

Affinity of Firm's Profitability and its Working Capital Management: Evidence from Selected Pharmaceutical Companies from India

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Abstract —The present paper tries to attempt the effect of working capital management and its impact on profitability of selected pharmaceutical companies. Particularly working capital management (WCM) is one of the most important part of firm's financing decisions as it is an important key element towards firm's performance. A current asset comprises working capital of a firm. Current assets are cash and its equivalents, accounts receivables, and inventory items of a firm. A firm's financial health determines its scope of profitability and survival in the market. An efficient management of working capital will determine the profitability of the firm. A sample of 15 pharmaceutical companies selected to identify the relationship between profitability and its working capital.

Keywords— Profitability, Working Capital Management, Cash, Account Receivable, Inventory items

I. INTRODUCTION

Working capital management is one of the important decisions of a firm's financial management. Working capital includes inventory items, cash and bank items and account receivables known as current assets. The decisions relating to current assets known as working capital management. Effective and efficient use of current assets leads to good financial performance of firm. The efficient management of current assets leads to enhance profitability of the firm. In this research articles 15 companies selected from pharmaceutical industry and classified according to their size into large, medium and small size companies of 5 companies from each group. Karl Pearson correlation is used to analyze the relation with firm's profitability to other variables. Karl person coefficient of correlation used at 1% level of significance to analyze the hypothesis. Positive correlation indicates both variables are moving in the same direction either increasing or decreasing trend, whereas negative correlation indicates both the variables are moving in the opposite direction and zero correlation indicates there is no relation between two variables.

II. RESEARCH OBJECTIVES

The objectives of this research article are:

1. To study the working capital management of the selected companies
2. To analyse the effect of working capital on profitability of firms

III. RESEARCH METHODOLOGY

The study entirely based on secondary data. The secondary data are collected from the website of the selected pharmaceutical companies of ten years balance sheets. For this 15 companies selected and classified according to their size of large, medium and small group.

IV. HYPOTHESIS DEVELOPMENT

The following null hypotheses and alternative hypothesis are developed:

- H_{0A}: There is no association between profitability of large size firm's to WCM.
- H_{0B}: There is no association between profitability of medium size firm's to WCM.
- H_{0C}: There is no association between profitability of small size firm's to WCM.
- H_{1A}: There is an association between profitability of large size firm's to WCM.
- H_{1B}: There is an association between profitability of medium size firm's to WCM.
- H_{1C}: There is an association between profitability of small size firm's to WCM.

The condition for accepting null hypothesis correlation value is less than 0.5 otherwise accept the alternative hypothesis.

V. LITERATURE REVIEW

Oladipupo and Okafor (2013) examined the effects of a firm's working capital management practice on its profitability. The study aims at the extent of the effects of working capital management on the Profitability and Dividend Payout Ratio.

Sharma and Kumar (2011) examined the implications of working capital on profitability of Indian firms. They collected data about a sample of 263 non-financial BSE 500 firms listed at BSE from 2000 to 2008 and analyzed the data using OLS multiple regression. The results revealed that working capital management and profitability is positively associated in Indian companies.

Mathuva (2010) examined the effect of working capital management on profitability found that there exists a highly significant negative relationship between the account receivables time period and profitability. He explained that the collection period is less for profitable firms and collection period is high for loss making firms.

Abel, Maxime (2008), analyzed the impact of working capital management on current assets of Small and medium-sized Manufacturing Enterprises (SMEs) in Sweden.

VI. DATA ANALYSIS:

TABLE NO: 1 CORRELATION ANALYSIS OF PROFITABILITY WITH WORKING CAPITAL FOR LARGE SIZE GROUP COMPANIES:

S NO	COMPANY NAME	Correlation Coefficient
1	AUROBINDO PHARMA LTD	0.95
2	CADILA HEALTHCARE LTD	0.96
3	CIPLA LTD	0.30*
4	DR REDDY'S LABORATORIES LTD	0.79
5	PIRAMAL ENTERPRISES LTD	0.68

SOURCE: COMPILED FROM SECONDARY DATA: CALCULATED VALUES ARE SIGNIFICANT AT 0.01 LEVEL OF SIGNIFICANCE

Interpretation:

The correlation coefficient value of profitability to working capital is greater than 0.50 for Aurobindo Pharma ltd, Cadila health care ltd, Dr Reddy's Laboratories ltd and Piramal Enterprises ltd. It implies for these firms null hypothesis rejected and accept the alternative hypothesis. It can be concluded that for these firms efficient management and sufficient working capital of the firm will enhance the profitability. On contrary for Cipla ltd the correlation coefficient value is less than 0.50 so accept the null hypothesis and concluded that profitability is independent from working capital management of Cipla ltd.

TABLE NO 2: CORRELATION ANALYSIS OF PROFITABILITY WITH WORKING CAPITAL FOR MEDIUM SIZE GROUP COMPANIES

S NO	COMPANY NAME	Correlation Coefficient
1	GRANULES INDIA LTD	0.87
2	UNICHEM LABORATORIES LTD	0.47*
3	SEQUENT SCIENTIFIC	0.47*
4	FDC LTD	0.70
5	SUVEN LIFE SCIENCES LTD	0.76

SOURCE: COMPILED FROM SECONDARY DATA: CALCULATED VALUES ARE SIGNIFICANT AT 0.01 LEVEL OF SIGNIFICANCE

Interpretation:

The correlation coefficient value of profitability to working capital is less than 0.50 for Unichem Laboratories ltd, Sequent Scientific ltd, therefore accept the null hypothesis and conclude that there is no association between profitability of the firm and working capital. On the other correlation coefficient value is greater than 0.50 for Granules India ltd, FDC ltd and Suven Life Sciences ltd, so reject the null hypothesis and concluded that there a relationship between profitability and working capital of the firm.

TABLE NO 3: CORRELATION ANALYSIS OF PROFITABILITY WITH WORKING CAPITAL FOR SMALL SIZE GROUP COMPANIES

S NO	COMPANY NAME	Correlation Coefficient
1	HIKAL LTD.	-0.11*
2	NEULAND LABORATORIES LTD	0.35*
3	NOVARTIS INDIA LTD	0.51
4	AARTI DRUGS LTD	-0.43*
5	ANUH PHARMA LTD	0.92

SOURCE: COMPILED FROM SECONDARY DATA: CALCULATED VALUES ARE SIGNIFICANT AT 0.01 LEVEL OF SIGNIFICANCE

Interpretation:

The correlation coefficient value of profitability to working capital is less than 0.50 for Hikal ltd, Neuland Laboratories ltd and Aarti Drugs ltd. Hence accept the null hypothesis and concluded that there no association between profitability and working capital of the firm. But for Novartis India ltd and Anuh Pharma ltd correlation coefficient value is greater than 0.50, so reject the null hypothesis and concluded that profitability is correlated with working capital management.

VII. CONCLUSION

The study showed majority of pharmaceutical companies had positive impact of working capital management on profitability of selected 15 companies. Considering the results it is evident that efficient management of working capital leads to firm towards profitability. The firms should improve their current asset components for sufficient working capital. Efficient management of inventories enhances the profitability of firms. It is concluded that firms with higher working capital have higher ratio of profitability and firms. The firms having sufficient working capital also have enough total assets. So it is observed that firms having sufficient proportion and efficient working capital have positive effect on profitability of the firms.

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