

CHALLENGES AND MEASURES – WORKING CAPITAL MANAGEMENT OF RICE MILLS OF NIZAMABAD DISTRICT

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ABSTRACT

The aim of the paper is to know the working capital management effect upon the profitability of rice mills. The purpose of this study is to identify the increase or decrease in the profitability.

The researchers have collected a sample 100 responses. The study applied neural network and the exploratory factor analysis. The study examined the suggestive measures for the study with respect to profitability. The study attempted to identify the measures with respect to working capital management and profitability. Working capital management tends to be the played as the vital role in the industry or any organization. Current assets and inventory were the identified as key factors for the increase in the profitability. The results demonstrate that the increase in the current assets will be implied to profitability improvement. The study has found that by the liquidity changes in the industry as well in the increase in the organization, it is revealed that by the current assets keeping at the highest level, owning the payments will enhance the profitability.

Keywords: Working Capital Management, Profitability, Current Assets And Decentralized In The Organization.

I. INTRODUCTION

Working Capital Management generally involves monitoring cash flow, assets and liabilities through Ratio analysis i.e. operating expenses ratio, working capital ratio, collection ratio etc. Working capital management of any company is a basement of the whole operating activities. Generally, maximum profitability depends on working capital management and working capital management depends on skill and experience of the owners or finance manager of the firm or any company. Main aims of the working capital management are adequate cash flow for operation and most productive use of resources. There are so many factors affecting WC i.e. Size of Company and growth rates, Organizational structure, Borrowing & Investing position, Banking facilities, Rates of interest, Economy etc. Net working Capital is based on 'Gone Concern Approach' and 'Going Concern Approach'. Whereas, Working Capital is classified on two bases also, first is on the basis of concept and second is on the basis of requirements.

Working Capital Management refers to all management decisions and actions that ordinarily influence the size and effectiveness of the working capital. It focuses attention to the managing of current assets, current liabilities and the relationships that exist between them. In the present day of rising capital cost and scarce funds, the importance of working capital needs special emphasis. It has been widely accepted that the profitability of a business concern likely depends upon the manner in which its working capital is managed. The inefficient management of working capital not only reduces profitability but ultimately may also lead a concern to financial crises. On the other hand, proper management of working capital leads to material savings and ensures financial returns at the optimum level even on the minimum level of capital employed.

Management of working capital which aims at maintaining an optimal balance between each of the working capital components, that is, cash, receivables, inventory and payables is a fundamental part of the overall corporate strategy to create value and is an important source of competitive advantage in businesses (Deloof, 2003)¹. In practice, it has become one of the most important issues in organizations with many financial executives struggling to identify the basic working capital drivers and the appropriate level of working capital to hold so as to minimize risk, effectively prepare for uncertainty and improve the overall performance of their businesses (Lamberson, 1995)².

Working capital management is a very important component of corporate finance because it directly affects the liquidity and profitability of the company. It deals with current assets and current liabilities. Working capital

management is important due to many reasons. For one thing, the current assets of a typical manufacturing firm accounts for over half of its total assets. For a distribution company, they account for even more. Excessive levels of current assets can easily result in a firm's realizing a substandard return on investment. However firms with too few current assets may incur shortages and difficulties in maintaining smooth operations (Horne and Wachowicz, 2000)³. Many surveys have indicated that managers spend considerable time on day-to-day problems that involve working capital decisions. One reason for this is that current assets are short-lived investments that are continually being converted into other asset types (Rao, 1989)⁴.

II. REVIEW OF LITERATURE

Mathias Bernard Baveld (2012): This study investigates how public listed firms in The Netherlands manage their working capital. The results of this study indicate that, in crisis periods, firms don't need to change their working capital policy concerning accounts payables and inventory, if their goal is to enhance profit. For the working capital policy managing accounts receivables this is not the case. This is because during a crisis accounts receivables have a positive effect on a firm's profitability of the next year. These results are on short-term basis. On the long-term, benefits of aiding customers during crisis periods are likely to grow, because future sales will still be there. Also the risks taken by these aiding firms are relatively low and for large reputable firms it is also relatively cheap.

Ashok Panigrahi (2012): This study empirically examines the relationship between working capital management and profitability of ACC Cement Company, the leading cement manufacturer of the country for assessing the impact of working capital management on profitability during the period 1999-2000 to 2009-10. The impact of working capital management on profitability is analyzed by computing Pearson's simple correlation coefficients, multiple correlation analysis and multiple regression analysis between Operating Profit and the selected independent variables affecting the working capital. Hence, the result concludes that there is a moderate relationship between working capital management and firm's profitability. It can be said that there exists a relationship between the efficiency of working capital and the profitability, but the relationship is not statistically significant. **Hampus Björkma (2014):** The purpose of this study is to develop the research on the relationship between Working Capital Management and profitability by investigating how it is affected by different company characteristics. The conclusion drawn from the study is that there is a positive relationship between the Cash Conversion Cycle and profitability, inconsistent with previous research. However, strong significant results indicated that smaller firms are returning a higher profit, regardless the level of Cash Conversion Cycle. No difference was found in the sensitivity to changes in Working Capital Management strategies

Nduati Elijah Kiarie (2014): The study analyzed the effects of working capital management on the profitability of manufacturing firms listed on the Nairobi Securities Exchange. The study objectives were to; analyze the relationship between average collection. The study established that gross operating profit was positively correlated with Average Collection Period and Average Payment Period but negatively correlated with Cash Conversion Cycle. The relationship between Inventory Turnover in Days and gross operating profit was insignificant. Profitability of manufacturing firms depends upon effective working capital management. The study therefore recommended that managers should focus on reducing cash conversion cycles, collect receivables as soon as possible because it is better to receive inflows sooner than later and delay payment of creditors in order to invest the money in short term securities which are profitable.

Dina Korent (2018): Accordingly, from the aspect of the measure of efficiency of working capital management, the objective of this paper is to evaluate working capital management impact on profitability of Croatian software companies. This impact was examined using descriptive and correlation as well as panel regression analysis for six-year period (2008-2013). The results show that after controlling for characteristics of the company and macroeconomic conditions working capital management significantly affects the profitability of Croatian software firms. Moreover, the results imply the existence of a nonlinear, concave quadratic relationship between the net working capital and return on assets. This suggests the existence of an optimal level of net working capital that balances costs and benefits and maximizes profitability of analysed companies.

Niman Ibrahim Arab (2018): The purpose of this study is to examine the impact of working capital management on firms' profitability. The study examined the statistical significance between food companies' working capital management and profitability. The researchers found that there is a significant negative

relationship between liquidity and profitability. Furthermore the study finds that there is strongly significance positive relationship between size and firm profitability. Unlike, the study found that there is no statistically significance negative relationship between debt used and firms profitability.

Rimsha Khalid (2018): This study aims to find out the impact of working capital management on profitability. Return on assets is used as a proxy of profitability. Other variables that are used in this study are Current ratio, debt to equity ratio, operating profit to debt ratio, and inventory turnover ratios of the firms. Results showed significant positive results. It is concluded that working capital management has positive significant impact on profitability of the firms.

Fekadu Agmas Wassie (2021): To analyze this particular study, a total of 164 exporters operating in Ethiopia have been taken as a sample and both primary and secondary data collection methods were used. Based on the result of the study, firms may need to extend credit terms for customers, may prolong their cash conversion cycle, may need an extended payment period, and may or may nothold a high volume of inventory. Thus, it is advisable to consider the result of this study while making decisions regarding their working capital management to support their performance.

III. OBJECTIVES OF THE STUDY

1. To identify the key challenges encountered by the rice mills for the working capitalmanagement.
2. To gauge the soundness of Working Capital Management of the rice mills in Nizamabad district.

IV. RESEARCH METHODOLOGY

The study has adopted the exploratory research approach to know the measures to improve the working capital management among the select rice industries of Nizamabad district of Telangana state. The study applied the following statistical tools for the examination of framed objectives.

Sample Method: The study has considered the convenient sampling method for the collection of primary data from the respondents. The study has collected the primary data from 100 respondents, who are working in rice industries in finance department.

Questionnaire: The study has constructed the questionnaire keeping in view of two objectives. The key challenges experienced by the rice industries in the aspect of working capital management among the rice industries in Nizamabad district of Telangana state. The questions were also framed to improve the suggestive measures for the working capital management among the rice industries. The opinions were collected in five point likert scale format.

Reliability: The study applied the Cronbach’s Alpha to know the primary data reliability. The study result stated that Cronbach’s alpha observed to be greater than the base value i.e. $0.856 > 0.7$. Therefore, the collected primary data relating to framed objectives observed to be reliable.

Neural Network: The study applied the neural network to prioritise the challenges experienced by the rice industries for the management of working capital. The Neural network will give the importance to identify the critical challenges.

Exploratory Factor Analysis: The study adopted the EFA to know the high loading factors for the suggestive measures to improve the working capital management among the rice mills in Nizamabad district.

V. TABULATION OF DATA ANALYSIS

Objective 1: To identify the key challenges encountered by the rice mills for the working capital management.

Table – 1: Case Processing Summary

		N	Per cent
Sample	Training	81	78.8%
	Testing	19	21.3%
Valid		100	100.0%
Excluded		0	
Total		100	

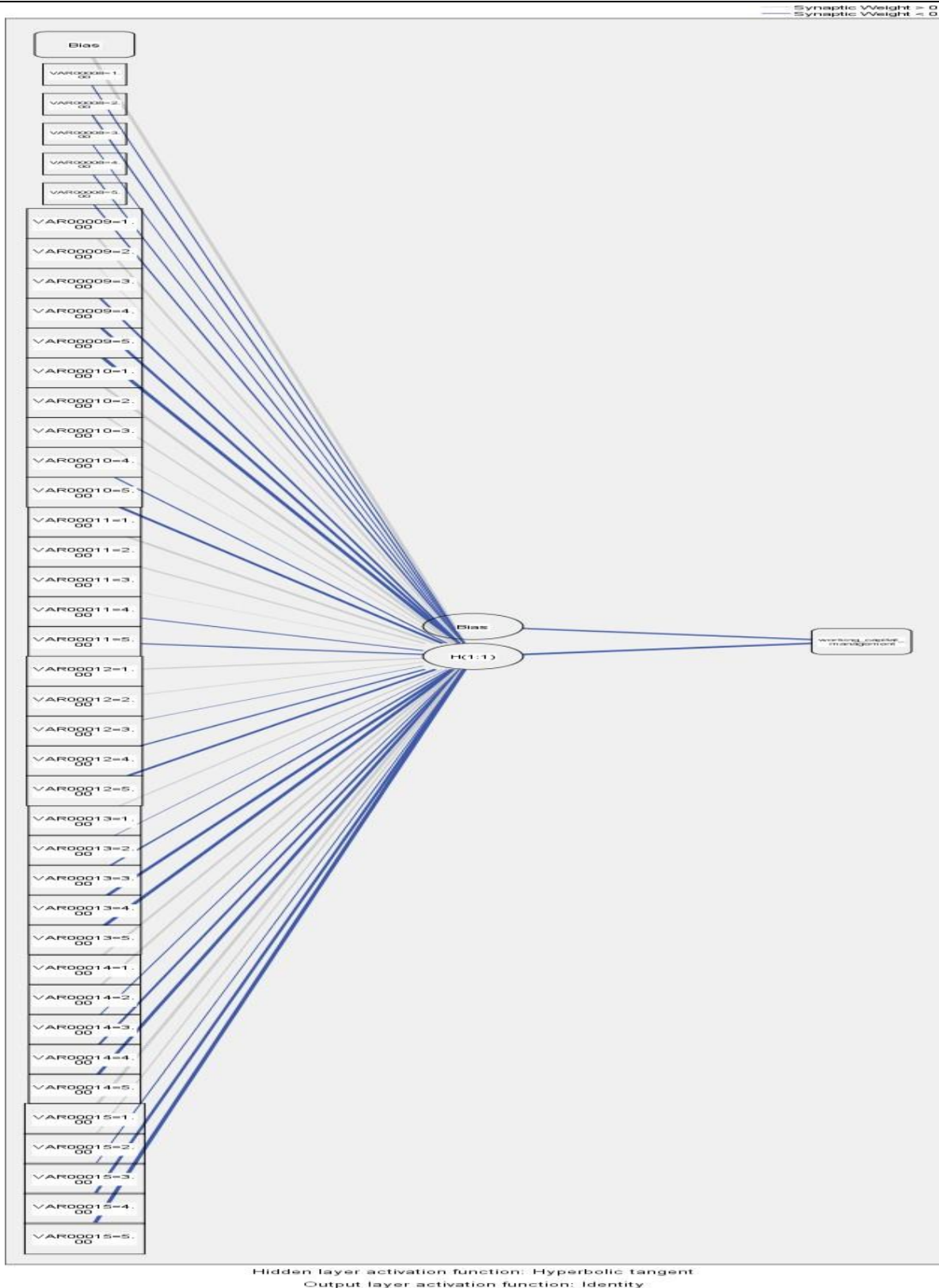
Source: Primary Data

The table above explains regarding the case processing summary with the training set allocated as 78.8% and the testing set allocated as 21.3%. Here, the model is applicable for the further analysis.

Table – 2: Independent Variable Importance

	Importance	Normalized Importance
The difficulty of recovering receivables from the government.	.014	8.4%
Too much decentralized organizational structure.	.143	88.2%
Material non-standardization due to reliance on indigenous Technology	.143	88.2%
Inadequate availability of peripherals and other critical components in a timely manner.	.132	81.7%
Long lead times due to the necessity to import the majority of the equipment and parts, resulting in massive stockpiles	.145	89.2%
Long manufacturing cycle	.132	81.3%
Because of the long delivery times quoted by foreign supplies and transit delays, the safety levels must be maintained at a high level.	.129	79.6%
Current assets had to be kept at a relatively high level, owing to contingent payments and the magnitude of inventory in comparison to short-term credit/loans.	.162	100.0%

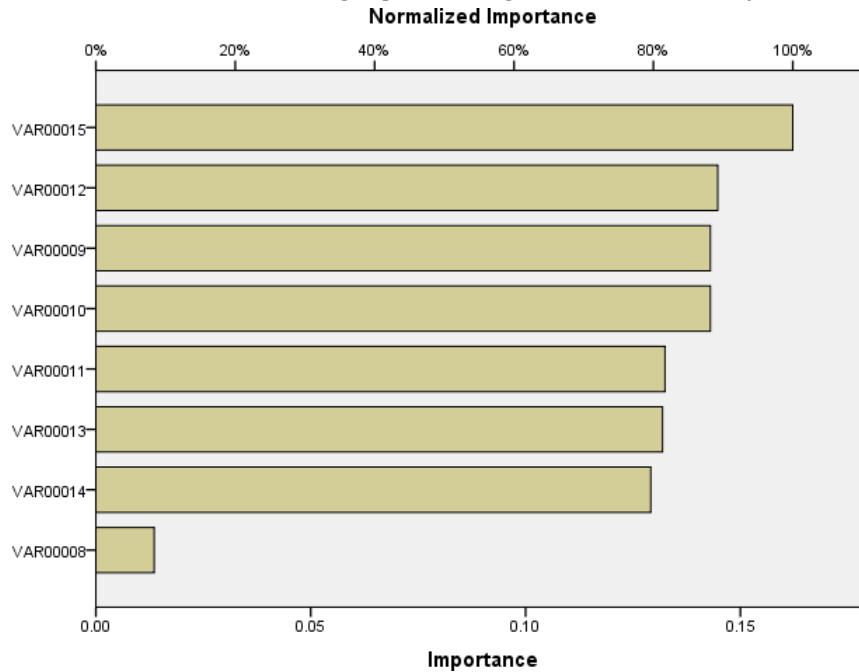
Source: Primary Data



Source: Primary Data

The table and figure above explains regarding the challenges experienced in working capital management of rice mills in Nizamabad district. The result implies that “Current assets had to be kept at a relatively high level, owing to contingent payments and the magnitude of inventory in comparison to short-term credit/loans” statement is observed to be 100% as the importance level whereas the other statement is tend to be “Long lead times due to the necessity to import the majority of the equipment and parts, resulting in massive stockpiles”

with 89.2%. The statement with the lowest importance level is tend to be 8.4% with respect to the statement “Long lead times due to the necessity to import the majority of the equipment and parts, resulting in massive stockpiles”. The study have found that by enhancing the current assets with respect to the comparison of short term loans will increase the level of the working capital management in the industry.



Source: Primary Data

Objective 2: To gauge the soundness of Working Capital Management of the Rice Industries in Nizamabad district.

The study applied the exploratory factor analysis to identify the higher loading factors. The study applied the KMO test i.e. sample adequacy test to run the exploratory factor analysis. The KMO test depicts the following result.

Table - 3: Sample adequacy Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.854
Bartlett's Test of Sphericity	Approx. Chi-Square	17.691
	Df	15
	Sig.	.279

Source: Primary Data

The above table states the result of KMO, which is observed to be significant and adequate. As the result stated that KMO calculated value $0.854 > 0.7$ Therefore, it states that sample is observed to be estimable to run for the exploratory factor analysis.

Table - 4: Communalities

	Initial	Extraction
Too much decentralized organizational structure.	1.000	.795
Material non-standardization due to reliance on indigenous technology	1.000	.728
Long lead times due to the necessity to import the majority of the equipment and parts, resulting in massive stockpiles,	1.000	.570
Long manufacturing cycle	1.000	.793
Current assets had to be kept at a relatively high level, owing to contingent payments and the magnitude of inventory in	1.000	.851

comparison to short-term credit/loans.		
Extraction Method: Principal Component Analysis.		

Source: Primary Data

The communalities value implies the effective contribution of each factor to the components that form. All the factors extraction values are above 50%. The highest contribution by the factor is seemed in “Current assets had to be kept at a relatively high level, owing to contingent payments and the magnitude of inventory in comparison to short-term credit/loans” (.851) followed by “Too much decentralized organizational structure” (0.795). “Long manufacturing cycle” (0.793)”. Here, the rest are tend to be “Material non-standardization due to reliance on indigenous technology” with 0.728 and “Material non-standardization due to reliance on indigenous technology” is observed to be 0.570.

Table – 5: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	1.425	23.754	23.754	1.425	23.754	23.754
2	1.146	19.101	42.855	1.146	19.101	42.855
3	1.053	17.555	60.410	1.053	17.555	60.410
4	1.008	16.1001	77.211	1.008	16.1001	77.211
5	.785	13.089	90.299			
6	.582	9.701	100.000			

Source: Primary Data

Above table shows after the extraction four core components are extracted with their eigen values. Component 2 has eigen values equal to 1.425 which is able to explain the total variance of 23.754%, Component 1 with eigen value 1.146 can explain the total variance of 19.101%, Component 3 has eigen value with 1.053 which is able to explain the total variance of 17.555%, Component 4 has eigen value equal to 1.008 that is able to explain the total variance of 77.211%.

Table – 6: Component Matrix

	Component			
	1	2	3	4
Too much decentralized organizational structure.	.638			
Material non-standardization due to reliance on indigenous technology	.748			
Long lead times due to the necessity to import the majority of the equipment and parts, resulting in massive stockpiles,		.637		
Long manufacturing cycle			.561	
Current assets had to be kept at a relatively high level, owing to contingent payments and the magnitude of inventory in comparison to short-term credit/loans.				.758
Extraction Method: Principal Component Analysis.				
a. 4 components extracted.				

Source: Primary Data

The above table principal component analysis result indicated the extracted factors through the four components. The analysis extracted the four factors out of five factors. Therefore principal component analysis concluded those factors are need to be implemented to develop the working capital management among the

rice mills of Nizamabad district of Telangana state. Herethere are four component values extracted below explained:

Component 1:

The component 1 explains that the factor such as “Material non-standardization due to reliance on indigenous technology” is observed to be 0.748and “Long lead times due to the necessity to import the majority of the equipment and parts, resulting in massive stockpiles” with 0.637. Here, depending upon the new technology adopted the working management can be increasing the profitability of the industry. This component has found that due to advanced technology there should be lead times expelled.

Component 2:

“Long manufacturing cycle” obtained as 0.561. The results implied that depending on the manufacturing cycle it should be shorten in order to increase the profitability of the company.

Component 3:

“Current assets had to be kept at a relatively high level, owing to contingent payments and the magnitude of inventory in comparison to short-term credit/loans” with 0.758 and “Too much decentralized organizational structure” with 0.638. The results implied that when compared to short- term credit/loans and there is a decentralized organization in order to obtain the current assets to top level by owing the payments.

VI. FINDINGS OF THE STUDY

1. The study found that there is a “Current assets had to be kept at a relatively high level, owing to contingent payments and the magnitude of inventory in comparison to short-term credit/loans.” Statement observed to be 0.748. Here, there is an inventory that will enhance the short-term credit/loans.
2. The study has found that by enhancing the current assets with respect to the comparison of short term loans will increase the level of the working capital management in the industry.
3. Results analyzed that current assets have been playing the vital role for the enhancement of the rice mills of the Nizamabad district in Telangana.

VII. CONCLUSION

The study has examined regarding the working capital management and its profitability. The study has considered the primary data with 100 responses. The results revealed the importance of the working capital management and the changes of the profitability of the rice mills. The findingsstate that Current assets had to be kept at a relatively high level, owing to contingent payments and the magnitude of inventory in comparison to short-term credit/loans with 0.748 as the component value. The increase in the current assets will increase the profitability of the industry. Hence, it is concluded that by keeping the current assets on the high priority the inventory will be increase and working capital management also.

VIII. REFERENCES

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