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A Diagnostic Study of Impact of Working Capital Management on Profitability of Indian Companies in Telecommunication Sector

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ABSTRACT

The main aim of this research was to examine the performance of working capital management of telecommunication – service provider over a period of ten years span from 2010 to 2019.The working capital management components viz. current ratio, inventory, debtors and creditors have been considered as independent variables and profitability is considered as dependent variable. The author has applied Matrix of Co-efficients of Correlations, Descriptive Statistics and regression coefficientto find to impact of the working capital on profitability. It is noticed that current ratio has negative association with return on equity and it is moderately important in terms of influencing the profitability. The remaining variables namely debtors, creditors and inventory ratio are found to be insignificant as far as their influence on profitability of the enterprise is concerned.

Keywords: Working capital management, current ratio, return on equity, regression.

INTRODUCTION

Working Capital plays one of the most important rolesin every business.Corporatecompany can't gain ground without sufficient working capital. Deficient working capital implies deficiency of financial sources, though abundance of it prompts additional expense. The management needs to

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see that assets contributed as working capital in their company generate appropriate profit.During the period of increasing capital expenditure and scarce funds the area of working capital managementassume greater significance as it profoundly impacts an enterprises liquidity and profitability. A prominent feature of working capital componentsis that they are of repeating nature. Consequently, proficient working capital management requires a legitimate harmony among age and usage of these assets without which either deficiency of assets will causeblock in the smoother working of the enterprise or abundance will keep the firm away from leading its business effectively. So the primary goal of working capital management is to orchestrate the required assets on the ideal time from the correct source and for the correct period, so a trade-off between liquidity and profitability might be accomplished.A firm may exist without making profits however can't survive without liquidity. The financial management must decide the acceptable degree of working capital assets and furthermore the ideal blend of current resources and current liabilities.

LITERATURE REVIEW

Vedavinayagam Ganesan(2007)studied telecommunication equipment firms over a period of seven years i.e. 2001 to 2007. Working capital performance was analysed using the variables days sales outstanding, days inventory outstanding, days payable outstanding, days working capital, current ratio, Cash conversion efficiency, income to total assets and income to sales. Researcher was using correlation, regression and ANOVA analysis. The result shows that days working capital had negative relationship with profitability. It was notice that it’s not significantly influencing the profitability of companies in this sector.Sandhya Harkwat and Chinnam S Reddy (2012) examined four electric equipment firms listed on Nifty 50 for a decade i.e., 2001 to 2010. They have taken net operating profit as dependent variables and inventory turnover in days, average collection period, current ratio and average payment period as independent variables. They were using correlation and linear multiple regression for the analysis. It was point out that inventory turnover in days, average collection period, current ratio and average payment period had strongly negative association with net operating profit. It was found that liquidity had significant negative association with net operating profit. Monica Singhania, Navendu Sharma, J. Yognesh Rohit, (2014) studied 82 Indian manufacturing companies for the period of eight years i.e., 2005 to 2012. They had taken Receivable collection period, inventory conversion period, payment deferral period, cash conversion cycle as independent variables, return on assets, net operating profit, and gross operating profit as dependent variables and sales growth, firm size, current ratio, debt ratio, and quick ratio as control variables. They are using correlation analysis, regression analysis. It was point out that there existed negative association between cash

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conversion cycle and profitability.Ashwin Madhou, Imad Moosa, Vikash Ramiah, (2015) examine performance of working capital as assess of company profitability over a period of six years i.e., 2003 to 2008. They had taken net profit, inventory, account payable, account receivable, cash, size, percentage change in sales, debt ratio, liquidity risk, gross domestic product, Return on assets and economic value added as a variables. They are using advance quantitative method, dynamic panel estimation and median regression. It was point out that two variables are perform very well in the corporate profitabilityviz. size and debt ratio. It was notice that losing companies and profitable companies lean towards had different assess of profitability. It was found that the impact of the variables of working capital management on profitability depend on companies element. Salman sarwal, Danish Iqbal, Baseer A. Durrant, Khalid H. shaikh, farhana liaquat (2016), analysed the performance of 18 pakistan's cement industry listed on Karachi stock exchange over a time period of five years i.e., 2007 to 2011. Return on assets was taken as dependent variable and days inventory outstanding, days sales outstanding, days payable outstanding, current liabilities to total assets ratio, assets turnover ratio, current ratio and size of firms were taken as independent variables. They were using panel least square method of regression analysis. It was notice that there is significantly positive relation between assets turnover ratio, current ratio and size of the firm with return on assets. It observed that three variables are one of the most important for working capital management i.e., inventory, account receivable and payable.Famil Samiloglu, Ali Ihsan Akgun (2016) analysed the performance of 120 Turkish manufacturing companies listed on Istanbul stock exchange for a decade i.e., 2003 to 2012. They had taken net profit margin, return on assets, return on equity and operating profit margin as dependent variable, cash conversion cycle, account receivable period, inventory conversion period, account payable period as independent variables and firm size and firm leverage as control variables. They were using multiple linear regression models for the analysis. It was found that there were significantly negative association among account receivable and all the dependent variables. It was notice that there were negative association among cash conversion cycle, account receivables period, account payables period and net profit margin, However further notice that inventory conversion period had positive association with net profit margin.M. Aravind (2016) examined 10 Indian manufacturing firms over a period of ten years with the span of 2005-06 to 2014-15 has been taken for analysis. They have taken days sales outstanding, days inventory outstanding, days payable outstanding, cash conversion cycle, net trade cycle as independent variables and net profit ratio, return on equity, return on assets as dependent variables. He was using descriptive statistics, correlation matrix and regression analysis. It was notice that cash conversion cycle is negative association with return on equity but positive related to the net profit ratio. It was concluded that the impact of working capital management on

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profitability was constant notwithstanding of the financialrotation. Farrah Wahieda Kasiran, Noredi Azhar Mohamad, Othman Chin (2016) examined 24 firms for a period of five years i.e. 2009 to 2013. The variable considered is current assets. They are using performance index, utilization index and efficiency index with help of descriptive analysis. The result indicated that all the firms were inefficient of working capital management. Dr. Khaled lafi al-naif, Mr. Ata Elayan M. Al Shra'ah (2017) studied nine Jordanian mining and extraction Industry sector for the 17 years with the span of 2000 to 2016 has been taken for analysis. The variables considered are return on assets, cash conversion cycle, receivable conversion period, inventory conversion period, payment period, corporate's size and debt ratio. They are using KarlPearson's and penal data. It was observed that there is negative association among return on assets with cash conversion cycle, receivable conversion period, inventory conversion period, payment period. It was notice that there was also negative association among debt ratio and return on assets. Furthered notice that there was positive association among corporate's size and return on assets.Nazish Bibi, Shehla Amjad (2017) analysed the performance of 50 companies listed on Karachi stock exchange over a period of five years with the span of 2007 to 2011 has been taken for analysis. They have taken cash gap in days, current ratio, net sales, total assets and market capitalization as independent variables and net operating income and return on assets as dependent variables. They were using descriptive statistics, correlation and multiple regression analysis. It was notice that cash gap had negative association with return on assets. The result shows that there was significantly positive association among current ratio, log of sale and log of total assets with the net operating income and return on assets. sNobanee H. (2018) examined working capital management performance of small and large size of firm for sample of 122 years-company for a period of eleven years i.e. 2003 to 2013. Working capital performance was analysed using the variables net trade cycle and return on assets. Researcher is using dynamic panel data system estimation with robust standard errors. It was point out that there existed a significantly negative relation among net trade cycle and return on assets. It is notice that small firm has insignificantly positive relation among the net trade cycle and return on assets so; it is showed that small UAE listed construction company not able to maintain their working capital competently. It observed that large firms have significantly positive relation with both the variables so; it was more able to maintain their working capital. It was found that during the crisis period there is significantly negative relation among the net trade cycle and return on asset. It was shows that UAE listed construction companies are highly capable in maintaining their working capital in the crisis time.

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RESEARCH METHODOLOGY

The data was collected from the annual reports of the 14 telecommunication – service provider companies listed at Bombay stock exchange fora period of ten years with the span of 2010 to 2019.The data were collected from the Capitaline database. The author appliedMatrix of Co-efficients of Correlations, Descriptive statisticsand regression coefficientto find the impact of the working capital variables on profitability. The Return on equity (ROE)represents the measure of profitability and is used as dependent variable. Independent variables includeCurrent ratio (CR), Inventory turnover ratio (IR), Debtors turnover ratio (DR) andCreditors velocity ratio (CVR).The SPSS software has been used for analysing the data.The fourteentelecommunication – service provider considered are:

- ATC Infrastructure Services Pvt Ltd
- Bharti Airtel Ltd
- Bharti Hexacom Ltd
- Indus Towers Ltd
- Mahanagar Telephone Nigam Ltd
- Nettlinx Ltd
- OnMobile Global Ltd
- Quadrant Televentures Ltd
- Railtel Corporation of India Ltd
- Reliance Communications Ltd
- Tata Communications Ltd
- Tata Teleservices (Maharashtra) Ltd
- Tatanet Services Ltd
- Vodafone Idea Ltd

OBJECTIVES

The objective of the study is understand the relation of component i.e. working capital management with profitability of the telecommunication – service provider firms and assess the degree of influence they create on profitability (return on equity).

HYPOTHESIS

H0: CR has no impact on ROE

H1: CR has impact on ROE

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H0: IR has no impact on ROE

H1: IR has impact on ROE

H0: DR has no impact on ROE

H1: DR has impact on ROE

H0: CVR has no impact on ROE

H1: CVR has impact on ROE

ANALYSIS AND INTERPRETATION

1. Table – 1 shows that the multi co linearity amongst the independent variables viz. CR, IR, DR, CRV have been considered by Pearson Correlation.The VIF statistics given in Table – 3 are also considered. It is precisely indicated that none of the four independent variables viz. CR, IR, DR, CRV has the co-efficient of correlation bigger than +0.7.VIF statistics are less than 10. Hence the problem of multi co linearity does not exist among the independent variables.
2. Table – 2 describes the descriptive statistics pertaining to the units in the telecom sector. The results given here in this research paper will be more applicable to the units whose data sets resemble the descriptive statistics given in Table-2.
3. The regression co-efficients are mentioned Table – 3. Along with the standardized coefficient Beta, significance level, direction, values and VIF. When we look at the Table – 3 we find that Current ratio, Inventory turnover ratio, Debtors turnover ratio and Creditors velocity ratio i.e. independent variables have relationship with return on equity. The standardize coefficient β of Current ratio as shown in Table – 3, stands at -0.084 which reveal that Current ratio has negative association with return on equity. Their significance levels indicate the value of 0.347 shows it statistically moderately relevant. Thus it’s noticed that H0 (Current ratio) be rejected and alternate hypothesis of current ratio be accepted. This means current ratio has moderate impact on return on equity.
4. As stated in the observed table standardized coefficient β of Inventory turnover ratio is -0.043 which means that there is negative association between inventory turnover ratio and return on equity. Further the value of significance level of 0.620 which points out that the Beta of IR is not significant. So, the H0 (inventory turnover ratio) be accepted and alternate hypothesis of inventory turnover ratio be rejected Thus inventory turnover has no impact on return on equity.

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5. The standardized coefficient β Debtors turnover ratio as describe in Table – 3 is -0.019 which revel that there is statistically negative relationship between debtors turnover ratio and profitability. Though the significance value 0.828 recommends that Debtors turnover ratio has no impact on profitability and it's statistically not significant. So, H0 (Debtors turnover ratio) be accepted and H1 (DR) be rejected.
6. Table – 3 further signify that the standardized coefficient β of Creditors velocity ratio is -0.053 which revel that Creditors velocity ratio and return on equity are negatively related with each other. Further the value of significance level 0.548 summarized that the coefficient β of Creditors velocity ratio is insignificant. Thus H0 (Creditors velocity ratio) be accepted and H1 (CRV) be rejected. This means Creditors velocity ratio has no impact on return on equity.
7. The multiple regression equation as under:
   ROE = +31.440 – 0.084(CR) – 0.043 (IR) – 0.019 (DR) – 0.053 (CVR).

FINDINGS AND RECOMMENDATION

1. There is negatively significant relationship among current ratio and return on equity. It's statistical significance level appears to be moderate.. This means firms assign moderate importance to this component from viewpoint of its impact on the return on equity.
2. The inventory turnover ratio has negative association with the return on equity of the firm. It is statistically not significant. The firms do not consider this variable to be important from viewpoint of profitability.
3. The Debtors turnover ratio is negatively and insignificantly related to profitability of the firm. It seems, the firm doesn't consider debtor turnover as significant component influencing the profitability of the firm.
4. The Creditors velocity ratio is insignificantly negatively related with profitability. It is statistically irrelevant. Hence, CVR is not found to be significant component. This lead us believe that the firm do not assign much value to credit being offered to suppliers.

CONCLUSION

This paper studied association among working capital management and profitability in fourteen firms listed on BSC from the ten years (2010 to 2019). The results make available evidence that working capital management measure that insignificantly negative association with return on equity. A negative and insignificant association among the Current ratio, Debtors turnover ratio, Creditors velocity ratio and return on equity was found. Current ratio was found to have moderate

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influence on profitability and hence firms should pay greater attention to current ratio to improve their profitability.

Table -1
Matrix of Co-efficients of Correlations

	CR	IR	DR	CRV
CR	**1.000**	**-0.122**	**-0.191**	**-0.137**
IR	**-0.122**	**1.000**	**0.044**	**-0.074**
DR	**-0.191**	**0.044**	**1.000**	**-0.170**
CRV	**-0.137**	**-0.074**	**-0.170**	**1.000**

Table -2
Descriptive Statistics

Variables→	ROE	CR	IR	DR	CRV
Mean	**17.522**	**0.946**	**1488.4141**	**16.587**	**100.050**
Std. Deviation	**93.982**	**1.133**	**4697.168**	**34.187**	**98.087**

Table - 3
Regression Co-efficients

	Regression Co-efficients		t	Significance Level	VIF
	Direction	Value			
Constant		**31.440**		**0.56**	
CR	**-**	**0.084**	**-0.944**	**0.347**	**1.089**
IR	**-**	**0.043**	**-0.497**	**0.620**	**1.024**
DR	**-**	**0.019**	**-0.218**	**0.828**	**1.082**
CRV	**-**	**0.053**	**-0.603**	**0.548**	**1.071**

Dependent Variable : ROE

Independent Variables: CR, IR, DR, CRV, N =140

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