have shown the positive growth rate with 37.59 percent and 85.68 percent respectively. The average current ratio (1.12) and quick ratio (0.85) are less than the rule of thumb i.e., 2 and 1 which indicates the liquidity position is not up to the expectation.

It is observed that working capital to current assets ratio has shown a negative growth of 119.99 Percent. This indicates that the growth rate of current assets was less as compared to the growth rate of current liabilities and hence the working capital is decreased. The negative growth in stock to current assets ratio which is 47.83 percent is a good sign for the company because it indicates that investment in inventories is decreasing gradually, which has to be continued.

Table-5 Sagar Cements Ltd (SCL) (Rs. In Lakhs)

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 (%)
2011-12	20,293.50	26,275.70	-5,982.20	11724.60	0.77	0.45	-29.48	42.22	57.78
2012-13	22,189.85	23,211.84	-1,021.99	15667.76	0.96	0.67	-4.61	29.39	70.61
2013-14	16,014.86	20,427.58	-4,412.72	11837.32	0.78	0.58	-27.55	26.09	73.91
2014-15	47,996.14	22,214.82	25,781.32	41765.30	2.16	1.88	53.72	12.98	87.02
2015-16	21,775.54	22,653.34	-877.80	15205.69	0.96	0.67	-4.03	30.17	69.83
2016-17	37,220.00	20,758.00	16,462.00	29924.00	1.79	1.44	44.23	19.60	80.40
2017-18	26,655.00	26,236.00	419.00	19898.00	1.02	0.76	1.57	25.35	74.65
2018-19	33,342.00	36,851.00	-3,509.00	22731.00	0.90	0.62	-10.52	31.82	68.18
2019-20	31,939.00	38,627.00	-6,688.00	23872.00	0.83	0.62	-20.94	25.26	74.74
2020-21	41,750.00	39,290.00	2,460.00	32553.00	1.06	0.83	5.89	22.03	77.97
Mean	29,917.59	27,654.53	2,263.06	22,517.87	1.12	0.85	0.83	26.49	73.51
Growth	21,456.50	13,014.30	8,442.20	20,828.40	0.29	0.38	35.37	-20.20	20.20
Growth Rate (%)	105.73	49.53	-141.12	177.65	37.59	85.68	-119.99	-47.83	34.96
S. D	10320.11	7589.46	10566.21	9807.72	0.47	0.45	28.06	7.82	7.82
C.V (%)	34.50	27.44	466.90	43.56	41.61	52.91	3390.98	29.53	10.64

Source: Annual reports

The quick asset to current assets has registered a positive growth of 34.96 percent during the study period, which shows that company's liquid assets position constant 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.

KCP Limited (KCP)

The details of description of liquidity position of KCP are furnished in table -6. It is evident from the table that the net working capital has shown a positive growth rate with 212.29 percent (S.D. of Rs.6515.17 lakhs and C.V. of -209.34 percent) due to the growth rate in current assets (35.57 percent with a S.D. of Rs.6034.81lakhs and a C.V. of 20.19 percent) is more than that of current liabilities (22.48 percent with a S.D. of 6119.75 lakhs and a C.V. of 18.55 percent). Quick assets also have registered a positive growth rate of 81.82 percent with a S.D. of Rs.6216.11 lakhs and a C.V. of 37.98 percent indicating the good liquidity position of the company.

The current ratio and quick ratio also have shown the positive growth rate with 10.69 percent and 48.45 percent respectively. The average current ratio (0.92) and quick ratio (0.50) are less than the rule of thumb i.e., 2 and 1 which indicates the liquidity position is not up to the expectation.

Table-6 KCP Limited (KCP) (Rs. In Lakhs)

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 (%)
2011-12	32547.63	30,302.62	2,245.01	17708.08	1.07	0.58	6.90	45.59	54.41
2012-13	31507.21	32,846.62	-1,339.41	19671.55	0.96	0.60	-4.25	37.56	62.44
2013-14	28744.77	26,425.17	2,319.60	16392.05	1.09	0.62	8.07	42.97	57.03
2014-15	27582.49	26,547.82	1,034.67	12791.34	1.04	0.48	3.75	53.63	46.37
2015-16	22986.75	27,884.66	-4,897.91	10894.32	0.82	0.39	-21.31	52.61	47.39
2016-17	25838.31	33,729.65	-7,891.34	14113.11	0.77	0.42	-30.54	45.38	54.62
2017-18	23630.5	29,886.32	-6,255.82	10922.2	0.79	0.37	-26.47	53.78	46.22
2018-19	32232.04	40,865.96	-8,633.92	14519.24	0.79	0.36	-26.79	54.95	45.05
2019-20	29671.79	44,388.68	-14,716.89	14476.26	0.67	0.33	-49.60	51.21	48.79
2020-21	44126.24	37,115.22	7,011.02	32197.04	1.19	0.87	15.89	27.03	72.97
Mean	29,886.77	32,999.27	-3,112.50	16,368.52	0.92	0.50	-12.44	46.47	53.53
Growth	11,578.61	6,812.60	4,766.01	14,488.96	0.11	0.28	8.99	-18.56	18.56
Growth Rate (%)	35.57	22.48	212.29	81.82	10.69	48.45	130.35	-40.71	34.11
S. D	6034.81	6119.76	6515.73	6216.11	0.17	0.17	21.39	8.87	8.87
C.V (%)	20.19	18.55	-209.34	37.98	18.85	33.58	-171.98	19.09	16.57

Source: Annual reports

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 130.35%. 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 (-40.71%) 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 34.11 % 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.

MOTAAL'S COMPREHENSIVE TEST OF LIQUIDITY

The results of Motaal's comprehensive test of liquidity are presented here in brief:

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 to Current Assets = $\frac{\text{Working Capital}}{\text{Current Assets}} X\ 100$

Stock to Current Assets = $\frac{\text{Stock}}{\text{Current Assets}} X\ 100$

Quick assets to Current Assets = $\frac{\text{Quick Assets}}{\text{Current Assets}} X\ 100$

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.

The results of Motaal's Comprehensive Test of Liquidity are manufactured in table -7. It may be seen that Hemadri Cements Limited (HCL) is awarded Rank-I, indicating the most liquid company among the six. Panyam Cements & Mineral Industries Ltd (PCMIL) and Sagar Cements Ltd (SCL) have ranked (equal) second and third respectively. Sri Chakra Cements Limited (SCCL) got 4th rank and NCL Industries Ltd (NCL) and KCP Limited (KCP) got equal ranks 5th and 6th rank respectively, indicating the most unfavorable liquidity position.

Table.7 Motaal's Comprehensive Test of Liquidity

S.no	Company	Net working capital to current assets Ratio (%)	Rank	Stock 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	NCL	-29.78	5	33.60	5	66.40	5	15	5.5
2	PCMIL	-186.84	6	20.43	1	79.57	1	8	2.5
3	SCCL	-14.89	4	32.58	4	67.42	4	12	4
4	HCL	46.18	1	25.14	2	74.49	2	5	1
5	SCL	0.83	2	26.49	3	73.51	3	8	2.5
6	KCP	-12.44	3	46.47	6	53.53	6	15	5.5

Source: Annual report

CONCLUSION

- In case of sample units, the growth rate of current liabilities is 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 assets and current liabilities grow at a similar rate.
- Negative working capital has been notified in case of some of the sample units. 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 ensure that they maintain an ideal current and liquid ratios. It is lacking in many sample units.

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