A Comparative Study on the Impact of Working Capital Management on Firms' Liquidity & Profitability of Selected It Companies

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Abstract

Working capital management is a concept that is gaining serious attention all over the World because of the current financial crisis and economic problems. It is also known as financial strategy of firm which has great effect on liquidity and profitability. Liquidity management of companies playing a vital role to increase profitability and shareholders wealth. The purpose of this study is to examine the effect and relationship between working capital management practices, Liquidity & profitability of IT firms in India. For the purpose of research we have obtained last five year working capital data (2011-2015) from various sources such as financial report of company and other financial analysis website and portal. In this research we have made comparison of both organization current assets and current liability along with working capital. The techniques of mean, standard deviations, coefficient of variation and ratio analysis. The result of the study clearly indicated that current assets and current assets of both company related with each other and also there is significant difference between working capital of both the organization. However, the firms', current ratio, quick ratio, Debt Equity Ratio, and Return on Capital Employed will positively influence profitability.

Key words: IT firms, working capital management, efficiency, profitability, liquidity.

Introduction

Information Technology (IT) industry in India is one of the fastest growing industries. Indian IT industry has built up valuable brand equity for itself in the global markets. IT industry in India comprises of software industry and information technology enabled services (ITES), which also includes business process outsourcing (BPO) industry. India is considered as a pioneer in software development and a favorite destination for IT-enabled services. Today, Indian IT companies such as Tata Consultancy Services (TCS), Wipro, Infosys, HCL etc are renowned in the global market for their IT prowess.

Working capital refers vital part of any organization which can be categorized as fund needed for day to day running operation to any business. In another word management of working capital is important like the management of long term financial management. At present scenario of the global competitive business no any business can be run without the proper supply of raw material, cash, stock of finished goods and ability to grants credit to customer. While we can say that working capital is like the life blood of the company and no business will be able to carry with the proper ability of working capital.

Working capital indicated the liquidity position of the organization it refers to efficient management of short term assists. There is direct relationship between a firm growth and its working capital requirement. On the other hand working capital management is directly concerned with situation which occurs in order to manage current assets and current liability as well as relation between both. Current assets are those assets which can be converted in cash within year such as cash, marketable securities etc. whereas current liability are those liability which are proposed to be paid within a year out of current assets as well as profit such as account payable, bills payable and bank overdraft. Hence well-organized management of working capital is basic part of business as well as overall operation to create share holders value.

Literature Review

Working capital management (WCM) refers to all management decisions and actions that ordinarily influence the size and effectiveness of the working capital (Kaur, 2010).

Working capital policy relates to the management of short term assets and liabilities within the maturity period of one year. Working capital management is really vital for the financial health of business no matter what is the size of the business. For the growth and survival of firms efficient working capital is indeed a requirement because it shows the level of inventory, production and sales.

The concept of working capital management addresses companies' managing of their short-term capital and the goal of the management of working capital is to promote a satisfying liquidity, profitability and shareholders' value. Working capital management is the ability to control effectively and efficiently the current assets and current liabilities in a manner that provides the firm with maximum return on its assets and minimizes payments for its liabilities.

The short-term capital refers to the capital that companies use in their daily operations and it consists of companies' current assets and current liabilities. A well managed working capital promotes a company's well being on the market in terms of liquidity and it also acts in favor for the growth of shareholders value (Jeng-Ren, Li & Han-Wen, 2006).

Working capital management efficiency is vital especially for manufacturing and construction firms, where a major part of assets is composed of current assets (Horne & Wachowitz, 2000). It directly affects the profitability and liquidity of firms (Raheman & Nasr, 2007). The profitability liquidity tradeoff is important because if working capital management is not given due considerations then the firms are likely to fail and face bankruptcy (Kargar & Bluementhal, 1994). The significance of working capital management efficiency is irrefutable (Filbeck & Krueger, 2005).

Working capital is known as life giving force for any economic unit and its management is considered among the most important function of corporate management. Every organization whether, profit oriented or not, irrespective of size and nature of business, requires necessary amount of working capital. Working capital policy relates to the management of short term assets and liabilities within the maturity period of one year. Working capital management is really vital for the financial health of business no matter what is the size of the business. For the growth and survival of firms efficient working capital is indeed a requirement because it shows the level of inventory, production and sales Nwankwo O. and G. S. Osho, (2010)

Working capital is the most crucial factor for maintaining liquidity, survival, solvency and profitability of business (Mukhopadhyay, 2004). Working capital management is one of the most important areas while making the liquidity and profitability comparisons among firms (Eljelly, 2004), involving the decision of the amount and composition of current assets and the financing of these assets. The greater the relative proportion of liquid assets, the lesser the risk of running out of cash, all other things being equal. All individual components of working capital including cash, marketable securities, account receivables and inventory management play a vital role in the performance of any firm.

Efficient management of working capital plays an important role of overall corporate strategy in order to create shareholder value. Working capital is regarded as the result of the time lag between the expenditure for the purchase of raw material and the collection for the sale of the finished goods. The way of managing working capital can have a significant impact on both the liquidity and profitability of the company (Shin & Soenen, 1998). The main purpose of any firm is to maximize profit. But, maintaining liquidity of the firm also is an important objective. The problem is that increasing profits at the cost of liquidity can bring serious problems to the firm. Thus, strategy of firm must maintain a balance between these two objectives of the firms. Dilemma in working capital management is to achieve desired tradeoff between liquidity and profitability (Smith, 1980; Raheman & Nasr, 2007). Referring to theory of risk and return, investment with more risk will result to more return. Thus, firms with high liquidity of working capital may have low risk and low profitability. Conversely, a firm that has low liquidity of working capital faces high risk which results to high profitability

Lazaridis and Tryfonidis (2006) examined the relationship between profitability and working capital management of 131 firms listed on the Athens Stock Exchange. Using regression estimation approach and data covering the period from 2001-2004, the authors find a statistically significant inverse relationship between profitability, measured as gross operating profit and the cash conversion cycle, accounts receivables days and inventory days. They also observe a significantly positive association between profitability and accounts payable days. This study re-emphasises that, firms can enhance profitability by prudently keeping their working capital management components (accounts receivables, accounts payables, and inventory) within optimal levels.

Singh and Pandey (2008) studied the working capital components and the impact of working capital management on profitability of Hindalco Industries Limited for period from 1990 to 2007. Results of the study showed that current ratio, liquid ratio, receivables turnover ratio and working capital to total assets ratio had statistically significant impact on the profitability of Hindalco Industries Limited.

Falope and Ajilore (2009), using a sample of 50 Nigerian quoted non-financial firms for the period 1996-2005, found a significant negative relationship between net operating profitability and the average collection period, inventory turnover in days, average payment period and cash conversion cycle for a sample of fifty Nigerian firms listed on the Nigerian Stock Exchange. Furthermore, they found no significant variations in the effects of working between the working capital management and the firm's profitability and adds substance to the existing theory developed by previous authors. The structure of the article is as follows: Section 2 depicts the overview of literature, section 3 presents methodology, analysis of result is outlined in section 4 and finally section 5 summarizes the results.

Afza and Nazir (2009) made an attempt in order to investigate the traditional relationship between working capital management policies and a firm's profitability for a sample of 204 non-financial firms listed on Karachi Stock Exchange (KSE) for the period 1998-2005.The study found significant different among their working capital requirements and financing policies across different industries. Moreover, regression result found a negative relationship between the profitability of firms and degree of aggressiveness of working capital investment and financing policies. They suggested that managers could crease value if they adopt a conservative approach towards working capital investment and working capital financing policies.

Owolabi et al (2010) conducted a research study on working capital management as a financial strategy in Nestle Nigeria PLC, for this study authors has been collected six year data from 2004-2009. Result of this study indicated that there is negative correlation between current ratio and profitability, and also conclude that poor management of working capital is reflected in poor current ratio.

Swaran Singh and SK Bhansal (2010) has undertaken a comparative study on Management study of working capital in IFFCO and KRIBHCO by considering the period from 2000-2007 using various analytical tools like ratio analysis, operating cycle and t-test. The study concludes that management of working capital at IFFCO is better as compared to KRIBHCO.

Objective of the Study

i. To analyze the Working capital position of Selected IT Companies
ii. To examine the liquidity position of the selected IT Companies
iii. To examine the profitability position of the selected IT Companies
iv. To analyze the relationship between working capital, liquidity and profitability.

Hypotheses

H_o = There is no relationship between working capital, liquidity & profitability of the company

H_1 = There is a relationship between working capital, liquidity & profitability of the company

Methodology of the Study

The Study is based on a secondary data collected through the audited & published annual reports of the company and website portal moneycontrol.com & covers the study period of 5 years from 2011 to 2015. The study consist of top two IT companies like TCS and WIPRO selected on the basis on Net sales and availability of information during the study period. The analyses are based on statistical tools like Mean, Standard Deviations, Coefficient of Variation and Ratio Analysis. The relationship between the working capital, liquidity & profitability of the companies are verified using correlation.

Data Analysis, Interpretation and Findings

Table -01 Working capital & liquidity position of TCS Company & Wipro Company

Year	TCS Company			Wipro Company		
	WC	CR	QR	WC	CR	QR
2011	4418.89	1.72	1.72	13717.60	2.17	2.10
2012	7700.31	1.87	1.87	12260.20	1.76	1.74
2013	13831.73	2.43	2.43	17688.60	2.19	2.17
2014	22569.11	2.84	2.84	22490.20	2.30	2.27
2015	23966.51	2.46	2.45	22490.20	2.30	2.27
Mean	**14497.31**	**2.26**	**2.26**	**17729.36**	**2.14**	**2.11**
Growth	**19547.62**	**0.74**	**0.74**	**8772.60**	**0.13**	**0.17**
Growth %	**442.36**	**42.91**	**42.94**	**63.95**	**5.84**	**7.90**
SD	**8703.97**	**0.46**	**0.46**	**4778.57**	**0.22**	**0.22**
CV	**60.04**	**20.34**	**20.35**	**26.95**	**10.32**	**10.33**

Source: Calculated values from annual reports of the companies

Table 01 shows that the Working Capital and Liquidity ratios during the year 2011 to 2015. The average working capital has 14497.31 crores and it varies 60.04% during the study period in TCS Company. However the average working capital has 17729.36 crores and it varies 26.95% during the study period in Wipro Company. TCS Company as Compared to Wipro Company has more growth i.e 442.36% and 63.95% respectively in working capital during the study period. The average CR & average QR has 2.26 in TCS Company. The average CR is 2.14 and average QR is 2.11 in WIPRO Company. CR & QR varies 20.34% and 20.35% respectively in TCS Company during the study period. However it varies 10.32% and 10.33% in WIPRO Company. TCS Company has more growth compared to WIPRO Company in CR & QR during the study period. It shows that the TCS Company has a better position in Working capital and Liquidity position compared to WIPRO Company.

Table – 02 Profitability position of TCS Company & Wipro Company

Year	TCS Company				Wipro Company			
	OPR	NPR	ROA	ROCE	OPR	NPR	ROA	ROCE
2011	29.93	25.85	29.06	44.45	21.9	18.41	14.19	22.44
2012	29.3	28.24	32.03	53.63	19.07	14.78	12.13	22.04
2013	29.54	26.4	29.72	48.07	20.86	17	13.88	26.72
2014	33.29	28.56	32.07	53.39	23.5	19.06	16.15	29.47
2015	28.57	26.17	30.53	52.77	22.32	19.88	15.34	26.85
Mean	**30.13**	**27.04**	**30.68**	**50.46**	**21.53**	**17.826**	**14.338**	**25.504**
Growth	**-1.36**	**0.32**	**1.47**	**8.32**	**0.42**	**1.47**	**1.15**	**4.41**
Growth %	**-4.54**	**1.24**	**5.06**	**18.72**	**1.9178**	**7.9848**	**8.1043**	**19.652**
SD	**1.84**	**1.26**	**1.35**	**4.06**	**1.669**	**2.0027**	**1.5325**	**3.1783**
CV	**6.10**	**4.65**	**4.41**	**8.04**	**7.752**	**11.235**	**10.688**	**12.462**

Source: Calculated values from annual reports of the companies

Table 2 reveals that the profitability position of TCS Company and WIPRO Company during the year 2011 to 2015. The average OPR in TCS is 30.13 & in WIPRO it is 21.53. It varies 6.10% & 7.75% during the study period. TCS Company has negative growth i.e -4.54% in OPR and positive growth in WIPRO i.e 1.91%. The average NPR is 27.04 and 17.82 & it varies 4.65% and 11.23% respectively in TCS and WIPRO Company. WIPRO Company has more growth compared to TCS Company in NPR i.e 7.98% and 1.24% respectively. The average ROA in TCS is 30.36 and in WIPRO is 14.33. It varies 4.41% & 10.68% respectively in TCS and WIPRO Company. Wipro Company has more growth compared to TCS Company in ROA i.e., 8.10% & 5.06% respectively. The average ROCE of TCS is 50.46 and 25.50 in WIPRO Company. It varies 8.04% & 12.46% respectively. WIPRO Company has more growth compared to TCS Company in ROCE i.e., 19.65% and 18.72% respectively. It shows that WIPRO Company has more variation in profitability ratios and growth during the study period compared to TCS Company.

Table – 03 Correlation Matrix of TCS Company

	WC	CR	QR	OPR	NPR	ROA	ROCE
WC	1						
CR	0.9061	1					
QR	0.9061	1.0000	1				
OPR	0.2937	0.5494	0.5494	1			
NPR	0.1893	0.3372	0.3374	0.6252	1		
ROA	0.3734	0.3882	0.3885	0.4422	0.9406	1	
ROCE	0.6100	0.5049	0.5051	0.1891	0.7313	0.9127	1

Source: Own estimate

Table 03 reveals that there is a positive correlation between the WC, CR, QR, OPR, NPR, ROA and ROCE. It shows that there is positive relationship between working capital, liquidity position and profitability in TCS Company.

Table – 04 Correlation Matrix of Wipro Company

	WC	CR	QR	OPR	NPR	ROA	ROCE
WC	1						
CR	0.8142	1					
QR	0.8529	0.996	1				
OPR	0.7879	0.9099	0.8937	1			
NPR	0.7838	0.9297	0.9100	0.9212	1		
ROA	0.8905	0.9228	0.9228	0.9818	0.9214	1	
ROCE	0.9296	0.7506	0.7281	0.7281	0.6055	0.8253	1

Source: Own estimate

Table 04 reveals that there is a positive correlation between the WC, CR, QR, OPR, NPR, ROA and ROCE. It shows that there is positive relationship between working capital, liquidity position and profitability in Wipro Company.

Findings

After the analysis of the components of current assets & current liabilities and the trends of working capital, it was found that:

1. The Working Capital of TCS Company has recorded more growth rate i.e 442.36% rather than WIPRO Company i.e. 63.95%.
2. The study also reveals that TCS Company has more growth rate in CR & QR when compared to WIPRO Company i.e. 42.91% & 42.94%, 5.84% & 7.90% respectively.
3. TCS Company has negative growth i.e -4.54% in OPR and positive growth in WIPRO i.e 1.91%.
4. WIPRO Company has more growth compared to TCS Company in NPR i.e 7.98% and 1.24% respectively.
5. WIPRO Company has more growth compared to TCS Company in ROCE i.e., 19.65% and 18.72% respectively.
6. WIPRO Company has more variation in profitability ratios and growth during the study period compared to TCS Company.
7. The study shows that the TCS Company has a better position in Working capital and Liquidity position compared to WIPRO Company.
8. The Correlation Matrix of TCS & Wipro Company reveals that there is a positive correlation between the WC, CR, QR, OPR, NPR, ROA and ROCE. It shows that there is positive relationship between working capital, liquidity position and profitability in both the Companies.

Conclusion

Working capital management is important part in firm financial management decision. The ability of the firm to continuously operate in longer period depends on how they deal with investment in working capital management. The optimal of working capital management could be achieved by firms that manage the tradeoff between profitability and liquidity. From the study it reveals that there is positive relationship between working capital, liquidity position and profitability in both the Companies. However TCS Company has a better position in Working capital and Liquidity position compared to WIPRO Company.

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Abbreviations:

WC: Working Capital

CR: Current Ratio

QR: Quick Ratio

SD: Standard Deviation

CV: Coefficient of Variation

OPR: Operating Profit Ratio

NPR: Net profit Ratio

ROA: Return on Asset

ROCE: Return on Capital Employed