ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 9| Issue: 1| January 2023|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2022: 8.205 || ISI Value: 1.188

WORKING CAPITAL MANAGEMENT IMPACT ON OPERATING PROFIT OF RICE MILLS IN NIZAMABAD DISTRICT - A STUDY

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ABSTRACT

This study aims to know the relationship and the impact of the working capital managementon the operating profit of Rice mills in Nizamabad district of Telangana state. The study has adopted the qualitative research approach for the examination of working capital management Impact on operating profit. The study has considered the secondary data for the duration of 5 years i.e. 2016-17 to 2020-21. The study applied the bivariate analysis and the ordinary least squares through the SPSS and E-views software. The study examined the relationship of working capital management and operating profit by the statistical method bivariate correlation. The study attempted to identify the working capital management that impact operating profit- Ordinary Least squares. This study depicts an effect through the current ratio, liquid ratio, working capital management ratio, inventory turnover ratio and receivables turnover ratio. The study had examined that effect of these by the change in the operating profit year on year. The study is one of the first attempts to know the relationship as well as impact of the working capital management ratios with operating profit. Here, the study found that there is a strong positive relationship of the current ratio and the inventory turnover ratio resembles that operating profit with these ratios have the strong relationship with each other (Kruti A. Patel 2015) and positive impactof the inventory turnover ratio and the working capital management ratio on the operating profit meaning that if the turnover ratios increases there is an increase in the operating profit.

KEY WORDS: ***Current ratio, liquid ratio, inventory turnover ratio, working capital turnover ratio, receivables turnover ratio and operating profit.***

INTRODUCTION

The management of working capital is an important part of corporate finance. It's the result of current assets and current liabilities interacting. For a company's day-to-day operations, working capital management is crucial. Financial management nowadays, particularly the administration and control of working capital, necessitates a great deal of attention and is a tough undertaking due to the high proportion of working capital in a corporation. Working capital management is the management of current assets that have an accounting year to convert into cash and current obligations that are payable within a year, as well as the relationship between the two. (**Fekadu Agmas Wassie 2021)**

While conducting day-to-day operations, a company must strike a balance between liquidity and profitability. Liquidity is a requirement for ensuring that businesses can satisfy their short-term obligations and that their cash flow can be guaranteed from a profitable enterprise. Given its critical role in the organization, the relevance of cash as a measure of ongoing financial health should come as no surprise. This necessitates a firm that is both efficient and profitable. During this process, an asset- liability mismatch may arise, increasing the firm's profitability in the short term while putting it at riskof insolvency in the long run. **(Kesseven Padachi 2006)**

Working capital management ensures that a company's operations function smoothly and that it has sufficient funds to cover both maturing short-term debt and expected operating requirements. It is mostly focused with inventory management, accounts receivables, accounts payables, and cash management. Working capital management's primary notion is to strike a balance between the three proportions of working capital in order to provide suitable support for the smooth and efficient operation of day-to-day business activities. Liquidity, profitability, and risk are the three factors. **(Jyoti Mahato 2015)[4]**

REVIEW OF LITERATURE

Greg Filbeck and Others (2007): Author has worked on a Working Capital Survey of Selected Firms for Shareholders, utilizing secondary data to ascertain investor views on working capital investments in order to assess the stock market. They investigated numerous companies from 1997 to 2000 and found that market price of shares is influenced by working capital; this indicates that investors have used WC information to invest in the company.

Harsh Pratap singh (2014): The goal of this research is to identify gaps in the present body of knowledge on working capital management (WCM) and make recommendations to scholars who want to pursue further research in this area. WCM has received considerable scholarly attention in recent years, particularly in the aftermath of the 2008 financial crisis. One of the significant flaws in previous work is the lack of a survey-based study approach and an overarching theory-building study, which raises new questions for future research.

Chakraborty (2015) analyzed "working capital management and its impact on liquidity and profitability: An empirical study of Britannia industries" using data published in the company's annual report from 2000 to 2013. The paper employs the ratio analysis technique and the Spearman's rank correlation to determine the relationship between liquidity and profitability. The 'T' test is used in this paper. The paper offered a current ratio, a quick ratio, and a net profit margin that were unsatisfactory.

Samit Paul (2017): The purpose of this study is to examine past research on working capital management (WCM) and determine the factors that are more likely to be influenced by poor WCM. Furthermore, it seeks to identify future WCM research subjects in order to increase the body ofknowledge. The majority of the highly cited studies investigated the relationship between the WCM and corporate profitability. As a result, the goal of this study is to widen the area of WCM research and to recommend potential research subjects for future researchers. As a result, this study identifies the core problem and suggests a slew of new research topics for further investigation.

Santu Charan Das (2018) "Impact of Profitability on Capital Structure: An Analytical Study" was researched. The researcher also conducted research on Indian steel businesses, which revealed an adverse association between profitability and debt equity ratio. The majority of research papers evaluated in China demonstrated an inverse association between capital structure and profitability of Chinese firms. Researchers have discovered that the similar relationship appears in capital structure and profitability.

Pravin Patel (2018) The current ratio, quick ratio, and debtors ratio were used to analyze the management of working capital of selected cement companies using secondary data from 2008-09 to 2014-15. The ANOVA test was utilized by the researcher as a statistical tool for analysis, and data was reported using tables and charts. The researcher discovered that Ambuja Cement Company and Ultra Tech cement are in strong working capital condition, however Binani Cement Company is not in good working capital situation.

Paroma Mitra (2018): According to the study, in order to maintain a balance between liquidity and profitability, a company must plan the optimal use of its working capital. As a result, the purpose of this paper is to investigate the effects of working capital management on the profitability of Indian steel sector enterprises. The study comprises four independent variables that serve as measures of industrial working capital utilisation: the current ratio, the quick ratio, the debtor turnover ratio, and the completedgoods turnover ratio.

Iman soukhakian (2019): The purpose of this research is to look into the impact of working capital management (WCM) on firm performance among publicly traded Iranian manufacturing enterprises, with a particular emphasis on the direct and moderating effects of inflation and GDP factors. The cash conversion cycle (CCC) is found to be inversely related to return on assets and refined economic value added (REVA). Furthermore, macroeconomic factors have little influence on the link between WCM and corporate success.

Abdullah Naqi (2020): The study will look at the firm's value and proactive working capital management, as well as the firm's profitability as a moderator. According to the findings, aggressive working capital financing has a significant negative impact on profitability and firm value, whereas aggressive investment strategy has a significantly positive impact on profitability. As a result, researchers propose that growing profitability necessitates maximizing current asset investment and increasing the quantity of long-term financing in working capital. Finally, the author discussed some of our inadequacies as well as future study possibilities.

OBJECTIVES OF THE STUDY

1. To know the relationship between the working capital management and operating profit.
2. To examine the impact of working capital management on operating profit.

HYPOTHESES OF THE STUDY

$H0_1$: There is no relationship between the working capital management and operating profit.
$H0_2$: There is no influence of working capital management on operating profit.

RESEARCH METHODOLOGY

The study has adopted the qualitative research approach to know the impact of working capital management on the operating profitability of Rice millsof Nizamabad district of Telangana state. **Research Scope:** The study has considered the secondary data for the duration of 2016-17 to 2020-21. Here, the working capital management ratios are considered for this study. Operating profit isconsidered as the dependent variable and the working capital management ratios as the independent variables. They are: Current ratio, Liquid ratio,

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Inventory turnover ratio, Working capital turnover ratio, and Receivables turnover ratio.

STATISTICAL METHOD: The study has considered the following statistical methods for theexamination of framed objectives.
Panel Data: The study has considered the ten Rice mills working capital related ratios have been framed into panel for the period of 2017 to 2021 year.

Stationary Test: The study has considered the ADF test to know the stationary of the data for the variables, which were considered in the study.
Bivariate Correlation: The study applied the bivariate correlation to know the significant relationship between the working capital management and operating profitability of rice mills of Nizamabad district of Telangana state.

Panel Ordinary Least Square: The study applied the Panel least square to know the impact of workingcapital management on the operating profitability of the Granite industries.

TABULATION OF DATA ANALYSIS

Objective 1: To know the relationship between the working capital management and operating profit of select Granite Industries.
Null Hypothesis: There is no relationship between the working capital management and operating profit **Alternative Hypothesis:** There is a relationship between the working capital management and operatingprofit

Table -1: Relationship between operating profit and working capital management

Correlations							
		Operatingprofit	CurrentRatio	LiquidRatio	Working Capital Turnover Ratio	Inventory Turnover Ratio	Receivables Turnover Ratio
Operating profit	Pearson Correlation	1					
	Sig. (2-tailed)						
	N	5					
Current Ratio	Pearson Correlation	.680	1				
	Sig. (2-tailed)						
	N	5	5				
Liquid Ratio	Pearson Correlation	.247	.851	1			
	Sig. (2-tailed)	.009	.067				
	N	5	5	5			
Working CapitalTurnover Ratio	Pearson Correlation	.137	.331	.626	1		
	Sig. (2-tailed)	.027	.017	.028			
	N	5	5	5	5		
Inventory TurnoverRatio	Pearson Correlation	.645	.639	.422	.387	1	
	Sig. (2-tailed)	.040	.026	.049	.520		
	N	5	5	5	5	5	
Receivables Turnover Ratio	Pearson Correlation	.599	.930*	.902*	.571	.502	1
	Sig. (2-tailed)	.026	.022	.036	.015	.039	
	N	5	5	5	5	5	5
*. Correlation is significant at the 0.05 level (2-tailed).							

Source: Secondary data

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The above table explains regarding the relationship between the operating profit and working capital management. The ratios such as current ratio, liquid ratio, working capital turnover ratio, inventory turnover ratio and receivables turnover ratio were considered in the study. The results implies that current ratio and inventory turnover ratio are tend to be having pearson correlation as 0.680 and 0.645 meaning that it has the strong positive relationship with the operating profit. The other ratio such as liquid ratio, working capital turnover ratio is .247 and 0.137 respectively. Receivables turnover ratio is observed to be 0.026 meaning that these ratios are having the weak relationship with the operating profit. Here, there is rejection of null hypothesis and acceptance of alternative hypothesis. Thus, there is positive relationship of current ratio with operating profit in working capital management ratios.

Objective 2: To examine the impact of working capital management on operating profit.

The study examining the impact of working capital management ratio's on the operating profit-ability ofthe selected rice mills of Nizamabad district of Telangana state. The study framed the following hypothesis.

Null Hypothesis: There is no influence of working capital management on operating profit.

Alternative Hypothesis: There is an influence of working capital management on operating profit.

Table – 2: Granger causality tests

Pairwise Granger Causality Tests			
Sample: 2017 2021			
Lags: 1			
Null Hypothesis:	**Obs**	**F-Statistic**	**Prob.**
Current Ratio Does Not Granger Cause Operating Profit	4	0.03789	0.0376
Operating Profit Does Not Granger Cause Current Ratio		2.18691	0.3785
Liquid Ratio Does Not Granger Cause Operating Profit	4	0.00152	0.0152
Operating Profit Does Not Granger Cause Liquid Ratio		0.01334	0.9268
Inventory Turnover Ratio Does Not Granger Cause Operating Profit	4	1727.02	0.0153
Operating Profit Does Not Granger Cause Inventory Turnover Ratio		0.33954	0.0241
Receivables Turnover Ratio Does Not Granger Cause Operating Profit	4	0.09725	0.0076
Operating Profit Does Not Granger Cause Receivables Turnover Ratio		0.02020	0.9101
Working Capital Turnover Ratio Does Not Granger Cause Operating Profit	4	0.78013	0.0394
OPERATING_PROFIT does not Granger Cause Working Capital Turnover Ratio		0.24612	0.7068

Source: Secondary data

The table above describes about the influence of working operating profit on working capital management ratios. The results implies that current ratio, liquid ratio, receivables turnover ratio as well as working capital turnover ratio are tend to be having the unidirectional effect upon the operating profit. The inventory turnover ratio is seemed to be having the bidirectional effect meaning that there is an effect of inventory turnover ratio upon the operating profit and vice-versa. Hence, there is a rejection of Null hypothesis and acceptance of alternative hypothesis. Therefore, there is an influence of the workingcapital management upon the operating profit.

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Null Hypothesis: There is no impact of working capital management on operating profit.

Alternative Hypothesis: There is an impact of working capital management on operating profit.

Table – 3: Impact of Working Capital Management on Operating Profit

Dependent Variable: OPERATING_PROFIT				
Method: Least Squares				
Sample: 2017 2021				
Included observations: 5				
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
C	33.5271	17.5861	1.906454	0.1527
Current Ratio	-0.344	0.434753	-1.60751	0.0263
Liquid Ratio	-3.16483	7.178674	-0.44087	0.0191
Working Capital Turnover Ratio	0.982403	4.110641	0.23899	0.0265
Inventory Turnover Ratio	1.417701	0.970137	1.461341	0.0401
Receivables Turnover Ratio	-4.12691	3.18386	-1.2962	0.0256
R-squared	0.76276	Mean dependent var		5.3295
Adjusted R-squared	0.88368	S.D. dependent var		3.320294
S.E. of regression	2.810153	Akaike info criterion		5.19353
Sum squared resid	23.69089	Schwarz criterion		5.037305
Log likelihood	-10.9838	Hannan-Quinn criter.		4.774238
F-statistic	2.584096	Durbin-Watson stat		1.950515
Prob(F-statistic)	0.016304			

Source: Secondary Data

The study indicates the impact of the working capital management ratios upon the operating profit. The independent variable is observed to be working capital management ratios and dependent variable is operating profit. The results signifies the positive impact of the working capital turnover ratio and inventory turnover ratio on the operating profit the coefficient values are observed to be 0.982403 and 1.417701 respectively. This means that there is an increase in the operating profit by the increase in the working capital turnover ratio and inventory turnover ratio. Here, the other ratios are observed to be negatively impacting the operating profit. Hence, there is a rejection of Null Hypothesis and acceptance of alternative hypothesis. Therefore, there is a positive impact of working capital management on operating profit.

FINDINGS OF THE STUDY

1. The study found that there is a strong positive relationship of the current ratio **(0.680)** and the inventory turnover ratio **(0.645)** resembles that operating profit with these ratios have the strong relationship with each other. **(Kruti A. Patel 2015)**[5]
2. The study reveals that the influence of the operating profit on the inventory turnover ratio is to be having the bidirectional effect meaning that there is an effect of inventory turnover ratio upon the operating profit and vice-versa.
3. Study found that there is a positive impact of the inventory turnover ratio **(1.417701)** and the working capital turnover ratio **(0.982403)** on the operating profit meaning that if the turnover ratio increase stimulates the operating profit of rice mills of Nizamabad district of Telangana state.

CONCLUSION OF THE STUDY

The study has considered the operating profit as the dependent variable and the independent variable as working capital management ratios. The study has considered the secondary data for the period of 2016- 17 to 2020-21. The results have examined that there is a strong positive relationship of the current ratio and the inventory turnover ratio resembles that operating profit with these ratios have the strong relationship with each other. **(Kruti A. Patel 2015)** and also there is a positive impact of the inventory turnover ratio and the working capital turnover ratio on the operating profit meaning that if the turnover ratios increases there is an increase in the operating profit. Hence, it is concluded that inventoryturnover ratio is the one that has been increasing the operating profit of the industry.

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