

A STUDY ON WORKING CAPITAL MANAGEMENT THROUGH RATIO ANALYSIS WITH REFERENCE TO KARNATAKA POWER CORPORATION LIMITED

Srinivas K T

Associate Professor, CIMS-B School, Jayanagar, Bangalore, india

Email: srinikeelara@gmail.com

ABSTRACT

Working capital is nerve system of any business. Without proper working capital management company cannot achieve its objectives and not possible to maintain financial soundness. So in this perspective present study is undertaken to study working capital management through ratio analysis at Karnataka Power Corporation limited. From the present study it is found that company financial position was seeing to be sound because the company tries to increase its production and also net profit.

Keywords: Working capital management, Ratio Analysis, KPCL

INTRODUCTION

One of the most important areas in the day to day management of the firm is the management of working capital. Working capital refers to the funds invested in the current assets i.e. investment in stock, sundry debtors, cash and others current are essential to use fixed assets profitability for e.g.: A machinery cannot be used without raw materials. The investments on the purchase of raw material are identified as working capital. It is obvious that a certain amount of the fund is always tied up in raw material inventories. Working capital may be regarded as lifeblood of a business. Its effective provision can do much ensure the success of the business, while its inefficient management can lead not only loss of the profits but also the ultimate downfall of what otherwise might be considered as promising concern.

The importance of working capital in commercial under takings can never be over emphasized. A concerned needs funds for its day to day running. A large amount of working capital would mean that the company has idle funds the various study is conducted by the bureau of public enterprises have shown that one of the reasons for poor performance of the public sector undertaking in our country has been the large amount of the funds locked up in working capital. Since funds have a cost, the company has to pay huge amount as interest on funds. This results in over the capitalization. Over the capitalization implies that company has too large funds for its requirements, resulting in low rate of the return, a situation which implies a less than optimal use of resources. A firm has therefore, to be very careful in estimating its working capital requirements.

REVIEW OF LITERATURE

Eljelly, (2004): elucidated that efficient liquidity management involves planning and controlling current assets and current liabilities in such a manner that eliminates the risk of inability to meet due short-term obligations and avoids excessive investment in these assets. The relation between profitability and liquidity was examined, as measured by current ratio and cash gap (cash conversion cycle) on a sample of joint stock companies in Saudi Arabia using correlation and regression analysis. The study found that the cash conversion cycle was of more importance as a measure of liquidity than the current ratio that affects profitability. The size variable was found to have significant effect on profitability at the industry level. The results were stable and had important implications for liquidity management in various Saudi companies. First, it was clear that there was a negative relationship between profitability and liquidity indicators such as current ratio and cash gap in the Saudi sample examined. Second, the study also revealed that there was great variation among industries with respect to the significant measure of liquidity.

Deloof,(2003): discussed that most firms had a large amount of cash invested in working capital. It can therefore be expected that the way in which working capital is managed will have a significant impact on profitability of those firms. Using correlation and regression tests he found a significant negative relationship between gross operating income and the number of days accounts receivable, inventories and accounts payable of Belgian firms. On basis of these results he suggested that managers could create value for their shareholders by reducing the number of days' accounts receivable and inventories to a reasonable minimum. The negative relationship between accounts payable and profitability is consistent with the view that less profitable firms wait longer to pay their bills.

Ghosh and Maji, (2003): in this paper made an attempt to examine the efficiency of working capital management of the Indian cement companies during 1992 – 1993 to 2001 – 2002. For measuring the efficiency of working capital management, performance, utilization, and overall efficiency indices were calculated instead of using some common working capital management ratios. Setting industry norms as target-efficiency levels of the individual firms, this paper also tested the speed of achieving that target level of efficiency by an individual firm during the period of study. Findings of the study indicated that the Indian Cement Industry as a whole did not perform remarkably well during this period.

Shin and Soenen, (1998): highlighted that efficient Working Capital Management was very important for creating value for the shareholders. The way working capital was managed had a significant impact on both profitability and liquidity. The relationship between the length of Net Trading Cycle, corporate profitability and risk adjusted stock return was examined using correlation and regression analysis, by industry and capital intensity. They found a strong negative relationship between lengths of the firm's net-trading Cycle and its profitability. In addition, shorter net trade cycles were associated with higher risk adjusted stock returns.

Smith and Begemann (1997): emphasized that those who promoted working capital theory shared that profitability and liquidity comprised the salient goals of working capital management. The problem arose because the maximization of the firm's returns could seriously threaten its liquidity, and the pursuit of liquidity had a tendency to dilute returns.

This article evaluated the association between traditional and alternative working capital measures and return on investment (ROI), specifically in industrial firms listed on the Johannesburg Stock Exchange (JSE). The problem under investigation was to establish whether the more recently developed alternative working capital concepts showed improved association with return on investment to that of traditional working capital ratios or not. Results indicated that there were no significant differences amongst the years with respect to the independent variables. The results of their stepwise regression corroborated that total current liabilities divided by funds flow accounted for most of the variability in Return on Investment (ROI). The statistical test results showed that a traditional working capital leverage ratio, current liabilities divided by funds flow, displayed the greatest associations with return on investment. Well-known liquidity concepts such as the current and quick ratios registered insignificant associations whilst only one of the never working capital concepts, the comprehensive liquidity index, indicated significant associations with return on investment.

NEED OF THE STUDY

Today financial soundness and profitability of business enterprises largely depend upon the working capital management by the firm. If there is shortage of working capital it affects the day to day operations of the business firm, if there is excess of working capital, fund become idle it also affects the financial soundness of the firm. In this perspective there is need to manage the working capital effectively in any business. The question which strike the mind during reviewing various literatures that how KPCL managing its working capital being public sector undertaking. Hence study is undertaken to answer the above mentioned question.

OBJECTIVES OF THE STUDY

1. To understand the concept of working capital and its importance
2. To determine the amount of the working capital employed by KPCL
3. To analyze the working capital management financial performance of the KPCL
4. To offer suggestions based on findings of the study

SCOPE OF THE STUDY

The present study is restricted to a single unit KPCL at Bangalore.

DATA COLLECTION

To achieve the aforesaid objectives data is gathered from secondary sources, like annual reports, journals, and related other research papers

DATA ANALYSIS

The collected data is analyses through ratio analysis and only important tables are used for data discussion as per research need and which are taken for data analysis.

Table 1. Table showing components of Currents of KPCL

Years	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Inventories	229.52	486.06	335.52	397.99	454.11
Sundry debtors	2919.5	4088.67	5204.19	6380.19	4913.02
Cash & bank balance	656.86	548.58	694.83	605.94	239.34
Loans & advances	336.06	343.89	321.96	358.83	213.76
Total Current Assets	4141.94	5467.2	6556.5	7742.95	5820.23

(Rs. In Crore)

Sources: Annual reports**Interpretation:**

The above table depicts the current assets of the company from 2007-08 to 2011-12, during 2007-08 total current assets was Rs. 4141.94 crores, in the year 2008-09 Rs. 5467.2 crores, in the year 2009-2010 Rs. 6556.5 crores, in the year 2010-2011 Rs 7742.95 crores, and in the year 2011-2012 Rs.5820.23crores, From the above table it can observe that there is a tremendous increase in the value of current assets from year 2007 -08 to 2010 -11, which indicates extensive growth of the organization. But during 2011- 2012 total current assets decline due to the amount of inventory was high and the inflow of the cash balance or the debtors balance reduced; the company should focus on increasing inflow

Table 2. Table showing Current Ratio of KPCL

Particulars	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Current assets	4141.94	5467.2	6556.5	7742.95	5820.23
Current liabilities	590.20	767.00	792.44	683.76	567.93
Current Ratio	7.01	7.12	8.27	11.32	10.25

(Rs. In Crore)

Sources: Annual reports**Interpretation:**

The standard current ratio is 2:1. The current ratio for five years from 2007- 2008 to 2011-2012 are calculated and presented in the above table. From the above table it is analyzed that the current ratio position in the company is good up to the year 2010-2011 i.e., the company has properly managed its working capital requirements; it shows good financial position of the company. After that there is slight decrease of the same in the year 2011- 2012 to 10.25. From the above table it is clear that the company has relatively high current ratio which is the indication that the company assets are highly liquid and the ability to pay its current obligations in time as when they are due.

Table 3. Table showing Liquid ratio of KPCL

Particular	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Liquid assets	3038.31	4981.14	5539.72	6778.19	5367.14
Liquid liabilities	590.20	767.00	792.44	683.76	567.93
Liquid Ratio	5.14	6.49	6.99	9.91	9.45

(Rs. In Crore)

Sources: Annual reports

Interpretation:

The standard quick ratio is 1:1. From the above table it is clear that the quick ratio has an increased from year 2007-2008 to 2010-2011, i.e., 5.14 to 9.91, and then there is a decrease during 2011-2012 i.e., From 9.91 to 9.45, which shows company has maintained its stability over the years and a slip in the current year due to the decrease in the liquid assets. From the above table it clear that the company has high liquid ratio compared to the current liabilities, which shows the company is in liquid form.

Table 4. Table showing working capital Turnover ratio of KPCL

Particular	(Rs. In Crore)				
	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Sales	3344.88	4147.90	4397.24	4149.56	5201.00
Net working capital	2724.44	4423.57	5694.28	6963.52	5087.42
WC turnover ratio	1.22	0.93	0.77	0.59	1.02

Sources: Annual reports

Interpretation:

The above depicts the working capital turnover ratio. From the above table it is analyzed that the working capital turnover ratio of the company is 1.22 in the year 2007-2008, and a slight decrease ever year till 2010-2011 and for the year 2011-2012 the company has concentrated and improved its working capital ratio to 1.02. From the above table it can see that there is a down trend in working capital turnover ratio till 2010-2011, and 2011-12 year there an increased in the ratio. From the above table it can inferred that there is a under utilization of working capital resource. Hence it is not a good indication for the company.

Table 5. Table showing current liabilities to Net worth ratio

Particular	(Rs. In Crore)				
	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Net working capital	2724.44	4423.57	5694.28	6963.52	5087.42
Current liabilities	590.20	767.00	792.44	683.76	567.93
CL to net worth Ratio	4.61	5.76	7.18	10.18	8.95

Sources: Annual reports

Interpretation:

Desirable level for this Ratio is 1/3. The ratios calculated above are very high compared to the desirable ratio. The above table depicts the CL to Net worth ratio of the company is very high. It means it is difficult to obtain long-term funds from any financial institutions.

Table 6. Table showing debtors turnover ratio

Particular	(Rs. In Crore)				
	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Net credit annual sales	3344.88	4147.90	4397.24	4149.56	5201.00
Average Sundry debtors	2919.50	4088.67	5204.19	6380.18	4913.02
Debt turnover Ratio	1.14	1.01	0.84	0.65	1.05

Sources: Annual reports

Interpretation:

The above table depicts the company's debt turnover ratio, it is in decreasing trend from 2007- 2008 to 2010-2011 but in the year 2011-2012 there is high increase due to decrease in debtors, i.e., the company's credit sales is increased but there is an decrease in the receivables, which can be further become a Bad debts to the company.

Table 7. Table showing average collection Period

Particular	2007-08	2008-09	2009-10	2010-11	2011-2012
Average No of working days	365	365	365	365	365
Debtors turnover ratio	2.29	2.02	1.68	1.30	2.1
Average collection period	159.38	180.69	217.26	280.76	173.80

Note: Average Number of working days is assumed to be 365days

Sources: Annual reports

Interpretation:

From the above analysis, the average collection period of debtors has an increasing trend from 160 days in 2007-2008 and then increased to 182 days in 2008-2009 and further increased to 218 days in 2009-2010, and in 2010-2011 it has further increased to 281 days, and in the year 2012 there is a decrease to 174 days of the collection period of debtors. From the above table it can be inferred that the company is losing its creditability in the market as there is short fall in the working capital and the amount of receivables also reduced.

Table 8. Table showing evaluation of Inventory Management

(Rs. In Crore)

Particular	2007-08	2008-09	2009-10	2010-11	2011-2012
Inventories	229.52	486.06	335.52	397.99	454.11
Net working capital	2724.44	4423.57	5694.28	6963.52	5087.42
Inventor management Ratio	0.08	0.11	0.06	0.06	0.09

Sources: Annual reports

Interpretation:

From the above analysis, the company inventory are up and down from the year 2007-2008 to 2011-2012 i.e. in 2007-08 it is 0.08, in 2008-09 it is increased to 0.11, then in 2009-2010 and 2010 - 11 it is decreased to 0.06, and then in 2012 it has increased to 0.09, Hence from 2009-2011 the company is maintaining stable inventory level, and in the year 2012 it increased to 0.09.

Table 9. Table showing inventories to current assets ratio

(Rs. In Crore)

Particular	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Inventories	229.52	486.06	335.52	397.99	454.11
Current assets	4141.94	5467.2	6556.5	7742.95	5820.23
Inventory to CA Ratio	0.05	0.08	0.05	0.05	0.07

Sources: Annual reports

Interpretation:

From the above analysis, the inventories to current asset are increasing in the year 2008-2009 from 0.05 to 0.08, while comparing the previous years. And for the next two years 2009-2011 it is maintained stable inventory to current assets i.e. 0.05, and then in the year 2012 it is increased to 0.07. From the above table it can be inferred that inventory to current assets of the company was fluctuating, and also stable inventory level of 0.05%, which is led to the decrease in the working capital which again has reduced the current assets of the company.

Table 10. Table showing Inventories to Turnover ratio

(Rs. In Crore)

Particular	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Sales	3344.88	4147.90	4397.24	4149.56	5201.00
Inventories	229.52	486.06	335.52	397.99	454.11
Inventories on turnover ratio	14.57	8.53	13.10	10.42	11.45

Sources: Annual reports**Interpretation:**

From the above table it is analyzed that the inventory are decreasing in the year 2007-2008, i.e., 229.52 and it increases in the year 2008-2009, i.e., 486.06 and then the ratio is also decreasing in the year 2008-2009, i.e., 8.53, then the ratio is increased to 13.10 in year 2009-2010, then it is decreased to 10.42 in the year 2011, and then in the year 2012 it has increased to 11.45 while comparing the previous year.

Table 11. Table showing evaluation of Receivables Management

(Rs. In Crore)

Particular	2007-2008	2008-2009	2009-2010	2010- 2011	2011- 2012
Receivable	2309.37	2361.95	1493.03	3850.01	4913.02
Net Working Capital	2724.44	4423.57	5694.28	6963.52	5087.42
R on net WC	0.84	0.53	0.26	0.55	0.96

Sources: Annual reports**Interpretation:**

From the above analysis the receivable to Net Working Capital ratio of the company is 0.84 in the year 2007-2008, then in the year 2008-2009 it is decrease to 0.53, then in the year 2009-2010 it has further decreased to 0.26, but later it is increased to 0.55 in the year 2010-2011, and then in the year 2011- 2012 it has further increased to 0.96. The above table indicates that the receivables on net working capital of the company are fluctuating.

Table 12. Table showing on Cash turnover ratio

(Rs. In crore)

Particular	2007-08	2008-09	2009-10	2010-11	2011-2012
Sales	3344.88	4147.90	4397.24	4149.56	5242.42
Cash & bank balance	656.86	548.58	694.83	605.94	239.35
Cash turnover Ratio	5.09	7.56	6.32	6.84	21.90

Sources: Annual reports

Interpretation:

From the above table it is found that the company's cash turnover ratio is increased in the year 2008-2009 from 5.09 to 7.56, and then in the year 2009-2010, it is decreased to 6.32, then in the year 2010-2011 it is increased to 6.84, and during 2011-12 year cash ratio is 21.90. The Cash Turnover ratio of the company from past four years, i.e., 2007- 2008 to 2010- 2011, was very low compared to 2011-2012, as there is an increase in the amount of sales of the company and the receivables is also increased and the net working capital is decreased due to which the cash inflow of the company has reduced.

FINDINGS OF THE STUDY

Some of the important findings of the study are as follows;

1. Quick ratio is also higher than the standard of 1:1, which shows that the company has good liquid position.
2. Current ratio trend shows that the ratio is above the standards of 2:1. Based on this data, liquid position of the company shall be considered as satisfactory.
3. Creditors Turnover ratio and average payment period shows that the company is prompt in its payments as and when due.
4. The increasing trend in working capital turnover ratio indicates that low investment in working capital relation to sales is required for the company.
5. Increasing trend in total assets turnover ratio shows the off sales generated by the total assets. The trend shows that the assets of the company are efficiently utilized to generate sales.
6. The Cash Turnover ratios of the company from past four years, i.e., 2008 – 2011, was very low compared to current year, And there is a high growth in the cash turnover ratio in the current year. But the company has to take some important measures to stabilize its resources.

SUGGESTIONS

1. The company depends on one customer KPTCL; in future it is advisable to look for other customers.
2. The management should take effective measures to recover the outstanding of the company.
3. The company depends largely in borrowing to finance its fixed assets. In future, the company should use its own earnings to reduce the burden of interest or dividend payments.
4. The cash balance of the company is required to be improved in order to have immediate liquidity position. But at the same time, precaution should be taken to see that too many funds are not locked up in cash balance, which ultimately may lead to improper utilization of funds.
5. The effective and efficient cash inflow provides an opportunity to co-ordinate with cash outflow. Proper coordinated cash inflow and outflow management will

maintain sound and better working capital management, the improvement in credit collection and selling will boost their sales and will record them in cash inflow management.

CONCLUSION

For over three decades, the Karnataka Power Corporation has been a prime mover and catalyst behind key power sector reforms in the state - measures that have spiraled steady growth witnessed in both industrial and economic areas. Right from the year of inception, in 1970, KPCL set its sights on "growth from within" meeting growing industry needs and reaching out to touch the lives of the common man, in more ways than one. From the study it was also concluded that though the company's earnings was increasing every year, the company's funds are not properly utilized. Therefore KPCL should try to improve its financial positions in the coming years.

At last it can be conclude that company financial position was seeing to be sound because the company tries to increase its production and also net profit.

REFERENCES

1. Sayaduzzaman MD. (2006), "Working Capital Management: A case study on British American Bangladesh Company Ltd." The Journal of Nepalese Business studies. Vol-3(1), 78-84.
2. Dong H. P. (2010), "The Relationship between Working Capital Management and Profitability". International Research Journal of Finance and Economic. Issue-49.
3. Filbeck G. & Thomas M.K. (2005), "An Analysis of Working Capital Management Results Across Industries", Mid-American Journal Of Business, Vol.20, No.2, Page 11-18.
4. Ganesan (2007), "An Analysis of Working Capital Management Efficiency in telecommunication Equipment Industry". Rivier Academic Journal. vol. 3(2), pp. 1-10.
5. Teruel PJG. & Pedro MS. (2007), "Effect of Working Capital Management on SME Profitability", International Journal of Managerial Finance, Vol. 3, No. 2 Page 164-177.
6. Zubairi H.J. (2010), "Impact of Working Capital Management and Capital Structure on Profitability of Automobile Firms in Pakistan".
7. Kesseven Padachi."Trends in Working Capital Management and its Impact on Firms' Performance: An Analysis of Mauritian Small Manufacturing Firms". International Review of Business Research Papers Vo.2 No. 2, 2006, Pp. 45 -58, 2006.
8. Jasmine Kaur."Working Capital Management in Indian Tyre Industry". International Research Journal of Finance and Economics ISSN 1450-2887 Issue 46, 2010.
9. Official website of KPCL: www.karnatakapower.com