Knowledge Consortium of Gujarat
Department of Higher Education - Government of Gujarat
Journal of Multi-Disciplinary - ISSN : 2279-0268

Continuous Issue -28 | February – March 2019

THE ANALYSIS OF WORKING CAPITAL MANAGEMENT OF SELECTED COMPANIES OF CERAMICS INDUSTRY OF INDIA

Abstract: *The working capital management refers to the company's administrative accounting strategy designed to monitor and use the two components of working capital, current assets and current liabilities, to ensure the most financially efficient operation of the company. The main purpose of working capital management is to ensure that the company always maintains sufficient cash flow to cover its short-term operating costs and its short-term debt obligations. For purpose of study researcher selected four Ceramics Companies and analysis management of working capital during 2013-14 to 2017-18 five year. In this study secondary data is used and various ratios and Anova statistical tool used for analysis. Researcher concludes that the Kajaria Ceramics ltd has very good management of working capital and in the remaining 3 Somany Ceramics ltd has good management of working capital, quick Ratios is around same among all selected Ceramics Companies.*

Keywords: *working capital management, Anova (Analysis of Variance), Ceramics Industry, Current Ratios.*

Introduction: Many companies can afford to lose money from time to time, but no company can afford to run out of cash. Without cash, you cannot pay your bills and if you cannot pay your bills, you're finished. That is why it is so important for companies to monitor and manage their working capital. In accounting terms, working capital is part of the total assets of the company; working capital is the difference between the current assets and current liabilities of the company. Current assets include cash on hand or with cash in bank and any assets that the company expects to convert into cash within a year, in particular accounts receivable and inventory. Current liabilities are bills that must be paid within a year and perhaps the most important of these is accounts payable (the company's own unpaid accounts). Companies look for positive working capital as more current assets than current liabilities, because it means that more cash must be coming in than to going. The management of working capital is really the management of cash flow. Any person in your company who deals with the components of working capital should be aware of the consequences of having to locking up too much cash. Therefore, the management of working capital is a process of managing assets and liabilities in the short term. It make sure that a company has sufficient liquidity to run its operations without problems or smoothly.

Ceramic tiles today have become an integral part of home improvement. It can make a big difference in the way your interiors and exteriors look and express themselves. The organized sector that represents 53-55% of the industry grew at an average annual rate composed of 7.7%, from FY13 to FY17. The non-organized sector operates mainly from the ceramic cluster in Morbi in Gujarat. It is estimated that Indian exports of ceramic and sanitary tiles from Morbi for FY17 will be ~ $ 914 million. For FY18, it is expected to be around ~ $ 1,500 million. The United States, Saudi Arabia and Mexico are the main destinations for the export of ceramic products from India. Domestic demand for ceramics has increased in the recent past due to the initiatives of Swachh Bharat Abhiyan (SBA) and Pradhan Mantri Awas Yojna (PMAY) along with increased demand for replacement. So that it is very fast growing sector and in production of ceramics it require lot of work in progress this work in progress comes under working capital management, therefore researcher select ceramics industry for analysis of working capital management.

Review of Literature: Some review of literature on study of working capital management which as under:

Ramachandran Azhagaiah and Janakiraman Muralidharan (2009): In this study author examine the relationship among working capital management proficiency and earnings before interest and tax. The study was made on Paper industry in India during 1997 to 2005. For the measurement of working capital management three indexes are taken into consideration performance index, utilization index and efficiency index, and EBIT of the selected companies for the study period are taken. As a conclusion of the study says paper companies of India performed well during period. Some having very good index and some of them need to improve the working capital management give proper attention on that particular area also.

Rahman Mohammad M. (2011): Research is based on correlation among working capital and profitability, to analyze the effectiveness of working capital management of the selected textile companies. conclusion of the study found that overall good management in working capital management of selected textile companies and thus most of the companies are profitable way going on.

Objective of the Study: Every study behind the objective to find out the solution of some problem the objective is:

- To study/analysis Working Capital Management of selected Ceramics Companies in India.
- To compare the Working Capital Management among selected Ceramics Companies in India.
- To give appropriate conclusion and finding.

Population of The Study: The population of study is all Ceramics companies which listed in BSE or NSE or both. The research work done on the basis of secondary data.

Sampling Design: This study is based on the "Convenience Sampling Method", researcher select five samples on the base of market capitalization (high to low) on 19th February, 2019. Selected samples as under:

1. Kajaria Ceramics Limited.
2. Cera Sanitaryware Limited.
3. Hindustan Sanitaryware & Industries Limited
4. Somany Ceramics Limited.

Period of Study: The present research study is the financial statement of last five years (2013-14 to 2017-18) of related concern from the Annual Reports of selected Ceramics companies.

Data Collection: The study is a based mainly on secondary data which is collected from Moneycontrol.com as well as selected Ceramics companies' periodical publications and its annual reports.

Tools and Techniques: For the study mathematics and statistics Tools and techniques like classification, average, various ratios and most appropriate ANOVA has been used. Key ratio used for analysis of Working Capital Management of selected Ceramic companies as under: 1) Current Ratio, 2)Quick Ratio, 3)Inventory Turnover Ratio, 4) Debtors Turnover Ratio.

Data Analysis:

1. Current Ratio: The current ratio is a liquidity ratio that measures a company's ability to pay short and long-term obligations. To calculate the proportion, analysts compare current assets with current liabilities. Current assets include cash, accounts receivable, inventory and other assets that are expected to become effective in less than one year. Current liabilities include accounts, salaries, taxes payable and the current portion of long-term debt. The formula to calculate the current relationship of a company is the following: **Current ratio = Current assets / Current liabilities.**

Table No. 1: Current Ratios

	2013-'14	2014-'15	2015-'16	2016-'17	2017-'18	Average
Kajaria	0.79	1.14	1.17	1.71	2.13	1.388
Cera Cenetary	1.12	1.16	1.32	1.3	1.42	1.264
HSIL	0.73	1.01	0.88	0.7	0.74	0.812
Somany Cera	0.86	0.91	0.98	1	0.97	0.944

(source: https://www.moneycontrol.com/)

As per above table the current ratio was maximum of Kajaria Ltd in the year 2017-18 i.e. 2.13 and was least in HSIL in the year 2016-17 i.e. 0.7. The average of Kajaria Ltd was maximum i.e. 1.388 and HSIL was lowest i.e. 0.812. The current ratio of Cera Cenetaryware is more than 1 during the study period. It has steady current ratio in last 5 years. The trend of Current ratio of Kajaria Ltd shows increasing trend from 2013-14 to 2017-18.

Hypothesis Testing:

H0: All the selected Banks have equal Quick Ratio**.**

H1: All the selected Banks have unequal Quick Ratio.

"F"-Test One Way Anova for Current Ratio

Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	1.08552	3	0.36184	4.584606	0.016845	3.238872
Within Groups	1.2628	16	0.078925			
Total	2.34832	19				

"F" test indicates that the Calculated value of F = 4.58 and tabular value of F = 3.24 at 5 % level of significance The Calculated value of F is greater or more than table value of F (Fc > Ft) So, the null hypothesis has been rejected and alternative hypothesis has been accepted it means all the selected Ceramics Companies have unequal or different Current Ratio.

2. Quick Ratio: The quick ratio is an indicator of a company's very short-term liquidity position, and measures a company's ability to meet very short-term obligations with its most liquid assets. It is indicates the company's financial position to instantly use its near cash assets (that is, liquid assets) to get rid of its current liabilities; it is also called as the acid test ratio. An acid test is a quick test designed to produce instant results, the Quick ratio formula is following: **Quick Ratio = Liquid Assets (Cash and Equivalents + Marketable Securities + Accounts Receivable) / Current Liabilities.**

Table No: 2: Quick Ratios

	2013-'14	2014-'15	2015-'16	2016-'17	2017-'18	Average
Kajaria	0.64	1.01	0.92	1.26	1.63	1.09
Cera Cenetary	0.96	1.06	1.06	1.13	1.14	1.07
HSIL	0.84	0.73	0.73	0.96	1.19	0.89
Somany Cera	0.96	0.95	1.06	1.27	1.22	1.09

(source: https://www.moneycontrol.com/)

Table no. 2 showing that Kajaria has highest ratio it is 1.63 in 2017-18 and other side also Kajaria has lowest ratio is 0.64. In this study somewhere and some how all companie's have ~ 1 quick ratio during the study period. It mean that all companies capacity of fulfill the short-term their obligations is very good and average same all selected samples.

Hypothesis Testing:

H0: All the selected Banks have equal Quick Ratio**.**

H1: All the selected Banks have unequal Quick Ratio.

"F"-Test One Way Anova for Quick Ratio

Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	0.14372	3	0.047907	0.941238	0.443881	3.238872
Within Groups	0.81436	16	0.050898			
Total	0.95808	19				

"F" test indicates that the Calculated value of F = 0.94 and tabular value of F = 3.24 at 5 % level of significance The Calculated value of F is less than table value of F (Fc < Ft) So, Researcher do not reject null hypothesis it means all the selected Ceramics Companies have equal Quick Ratio.

3. Inventory Turnover Ratio: The inventory turnover ratio is an efficiency index that shows how efficiently the inventory is managed by comparing the cost of the goods sold with the average inventory over a period. This measures how many times the average inventory is "Turned" or sold for a period. The formula of this is following: **Inventory Turnover Ratio = Cost of Goods Sold/Average Inventory.**

Table No. 3: Inventory Turnover Ratios

	2013-'14	2014-'15	2015-'16	2016-'17	2017-'18	Average
Kajaria	13.2	11.78	11.88	11.59	10.16	11.722
Cera Cenetary	6.35	6.82	7.39	8.2	7.41	7.234
HSIL	4.59	4.55	4.9	4.52	4.05	4.522
Somany Cera	14.67	12.64	14.85	14.29	10.74	13.438

(source: https://www.moneycontrol.com/)

As per above table no. 3 showing that Somony Ceramics has 14.85 inventory turnover ratio in year 2015-16. And other side HSIL has lowest ratio is 4.05 in year 2017-18 it mean this company is not able to maintain efficiently inventory. Kajaria and Somany Ceramics companies has average respectively 11.72 and 13.44. And also there companies have more than 11 inventory turnover ratio.

Hypothesis Testing:

H0: All the selected Banks have equal Inventory Turnover Ratio**.**

H1: All the selected Banks have unequal Inventory Turnover Ratio.

"F"-Test One Way Anova for Inventory Turnover Ratio

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	250.333	3	83.444	69.769	2.09E-09	3.2388
Within Groups	19.13596	16	1.195998			
Total	269.469	19				

"F" test indicates that the Calculated value of F = 69.77 and tabular value of F = 3.24 at 5 % level of significance The Calculated value of F is greater or more than table value of F (Fc > Ft) So, the null hypothesis has been rejected and alternative hypothesis has been accepted it means all the selected Ceramics Companies have unequal or different Inventory Turnover Ratio.

4. Debtors Turnover Ratio: The Debtors turnover ratio is an accounting measure used to quantify a firm's effectiveness in extending credit and in collecting debts on that credit. The Debtors turnover ratio is an activity ratio measuring how efficiently a firm uses its assets. This ratio formula is following: **Debtors Turnover Ratio = Net Credit Sales/Average Accounts Receivable.**

Table No. 4: Debtors Turnover Ratios

	2013-'14	2014-'15	2015-'16	2016-'17	2017-'18	Average
Kajaria	12.74	12.76	11.02	9.06	7.24	10.564
Cera Cenetary	7	6.14	5.34	4.94	4.84	5.652
HSIL	4.59	4.55	4.9	5.28	4.94	4.852
Somany Cera	6.49	6.61	6.12	5.03	3.78	5.606

(source: https://www.moneycontrol.com/)

As per above table no 4 showing that the Kajaria has highest average debtors turnover ratio is 10.56 it almost twice average to the other selected samples. And remain other has around 5 average debtors turnover ratio, it mean that Kajaria has very good strategy to collect their cash from their Debtors.

Hypothesis Testing:

H0: All the selected Banks have equal Debtors Turnover Ratio**.**

H1: All the selected Banks have unequal Debtors Turnover Ratio.

"F"-Test One Way Anova for Debtors Turnover Ratio

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	103.1839	3	34.39462	16.94942	3.19E-05	3.238872
Within Groups	32.468	16	2.02925			
Total	135.6519	19				

"F" test indicates that the Calculated value of F = 16.95 and tabular value of F = 3.24 at 5 % level of significance The Calculated value of F is greater or more than table value of F (Fc > Ft) So, the null hypothesis has been rejected and alternative hypothesis has been accepted it means all the selected Ceramics Companies have unequal or different Debtors Turnover Ratio.

Conclusion: In this study an attempt was made through various key financial ratios to analysis working capital management of selected Ceramics Companies and with calculation of Anova test researcher conclude that selected all companies have good management of working capital, but among the all selected samples the Kajaria ltd has very good management of working capital because it has current, quite, inventory turnover and Debtors Turnover Ratios is very high among other selected samples. And in the remaining three companies Somany cera has good management of working capital. And Quick Ratio of selected is all companies near to equal because in that Anova null hypothesis is accepted. HSIL very less management of working capital compare to other selected Ceramics Companies.

References

I. Management Accounting: Arora, M.N. Vikas Publishing House, New Delhi.
II. Management Accounting: Maheshwari S.N. and S.N. Mittal Mahavir Book depot, New Delhi.
III. Statistical Methods – S. P. Gupta (Sultan and Chand).
IV. Kothari C. R., "Research Methodology Methods & Techniques" New Delhi.

V. Azhagaiah, R. and Muralidharan, J. (2009) "The Relationship between Working Capital Management Efficiency and EBIT", ecopapers, vol 7, issue 1, pp. 61-74.

VI. Rahman Mohammad M., (2011), "Working Capital Management and Profitability: A study on Textiles Industry", ASA University Review, Vol. 5, No. 1, pp. 115-132.

VII. https,://www.moneycontrol.com/

VIII. https://www.kajariaceramics.com/m/annual-reports.php

IX. https://www.cera-india.com/corporate/financials/

X. https://www.hindwarehomes.com/annualreports.aspx

XI. https://www.somanyceramics.com

****

Odedra Kana Ranmal
M.phil scholar
Saurashtra University
Rajkot