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Working capital management of Ambuja cements limited through ratio analysis

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Abstract
Efficient working capital management is a vital part in any kind of business. Every Company requires sufficient working capital to pay for all of its shot – term expenses and liabilities. Working capital is an essential element for all business activities, irrespective of their size and nature. Working Capital is an indication of a company's operating liquidity. The company share prices also affect by their potential liquidity and credit- worthiness. Creditors pay the much attention towards the companies repaying ability before issuing the credit. Nowadays even an investor also evaluating the company's liability level before they make investment. Hence forth, the working capital management is indispensable for all the companies. On the other hand, if the company has more working capital means they could consider to make investment in long – term or short – term sectors to enhance the financial level which helps the company growth because working capital could directly impact the company net profit. So the present study examined the working capital management through ratio analysis at Ambuja Cements Limited. This study exhibits the five years annual report of ACL which collected from secondary source of the respective firm website from the year 2010 to 2015. The study found that the debtor's collection period is in the optimum level which is much appreciable.

Keywords: ACL, working capital, debtor's turnover ratio, ratio analysis

1. Introduction
Working capital management also known as short-term financial management largely deals with the management and control of current assets and current liabilities. Theoretically, there are two concepts of working capital namely gross working capital (comprising total current assets) and net working capital (i.e. current assets less current liabilities). Current assets consists of cash in hand, cash at Bank and cash in transit, Investments (short-term quoted shares of other companies intended for sale), Inventories (raw materials, work-in-progress and finished goods), accounts receivables and Bills Receivables, and Loans and Advances given by the company to others. Current liabilities consists of Bills receivables, Trade Advances (received by the company for supply of goods and services), short-term loans from other sources and provisions for payment of taxes, bad debts to be written-off and fluctuations of exchange rates. However, in practice, the working capital management concerned with the management of total current assets and total current liabilities, which varies depending on the level of current assets required. Thus the term net working capital is only an accounting concept, not having much meaning of economic or financial significance. In fact working capital management mainly pertains to the management of current assets. But it also involves management of current liabilities because these arise due to the volume and value of the current assets required. It is therefore good sense to keep the level of current assets to the minimum level where by the level of current liabilities would automatically be low enough hence the interest and opportunity cost.

2. Review of Literature
Natarajan Vallalnathan and Getachew Joriye (2013) [4], in their study entitled, "Impact of Working Capital Management on the Profitability of Co-operative Unions in East Showa, Ethiopia", analyzed the impact of WCM on the profitability of cooperative unions in East Showa, Ethiopia. The study was mainly based on secondary data by using the financial statement of the unions during the period from 1999-2003. The results showed a significant positive relationship between the size of the unions and its profitability and positive relationship between debt used by the cooperative unions and its profitability.

Kulkanya Napompech (2012) [6], in his article entitled "Effects of Working Capital Management on the Profitability of Thai Listed Firms", investigated the Effects of Working Capital Management on the Profitability Thai Listed Firms. The tools used for analysis include Descriptive Statistics, Correlation analysis, and Regression analysis, Cash conversion cycle, Inventory conversion period, and Receivables collection period. The study revealed that there was negative relationship between the Gross operating profits, Inventory conversion period and the Receivables collection period. Managers were found to increase the profitability of their firms by shortening the cash conversion cycle, inventory conversion period, and receivables collection period.

Barnali Chaklader and Neharika Shrivastava (2011) in their paper entitled, "Relationship of Working Capital Management with Firm's Profitability during the Period of Global Slowdown: An Empirical Study of Manufacturing Firms in India ", analyzed the importance of components of working

capital and the effect of working capital management during the period of study from 2008-2011. The study found that average collection period, average payment period, inventory conversion period and current assets to total assets were significant. During this period of slowdown, manufacturing firms were following an aggressive working capital policy by maintaining a low level inventory.

Abdul Raheman and Mohamed Nasr (2007) [8], in their article, "Working Capital Management and Profitability-Case of Pakistani firms", attempted whether the Working Capital Management had its effect on liquidity as well on profitability of the firm. The findings specified that the effect of different variables of working capital management including the average collection period, inventory turnover in days, average payment period, cash conversion cycle and current ratio had its impact on the Net operating profitability of Pakistani firms. The results suggested that there was strong negative relationship between variables of the working capital management and profitability of the firm.

Lal C. Jagetia (2007) [9], "Ratio analysis in Evaluation of Financial Health of a company" has discussed the techniques for assessing the financial health of the company. Debt ratios, quality ratios and debt coverage ratios are helpful in providing insight into corporate financial health. He is of the option that one must look at other sources of data also to make a meaningful interpretation of ratios.

Ghosh and Maji (2003) [13] in their working paper entitled "The firm's efficiency in WCM in the cement industry in India" Analyzed the efficiency of working capital using regression analysis and it was found that there is an inverse relationship between EBIT and CCC, positive relation between Payable Period and EBIT, which means profitable firms delay their payables. Further analysis found that there was positive relationship between collection period and EBIT. This means credit facility increases sales of firm which ultimately increases profitability.

3. Need of the study

Working capital management is concerned with the problem arise in attempting to manage the current assets, current liabilities and interrelation between both. In operational goal is to manage the smooth functioning of day-to-day operation of an organization. Most the firms in an industry that has low competition would focus on minimizing the receivables and maximizes the cash flows for firms in industry. Where there is large number of suppliers of materials**,** the focus is on maximizing the payables. The main problem in to analyze about the variations in working capital management measures and how a working capital management component impact working capital management efficiency in the Ambuja Cements Limited. The analysis is mainly done to know how efficiency the working capital management in managed in Ambuja Cements Limited, and profitability is analyzed.

4. Objectives of the Study

1. To examine the impact of working capital of Ambuja Cements Limited firm performance.
2. To identify the amount of working capital employed in Ambuja Cements Limited during the study period
3. To reveal the suggestion through ratios findings for effective functioning of Ambuja Cements Limited.

5. Methodology of the Study

Sample Selection

This empirical study analyses the financial data of Ambuja Cements Limited which undertaken by convenience sampling method, In order to evaluate the financial performance, working capital management of the firm has analyzed.

Period of the Study

The present study covers six years from 2010 to 2015.

Sources of Data

The present study was mainly based on secondary data which were collected from the firm's website. Data were collected from the Annual Reports of respective firm through its website.

Tools Used For the Study

1. Current Ratio
2. Liquid Ratio
3. Working Capital Turnover Ratio
4. Current Liabilities to Net Worth Ratio
5. Debtors Turnover Ratio
6. Average Collection Period
7. Inventory Management Ratio
8. Inventory to Current Asset Ratio
9. Inventories to Turnover Ratio
10. Cash Turnover Ratio

6. Data Analysis and interpretation:

The data collected is analyzed through ratio analysis and important tables are used for data discussion as per needed. The ratios and various tables prepared are used for data analysis.

Table 1: Components of Current Assets of ACL (Rs. In Crores)

Years	2010	2011	2012	2013	2014	2015
Investments	621.11	806.04	1543.83	1683.94	2067	2119
Inventories	901.86	927.76	986.93	936.41	889.97	895.45
Sundry Debtors	128.18	247.76	220.54	235.13	231.65	286.36
Cash & Bank	1748.39	2075.37	2260.17	2344.98	2462.28	2848.39
Other Current Assets	16.57	24.46	30.36	55.47	41.58	62.91
Loans & Advances	340.32	563.55	250.91	271.35	310.23	336.26
Total Current Assets	3756.43	4644.94	5292.74	5527.28	6002.71	6548.37

Source: Annual reports of Ambuja Cements Limited.

The table No.1 exhibits that the level of current asset since 2010 to 2015, it clearly denotes that the level of current assets got increased upwards year to year during the study period.

Table 2: Current Ratio of ACL (Rs. In Crores)

Particulars	2010	2011	2012	2013	2014	2015
Current Assets	3756.43	4644.94	5292.74	5527.28	6002.71	6548.37
Current Liabilities	2397.09	2710.00	3044.61	2853.28	3154.68	3226
Current Ratio	1.56	1.71	1.74	1.94	1.90	2.03

Source: Annual reports of Ambuja Cements Limited.

Table No.2 reveals that the current ratio of the ACL shows a fluctuating trend during the study period 2010 to 2015. The highest ratio is 2.03 in the year 2015 and the lowest ratio is 1.56 in the year 2010. The current ratios are below the optimum ratio of 2 except 2015. The above optimum level in the year 2015 is appreciable one. It is healthy for short term solvency.

Table 3: Liquid Ratio of ACL (Rs. In Crores)

Particulars	2010	2011	2012	2013	2014	2015
Liquid Assets	2854.57	3717.18	4305.81	4590.87	5112.74	5652.92
Liquid Liabilities	2397.09	2710.00	3044.61	2853.28	3154.68	3226
Liquid Ratio	1.19	1.37	1.41	1.61	1.62	1.75

Source: Annual reports of Ambuja Cements Limited.

It is observed from the table No 3 throughout the study period the ratio is in gradually increasing trend and it is higher than the optimum level of 1:1. It is at the highest ratio 1.75 in the year 2015 and the lowest ratio 1.19 in the year 2010. The liquid ratios are above the optimum ratio of 1 higher ratio will affect the short term solvency. Hence it should be decreased.

Table 4: Working Capital Turnover Ratio of ACL (Rs. In Crores)

Particulars	2010	2011	2012	2013	2014	2015
Sales	7390.21	8531.23	9739.54	9118.00	9930.54	9368.30
Net Working Capital	1359.34	1934.94	2248.13	2674.00	2848.03	3322.37
Working Capital Turnover Ratio	5.44	4.41	4.33	3.41	3.49	2.82

Source: Annual reports of Ambuja Cements Limited.

Table No 4 reveals that the working capital turnover ratio of the ACL shows a decreasing trend during the study period 2010-2015 except in 2014. The highest ratio is 5.44 in the year 2010 and the lowest ratio is 2.82 in the year 2015. Due to increase in sales the ratios were decreased than compared with its previous year except 2013 and 2015 because the sales of the respective year significantly decreased than its pre and post years. The high working capital turnover ratio is the symbol of excellence; here the level of ratio is significantly decreased consequently. Hence, it should be increase for better movements.

Table 5: Current Liabilities to Net worth Ratio (Rs. In Crores)

Particulars	2010	2011	2012	2013	2014	2015
Net Working Capital	1359.34	1934.94	2248.13	2674	2848.03	3322.37
Current Liabilities	2397.09	2710.00	3044.61	2853.28	3154.68	3226
Current liabilities to Net worth	0.57	0.71	0.74	0.94	0.90	1.03

Source: Annual reports of Ambuja Cements Limited.

From the Table No 5 it is cleared that the ACL's current liabilities to net worth ratio indicates a increasing trend during the study period 2010 to 2015 except 2014. The highest ratio is 1.03 in the year 2015 and the lowest ratio is 0.57 in the year 2010 because of minimum net working capital in the year 2010 while compared with other years.

Table 6: Debtors Turnover Ratio (Rs. In Crores)

Particulars	2010	2011	2012	2013	2014	2015
Net Credit Sales	7390.21	8531.23	9739.54	9118.00	9930.54	9368.30
Average Debtors	128.18	247.76	220.54	235.13	231.65	286.36
Debtors Turnover Ratio	57.65	34.43	44.16	38.78	42.87	32.71

Source: Annual reports of Ambuja Cements Limited.

Table No 6 depicts that the debtor's turnover ratio of the ACL shows a fluctuating trend during the study period 2010-2015. The highest ratio is 57.65 in the year 2010 and the lowest ratio is 32.71 in the year 2015.

Table 7: Average Collection Period

Particulars	2010	2011	2012	2013	2014	2015
Average No. of Working Days	365	365	365	365	365	365
Debtors Turnover Ratio	57.65	34.43	44.16	38.78	42.87	32.71
Average Debtors Collection Period (in days)	6.33	10.60	8.26	9.41	8.51	11.15

***Source*:** Annual reports of Ambuja Cements Limited.

The above table No. 7 indicates that, the average collection period of Ambuja Cements Limited. The debtor's collection duration in the year of 2015 is considerably 11 days; this is higher than the rest of the years. Hence give more attention to collect from debtors quickly.

Table 8: Inventory Management Ratio (Rs. In Crores)

Particulars	2010	2011	2012	2013	2014	2015
Inventories	901.86	927.76	986.93	936.41	889.97	895.45
Net working capital	1359.34	1934.94	2248.13	2674	2848.03	3322.37
Inventory management Ratio	0.66	0.48	0.44	0.35	0.31	0.27

Source: Annual reports of Ambuja Cements Limited.

It is inferred from the Table No. 8, the Inventory management ratio are gradually decreasing during the entire study period because of stable increase in net working capital. The highest ratio is 0.66 in the year 2010. The lowest ratio is 0.27 in the year 2015 it is less than 50 per cent while compared with 0.66 in the year of 2010.

Table 9: Inventories to Current Assets Ratio (Rs. In Crores)

Particulars	2010	2011	2012	2013	2014	2015
Inventories	901.86	927.76	986.93	936.41	889.97	895.45
Current Assets	3756.43	4644.94	5292.74	5527.28	6002.71	6548.37
Inventories to Current Asset ratio	0.24	0.20	0.19	0.17	0.15	0.13

Source: Annual reports of Ambuja Cements Limited.

It is depicted from the Table No. 9 the Inventories to current assets are gradually decreasing during the entire study period because of steady increase in current assets. The highest ratio is 0.24 in the year 2010. The lowest ratio is 0.13 in the year 2015.

Table 10: Inventories to Turnover Ratio (Rs. In Crores)

Particulars	2010	2011	2012	2013	2014	2015
Sales	7390.21	8531.23	9739.54	9118.00	9930.54	9368.30
Inventories	901.86	927.76	986.93	936.41	889.97	895.45
Inventories to Turnover Ratio	8.19	9.19	9.87	9.74	11.16	10.46

Source: Annual reports of Ambuja Cements Limited.

From the table No. 10 it is observed that the inventory turnover ratio shows a gradual increasing trend except 2013. The highest stock turnover ratio is 11.16 in the year 2014 and the lowest ratio is 8.19 in the year 2010. The analysis shows that the ratio booming since 2010 to 2015 which is a healthy trend. It is a sign of efficient management of inventories; the company may consider increasing some sort of inventories for enhance the productivity of firm.

Table 11: Cash Turnover Ratio (Rs. In Crores)

Particulars	2010	2011	2012	2013	2014	2015
Sales	7390.21	8531.23	9739.54	9118.00	9930.54	9368.30
Cash and Bank balance	1748.39	2075.37	2260.17	2344.98	2462.28	2848.39
Cash Turnover Ratio	4.23	4.11	4.31	3.89	4.03	3.29

Source: Annual reports of Ambuja Cements Limited.

From the Table No. 11 it is found that the ACL's cash turnover ratio shows a fluctuating trend during the study period 2010 to 2015. The highest ratio is 4.31 in the year 2012 and the lowest ratio is 3.29 in the year 2015 because of low sales in the year 2015 while compared with previous year.

7. Conclusion

The present study witnessed the working capital management of Ambuja Cements Limited for six years. The current ratio of the firm is just more than the optimum level which is good for short term solvency. Hence it should be increased where as the liquid ratio of ACL is higher than the optimum level which will affect the short term solvency. Hence it should be decreased. The high working capital turnover ratio is the symbol of excellence; here the level of ratio is significantly decreased consequently. Hence, it should be increase for better movements.

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