

Measuring the Relationship Between Working Capital Management and Profitability: Empirical Evidence from Bangladesh

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The efficient management of working capital is very vital for a business survival and thus a factor for overall boost in profitability (Nzioki et al, 2013). The paper examines the relationship between working capital management and profitability of 10 sample companies listed in Chittagong Stock Exchange (CSE) of Bangladesh. The study has employed primary and secondary data to validate the findings. The primary data have been collected through a structured questionnaire which is prepared in the light of objectives. The results from the study revealed that company operating profit was positively correlated with efficient management of working capital. It may be helpful to the listed companies for formulating the working capital policies as to guide the efficient working capital management. The result may also be helpful to the academicians, researchers and policy makers, who have been making serious endeavour to protect the interest of stakeholders and to develop the listed companies of stock market as a whole.

INTRODUCTION

Working capital is essential components of total capital for any business organization to operate their daily activities. Working capital involves with total current assets like accounts receivable, marketable securities, cash, inventory, and prepaid expenses. The profitability and productivity of companies depends on efficient use of current asset of those companies. Every organization requires efficient working capital management to minimize the short-term cost of capital and maximizes the productivity that affects profitability of companies. Working capital management is one of the most important areas while making the liquidity and profitability comparisons among the firm involving the decision of the amount and composition of current asset and the financing of these assets (Eljelly, 2004). It directly affects the profitability and liquidity of firms (Raheman and Nasr, 2007). The profitability and liquidity are trade-offs because working capital management is not given due considerations then the firms are likely to fail and face bankruptcy (Kargar and Bluementhal, 1994). Companies' inventory management policy, debtor's management policy and creditors' management policy have an important role in its profitability performance of the corporation (Vishanani and Shah, 2007). During recent years different corporation like small and medium organizations have suffered poor working capital management and a lack of financial management skills. The WCM practices of firms are very important because it determines the

level of working capital available (Tauringana and Afrifa, 2013), which intends influences the profitability of the firm. (Peel and Wilson 1994) found in a research conducted in the U.K that good credit management practices have connection with firm profitability. Firm that has low liquidity of working capital, facing high risk results to high profitability. The issue here is in managing working capital, firm must take into consideration all the items in both accounts and try to balance the risk and return. The need of proper working capital management is important for good solvency and liquidity of the firm. However, very few researchers have looked into the WCM practices of large and small corporations in Bangladesh.

In this study, we investigate the relationship between working capital management and corporate profitability of 10 listed companies in the Chittagong Stock Exchange (CSE) for the period 2009-2014. The study seems to carry an enormous academic value since no extensive study has been undertaken on this aspect of the problem. It may be helpful to the government, to the researchers, to the national policy makers, who have been making serious endeavour to protect the corporation sector and to develop the Bangladesh economy as a whole.

LITERATURE REVIEW

Working capital management is often a dilemma between the liquidity and profitability. The study has made an attempt to find out the solution to the problems of working capital management and identify the gap in the previous research. To achieve these goals, the literature review has been conducted. Samiloglu and Demirgunes (2008) analysed the effect of WCM on company profitability of a sample of companies consisting of Istanbul Stock Exchange (ISE) listed manufacturing companies for the period of 1998 to 2007. Making use of ROA as a measure of company profitability, they found a significantly negative effect of inventory holding period and accounts receivable period on company profitability. Raheman et al.(2010) found that “Working Capital Management and Corporate Performance of Manufacturing Sector in Pakistan” that Working Capital Management has a significant impact on profitability of the firms and plays a key role in value creation for shareholders and have negative impact on Net Operating Profitability of a firm. Sayeda Tahmina (2010) studied on “Effects of Working Capital Management and Liquidity.” The study finds enough evidences that a firm is likely to enjoy better profitability if the firm manages its working capital with better efficiency and focuses on cash position with more care. Kaur and Singh (2013) conducted a survey on an important piece of work on “Managing Efficiency and Profitability Through Working Capital” include with the analysis of the working capital performance of 164 manufacturing BSE 200 companies classified into 19 industries over the period of 2000-2010. The results of the study support earlier studies revealing that efficient management of working capital significantly affects profitability. Asghar et al. (2012) examined on “Working Capital Management: Is It Really Affects the Profitability? Evidence from Pakistan” This paper showed a positive impact of working capital management on profitability. Considering the results it is evident that efficient management of working capital can lead a firm towards profitability. Rehn (2012) has done a study on “Effects of Working Capital Management on Company profitability”. The result of his study shows that there is a significant effect of working capital Management on company profitability. A careful conclusion can be made that some industries can use their investment in working capital to actually increase profitability. Napompech (2012) conducted a research on “Effects of Working Capital Management on the Profitability of Thai Listed Firms”. The results revealed a negative relationship between the gross operating profits and inventory conversion period and the receivables collection period. Padachi (2006) has conducted a research on “Trends in Working Capital Management and its Impact on Firms Performance. A strong significant relationship between working capital management and profitability has been found in previous empirical work. Lazaridis and Tryfonidis (2006) investigated the “Relationship of corporate profitability and working capital management for firms listed at Athens Stock Exchange”. They reported that there is statistically significant relationship between profitability measured by gross operating profit and the Cash Conversion Cycle.

RATIONALE OF THE STUDY

Corporations play a significant role in the development process of any country. Large corporations meet the requirement of macro-economic factors of employment creation, poverty reduction, improving income distribution, industrial development, rural development and export growth. The sustainability of the large corporation typically depends on the management of working capital of a firm. Working capital management efficiency is vital especially for manufacturing firms, where a major part of assets is composed of current assets (Horne and Wachowitz, 2000). Working capital is the most crucial factor for maintaining liquidity, survival, solvency and profitability of business (Mukhopadhyay, 2004). 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 attaining the profitability of the firm. Shin and Soenen (1998) argued that efficient working capital management is very important to create value for the shareholders while Smith (1997) emphasized that profitability and liquidity are the salient goals of working capital management. The need to main effective working capital management within corporation remains pivotal to solvency and liquidity of these organizations. Working capital is the main component of any business enterprise. Especially it has a great importance on Business Corporation. Because most of the business corporations are operating their daily business activities with short term financial planning. And particularly in Bangladesh we have many manufacturing and non-manufacturing business corporation which are the key of economic growth. The significance of working capital management efficiency is irrefutable (Filbeck and Krueger, 2005). Previous research study shows that there are a few studies on the working capital management practices of listed corporation for a developing country like Bangladesh. This research therefore endeavours to fill this gap. This study will be the great importance to the entrepreneurs as it will outline the efficient working capital management of corporation. Moreover working capital Management is the core of any business enterprise to the researcher and academicians. This study will be a source of material for future research to the related topics. It will also help the academicians to find out better solution to overcome the limitations and this study will provide better suggestions and planning to the future entrepreneurs and organizations So that they can remove the obstacles and come up with a better business model and planning. Literature in this area is scanty in numbers and partial in content. Existing literatures indicate that a few partial studies have been conducted, but the role of working management on the profitability of corporations of Bangladesh is not studied comprehensively as a whole. It is necessary to conduct a study to shed light on the role of working management in profitability of the corporation. The findings of the study can be helpful for the policymakers 'of business sector to formulate policies in order to improve the present condition by being more innovating in developing new working capital products and policies.

OBJECTIVES

The main theme of the study is to critically assess the working capital management and profitability of listed companies in Bangladesh. The study aimed at sustaining the following specific objectives:

- To examine the working capital management of the companies listed in CSE of Bangladesh.
- To evaluate the relationship between Working capital management and profitability of sample companies.
- To identify the problems involved in Working Capital Management that hinder the profitability of sample companies.
- To provide suggestions for improving the problems involved in working capital management of the companies listed in CSE of Bangladesh.

METHODOLOGY

The study has been designed to examine the relationship between working capital management and profitability of listed companies in CSE. The study is based on both primary and secondary data. Primary data were collected through a structured questionnaire which was administered personally to the particular financial managers and high officials of 30 companies. Convenient sample technique has been used to interview the target population in Bangladesh. The target population of this study was high financial officers of listed companies in Chittagong stock exchange. The study has taken one financial managers and one financial officer of 30 companies. The total numbers of respondents of 60 were selected for interviewing from 30 listed companies in CSE. The main reason of selecting respondents is the convenient of researcher. In view of the limited resources and time at the disposal, financial staff of all listed companies in CSE could not be investigated. Secondary data and information relevant to this study have been collected from available publications including journals, Data relating to the working capital, and profitability, Annual Reports of the sample companies under study period etc. have been consulted for the theoretical development of the study. We use the panel data of gross current assets, gross current liability, net working capital, gross profit and net income of sample companies for the period 2009 to 2013. Data and information thus collected have been processed manually as well as through personal computer. Descriptive statistics such as 5 point Likert scale, average, Ratios, and percentage, have been used in this study to analyse the data for the validity of findings. The results of the study have been analysed critically in order to make the study more informative, useful and acceptable to the readers, academicians, policymakers, and those people who are devoted to improve the working capital policy in the listed companies in CSE as a whole.

RESULTS & DESCRIPTIONS

This study aims to provide an overview of general findings based on the questionnaire as well as to discuss the results that have been achieved during this study. Descriptive Statistics have been used to carry out the data analysis. However, the major findings of the study and their analyses have been summarized as below:

Determination of Working Capital Size of the Sample Companies

Working capital is determined based on some factors that are identified by the opinion of respondents through the questionnaire survey. The factors that influence the size of working capital in the firm are presented in Table-1.

It is found that very significant number of respondents opined that profitability of the firm is the most important factor for determining the size of working capital which is ranked no.01. A good number of respondents made comment that growth in sales is the another influential factor for determining the working capital size that is ranked no. 02. A significant number of respondents agreed that working capital is determined by the availability of credit which is identified no. 03. A larger number of respondents opined that working capital size depends on the size of business which is ranked number 04. A considerable number of respondents reported that working capital size is determined by the product turnover which is ranked no. 05. A significant number of respondents felt that business cycle is considered as important factor for determining the working capital size which has been ranked as number 06. A number of respondents opined that size of working capital depends on the scarcity of inventory and raw material which is ranked as 07. An insignificant number of respondents also opined that customer demand is also a factor for determining the working capital size which is ranked as 08. A satisfactory number of respondents' proponent that frequency of vendors supply is considerable factor for working capital size which is traced out as 9 in rank. A few number of respondents opined that a firm size is considered for making investment decision which is ranked no. 10. A number of respondents mentioned that price appreciation is relevant to investment decision which has been identified as number 11.

TABLE 1
DETERMINATION OF WORKING CAPITAL SIZE OF THE SAMPLE COMPANIES

Factors	1	2	3	4	5	Total	Mean	Rank
Business Size	5	8	9	21	17	217	3.61	4
Customer demand	8	12	10	20	10	192	3.20	8
Seasonal demand	12	20	11	10	7	160	2.66	11
Credit sales	13	18	7	16	6	164	2.73	10
Profitability	2	4	5	25	24	241	4.01	1
Product Turnover	5	9	8	24	14	213	3.55	5
Scarcity of inventory & raw material	7	12	8	16	17	204	3.40	7
Frequency of vendors supply	9	16	6	17	12	187	3.11	9
Availability of credit facility	5	10	6	20	19	218	3.63	3
Business cycle	5	11	8	21	15	210	3.50	6
Growth in sales	5	7	8	22	20	231	3.85	2

Source: Field survey by the authors.

Components of Current Assets Used by the Companies

The study made an attempt to trace out the types of current assets used by sample companies. According to the opinions of respondents, the lists of current assets are determined on basis of priority of their usage listed below:

TABLE 2
COMPONENTS OF CURRENT ASSETS USED BY THE SAMPLE COMPANIES

Components of WC	1	2	3	4	5	Total	Mean	Rank
Cash and bank balance	-	3	7	28	22	249	4.15	1
Marketable securities	6	10	6	21	17	210	3.50	4
Accounts receivable	5	11	5	23	16	214	3.56	3
Prepaid expenses	9	13	7	18	13	193	3.21	5
Inventories	5	8	6	25	16	219	3.65	2

Source: Field survey by the authors.

It is found that most of the respondent opined that they used cash and bank balances as their working capital which ranked 01. A good number of respondents revealed that they used inventories as components of working capital which is ranked as no 02. A significant number of respondents agreed that accounts receivable is important component of working capital which is ranked as 03. A number of respondents reported that marketable securities and prepaid expenses are used as working capitals which are ranked as no. 04 and 05.

Working Capital Financing of Sample Companies

In the questionnaire there was a section concerning about what sources of working capital are used in the sample companies. These sources of working capital have been identified by the opinion of respondents in the study which are mentioned as below:

The study made an attempt to examine the sources of working used by sample firms. The respondents reported that self-finance is very useful for easy meeting the working capital requirement which is ranked as number 01. A very significant number of respondents revealed that personal loan is another suitable source of working which is traced out as rank 02. A good number of respondents opined that short-term

bank loan is an alternative to meet working capital needs which ranked in number 03. The respondents opined that Trade credit is a convenient source of working capital for the sample firms which is ranked as no 04. The respondents also revealed that cash credit is used by sample companies to meet the working capital need which is ranked as number 05. More than average respondents felt that account payable is used as working capital which is ranked as 06. A number of respondents revealed that stock sample firms use the supply as a source of working capital which is ranked in number 07. An average number of respondents indicate that borrowing from friends/relative is used as source of working capital which is ranked as number 08. A few number of respondents revealed that accruals is used as source of working capital which is shown in ranking of last 07.

TABLE 3
WORKING CAPITAL FINANCING OF SAMPLE COMPANIES

Sources	1	2	3	4	5	Total	Mean	Rank
Borrowing from friends/relatives	10	13	7	20	10	187	3.11	8
Short-term Bank loan	6	10	5	25	12	201	3.35	3
Supplies	8	15	7	21	9	188	3.13	7
Account payable	8	14	8	20	10	190	3.16	6
Accruals	12	20	7	15	6	163	2.71	9
Trade credit	6	14	5	22	13	202	3.36	4
Self-finance	8	9	4	25	14	208	3.46	1
Cash credit	6	14	6	23	11	199	3.31	5
Personal loan	4	15	7	21	13	204	3.40	2

Source: Field survey by the authors.

Alternative Use of Source of Working Capital in Liquidity Crisis

The study investigates how sample companies meet the liquidity crisis at the time of financial distress. It is a vital issue for financial manager to make the balance between liquidity and profitability. The respondents were asked about alternative source of cash used if they face liquidity crisis. Different respondent opined several opinions. A significant number of respondents opined that loan from others is used as component of liquidity in case of cash emergency which is raked 01 according to their choices. A very significant number of respondents opined that Bank loan is an alternative source of liquidity to meet the crisis moments which is ranked as 02. A significant number of respondents felt that personal savings are used as component of liquidity to meet the financial crisis which is ranked as number 03. A good number of respondents opined that sample companies use Grameen bank or NGOs as source of liquidity which is numbered as 04. A few number of respondents reported that sample companies use the other sources than mentioned when fall into financial crisis.

TABLE 4
ALTERNATIVE USE OF SOURCES OF WORKING CAPITAL IN LIQUIDITY CRISIS

Sources	1	2	3	4	5	Total	Mean	Rank
Personal savings	8	17	6	17	12	188	3.13	3
Bank loan	9	14	5	20	12	192	3.20	2
Loan from others	7	15	7	18	13	195	3.25	1
NGOs/ Grameen bank	9	16	6	21	8	183	3.05	4
Others	11	14	7	18	10	182	3.03	5

Source: Field survey by the authors.

Maintaining Working Capital Policy

The study examines the working capital policy of sample companies whether they use in the working capital management or not. Working capital policies vary from business to business. 30% of respondents opined that they follow relaxed working capital policy in the working capital management of sample companies. 26% of the respondents reported that they use moderate policy in working capital management. 26% of respondents felt that the working capital policy is not necessary for maintaining the working capital. 10% of respondents revealed that sample companies use the restricted working capital policy in the working capital management of their companies. 7% of respondents felt that they are not familiar to the working capital policy.

TABLE 5
MAINTAINING WORKING CAPITAL POLICY

Queries	Frequency	Percentage
Restricted	6	10%
Moderate	16	27 %
Relaxed	18	30 %
Not necessary	16	26 %
Not familiar	04	7 %
Total	60	100%

Source: Field survey by the authors.

Relationship Between Working Capital Management and Profitability of Sample Companies

The profitability of a firm depends on the efficient management of working capital. If the firm invests more capital in current assets, that facilitates the liquidity smoothly but having possibility to decrease the profitability. The study made an attempt to examine the relationship between Gross working capital and profitability. The secondary data were analysed to examine the degree of relationship between working capital management and profitability of sample companies listed in CSE of Bangladesh. Descriptive statistics have been used to carry out the data analysis.

The Relationship Between the Growth of Gross Working Capital and Gross Profit

Table-6 shows the degree of relationship between the growth of Gross Working Capital and Gross Profit of sample companies. The BATA has displayed that the gross working capital has been growing more than gross profit from 2009 to 2013. This implies that there is negative correlation between growth in GWC and GP. The Kohinoor has demonstrated the relationship between GWC and profitability. The relationship exists between GWC and GP is positive (Growth rate in GWC is 14.14 percent and Growth in GP is 17.50 which is greater than growth in GWC). Bangas has found that the growth in GWC is 1.26 percent and 29.43 percent in Gross profit. This signifies that when the firm invested less capital in current asset that would increase the profitability by 29.43 percent. Keya has also shown the identical relationship between investment in working capital and profitability of the firm (growth in GWC is 72.17 percent and 48.24 percent in GP). Aramit indicates the almost identical relationship between growth in GWC and growth in GP. The company has grown in GWC and GP are 2.66 and 2.48 respectively. The BSRM represents that the gross working capital has been growing more than gross profit from 2009 to 2013 which are 33.64 percent and 22.99 percent. This implies that there is negative correlation between growth in GWC and GP. The ACI has demonstrated the relationship between GWC and profitability. The relationship exists between GWC and GP is positive (Growth rate in GWC is 15.00 percent and Growth in GP is 15.84 which are growing at the same rate). Shine Pukur has found that there exists negative correlation between growth in GWC and Gross profit which are 7.25 percent and (3.21 percent) respectively. This implies that when the firm invested more capital in current asset that would decrease

the profitability by 3.21 percent. Confidence Cement has also shown the positive relationship between investment in working capital and profitability of the firm (growth in GWC is 28.77 percent and 35.61 percent in GP). BHL indicates the negative relationship between growth in GWC and growth in GP. The company has grown in GWC and GP are 6.97 percent and 0.44 percent respectively.

TABLE 6
THE RELATIONSHIP BETWEEN THE GROWTH OF GROSS WORKING CAPITAL AND GROSS PROFIT

Year		2009	2010	2011	2012	2013	Mean
Bata	GWC	-----	67.93	12.29	1.20	8.28	22.42
	GP	-----	68087	6.84	1.55	(25.29)	12.99
Kohinoor	GWC	-----	20.25	13.27	14.43	8.61	14.14
	GP	-----	0.44	24.22	35.82	9.55	17.50
Bangas	GWC	-----	(15.50)	11.69	(27.25)	36.13	1.26
	GP	-----	(19.21)	26.44	38.28	72.22	29.43
Keya	GWC	-----	35.52	135.92	104.04	13.22	72.17
	GP	-----	18.97	166.36	(1.24)	8.90	48.24
Aramit	GWC	-----	9.23	0.023	(7.38)	8.80	2.66
	GP	-----	(30.35)	55.82	(14.96)	(30.5)	2.48
BSRM	GWC	-----	16.25	126.07	(10.33)	2.58	33.64
	GP	-----	22.0	(0.78)	(1.36)	72.10	22.99
ACI	GWC	-----	8.11	19.88	19.83	12.20	15.00
	GP	-----	19.23	12.05	13.57	18.58	15.84
Shine Pukur	GWC	-----	23.9	(1.18)	11.07	(4.78)	7.25
	GP	-----	17.86	(0.90)	3.20	(33.03)	(3.21)
Confidence Cement	GWC	-----	30.69	33.89	36.54	13.98	28.77
	GP	-----	3.48	32.86	78.61	27.50	35.61
BHL	GWC	-----	(42.89)	38.88	15.22	16.70	6.97
	GP	-----	26.81	(9.71)	(29.05)	13.72	0.44

Source: Annual reports of the sample companies.

The Relationship Between the Growth of Net Working Capital and Net Profit

Table-7 shows the degree of relationship between the growth of Net Working Capital and Net Profit of sample companies. The BTA represents that the net working capital has been growing more but net profit is declining from 2009 to 2013 which are 242.38 percent and (49.2) percent. This implies that there is negative correlation between growth in NW and NP. The Kohinor has demonstrated the negative relationship between NWC and NP which are trace out by (7.08) and 27 percent. Bangas has found that the NWC has been grown by 104.01 percent and NP has also been increased by 86.65 percent. This implies that when the firm invested more capital in current asset that would increase the net profit by 86.65 percent. Keya has also shown the negative relationship between investment in net working capital and net profitability of the firm (growth in NWC is 386.09 percent and 36.61 percent in NP). Aramit indicates the negative relationship between growth in NWC and growth in NP. The company has grown in NWC and NP are 18.50 percent and 0.71 percent respectively. The BSRM found that there exists negative correlation between the net working capital and net profit from 2009 to 2013 which are (23.43) percent and 19.27 percent. The ACI has experienced that there have negative relationship between NWC and NP which are trace out by 6.33 percent and (1.21) percent. These signify that firm invested more in working would reduce the profitability. Shine Pukur has found that the NWC has been grown by 195.95 percent and NP has also been increased by 36.49 percent respectively. This implies that when the firm

invested more capital in current asset that would increase the net profit by 36.49 percent. Confidence Cement has magnified the net working capital by 30.55 percent and net profit has also been increased by 30.38 percent. Finally BHL indicates the relationship between growth in NWC and growth in NP. The company has grown in NWC and NP are 9.79 percent and 26.86 percent respectively.

TABLE 7
THE RELATIONSHIP BETWEEN THE GROWTH OF NET WORKING CAPITAL AND NET PROFIT

Year		2009	2010	2011	2012	2013	Mean
Bata	NWC	-----	780.06	182.44	11.08	(4.30)	242.38
	NP	-----	0.30	(73.91)	7.30	(130.70)	(49.2)
Kohinoor	NWC	-----	(29.41)	(86.91)	15.09	102.63	(7.08)
	NP	-----	(3.33)	14.89	58.24	38.20	27
Bangas	NWC	-----	130.18	216.24	16.02	53.60	104.01
	NP	-----	7.18	76.21	128.37	134.84	86.65
Keya	NWC	-----	195.57	144.59	1349.1	44.29	386.09
	NP	-----	74.77	77.29	(1.70)	(4.48)	36.47
Aramit	NWC	-----	25.18	9.17	16.28	23.38	18.50
	NP	-----	(29.89)	47.49	12.69	(27.33)	0.71
BSRM	NWC	-----	(14.68)	(21.15)	3.00	(58.89)	(23.43)
	NP	-----	68.07	(13.02)	3.11	38.22	19.27
ACI	NWC	-----	44.17	(4.38)	(24.76)	10.32	6.33
	NP	-----	(40.12)	15.13	(19.90)	40.18	(1.21)
Shine Pukur	NWC	-----	(193.75)	118.46	(46.50)	(292.45)	195.95
	NP	-----	46.91	(33.33)	(63.35)	(113.07)	36.49
Confidence Cement	NWC	-----	17.10	(3.41)	(63.35)	45.19	30.55
	NP	-----	68.04	(17.77)	41.45	29.81	30.38
BHL	NWC	-----	(34.86)	42.63	14.80	16.62	9.79
	NP	-----	66.20	(10.10)	38.50	12.81	26.86

Source: Annual reports of the sample companies.

Performance of Gross Working Capital on Its Return

The table-8 measures the financial performance of sample companies from 2009 to 2013 by the ratios of return on working capital. The ratios have been calculated gross profit divided by gross working capital. The BAL has significantly earned on gross working capital which is 79.57 percent and take the first position among the sample companies. Keya Company has also generated significant earnings on gross working capital which is 67.56 percent and ranked by second position among sample companies. BSRM has produced 50.85 percent on gross working capital which is ranked by third position among sample companies. Bangas has also earned 44.41 percent on gross working capital which is ranked by fourth position among sample companies. BHL has achieved 43.69 percent earnings on gross working capital which is ranked by fifth position. Aramit has earned 37.20 percent on gross working capital which is ranked sixth position. Shine Pukur has obtained 36.28 percent on gross working capital which is ranked seventh position. ACI has generated 34.98 percent on gross working capital which is ranked eighth position. Confidence Cement has earned 33.60 percent on gross working capital which is ranked ninth position. Kohinnor has earned 31.48 percent on gross working capital which is the lowest position among the sample companies.

TABLE 8
PERFORMANCE OF GROSS WORKING CAPITAL ON ITS RETURN

Year	2009	2010	2011	2012	2013	Mean	Rank
Company	ROGWC%	ROGWC%	ROGWC %	ROGWC %	ROGWC %		
<i>Bata</i>	72.72	91.60	98.70	85.86	49.00	79.57	1
Kohinoor	31.90	26.62	29.23	34.68	34.99	31.48	10
Bangas	29.03	27.75	31.43	59.92	74.43	44.51	4
Keya	84.26	66.87	64.62	64.41	57.65	67.56	2
Aramit	32.04	35.62	31.51	33.65	53.19	37.20	6
BSRM	72.33	63.18	34.20	44.27	40.29	50.85	3
ACI	31.08	30.41	34.69	43.39	35.35	34.98	8
Shine Pukur	35.33	40.28	40.38	37.52	27.89	36.28	7
Confidence Cement	35.29	27.96	27.76	36.33	40.68	33.60	9
BHL	72.22	27.85	50.24	32.17	36.01	43.69	5

Source: Annual reports of the sample companies.

Performance of Net Working Capital on Its Return

The table 9 measures the financial performance of sample companies from 2013 to 2014 by the ratios of return on net working capital. The ratios have been calculated Net profit divided by Net working capital. Confidence Cement has significantly earned 89 percent on net working capital and takes the first position among the sample companies. Bangas has also generated significant earnings on net working capital which is 36.89 percent and ranked by second position among sample companies. BHL has produced 31.05 percent on net working capital which is ranked by third position among sample companies. Shine Pukur has also earned 24.50 percent on net working capital which is ranked by fourth position among sample companies. ACI has achieved 24.09 percent earnings on net working capital which is ranked by fifth position. Aramit has earned 22.05 percent on net working capital which is ranked sixth position. Keya has obtained 12.86 percent on net working capital which is ranked seventh position. BAL has generated 4.72 percent on net working capital which is ranked eighth position. Kohinoor has earned 3.03 percent on net working capital which is ranked ninth position. BSRM has earned (56.84)

TABLE 9
PERFORMANCE OF NET WORKING CAPITAL ON ITS RETURN

Year	2009	2010	2011	2012	2013	Mean	Rank
Company	RONWC %	RONWC %	RONWC %	RONWC %	RONWC%		
<i>Bata</i>	9.7	7.0	5.64	1.61	(0.33)	4.72	8
Kohinoor	(5.73)	4.33	4.37	5.99	7.58	3.03	9
Bangas	30.99	32.47	30.11	46.25	44.63	36.89	2
Keya	14.14	8.20	11.65	17.67	12.64	12.86	7
Aramit	39.61	22.30	30.21	0.966	17.21	22.05	6
BSRM	(34.16)	(81.0)	(71.19)	(68.95)	(29.02)	-56.84	10
ACI	24.61	15.84	28.07	28.35	23.62	24.09	5
Shine Pukur	79.26	177.95	(531.6)	371.52	25.37	24.50	4
Confidence Cement	104.3	97.95	91.66	79.54	70.95	89	1
BHL	35.80	52.11	33.14	17.51	19.69	31.05	3

Source: Annual reports of the sample companies.

percent on net working capital which is the lowest position among the sample companies. It is mentionable that Aramit has retained the same position between return on gross working capital and return on net working capital and BSRM has failed good position in RONWC but had good position in ROGWC.

Working Capital Management Problems of Sample Companies

The study made an attempt to address the problems involved in the working capital management of sample companies through the questionnaire. The following problems have been facing from long-run by managers and officers who are directly or indirectly engaged in working capital management that hinder the profitability of sample companies:

TABLE 10
PROBLEMS IN WORKING CAPITAL MANAGEMENT OF SAMPLE COMPANIES

Factors	1	2	3	4	5	Total	Mean	Rank
Lack of computer literacy in working capital management	10	16	7	18	9	180	3.00	5
Absence of separate finance department for working capital management	7	11	6	24	12	203	3.38	1
Low qualified official in working capital management	10	15	8	18	9	181	3.01	4
Unskilled personnel in working capital management	9	12	7	19	13	195	3.25	2
Low access to new technology and market information for working capital management	10	18	6	15	11	179	2.98	6
Lack of easy access to liquidity market	11	17	6	16	10	177	2.95	7
Lengthy of credit collection	8	14	8	17	13	193	3.21	3
Failure to control cash management	12	14	7	18	9	171	2.85	8

Source: Field survey by the authors.

Some other respondents has found working capital management problem because of unskilled personnel in working capital management. This problem has been given 2nd priority. Another number of respondents opined that they think they face problem for lengthy of credit collection. Low qualified official in working capital management is also a big problem by many other respondents. Depend on the operational activities of the organization they face several problems in working capital management like, Lack of computer literacy in working capital management, Low access to new technology and market information for working capital management, Lack of easy access to liquidity market, Failure to control cash management etc.

Policy Implications

The profitability of a firm can be determined by the proper usage and size of working capital. The proper size of working capital has to be equipped by considering a number of factors such as credit facility, firm size, customer demand, availability of raw materials, and growth in sales etc. that highly affects the profitability of the firm. Several policy implications can be taken on the basis of major opinions of respondents and analysis of findings that will improve the working capital management as well as increase the profitability of the firm:

- The management of working capital in sample firms should be guided as the efficient use of current assets as well current liabilities that will improve the profitability of those firms.

- For the efficient management of working capital, the firm requires separate finance department that can collect working capital at lowest possible cost of capital.
- The firms should use the new technologies which will ensure easy access to market information relates to sources of working capital and liquidity management
- The firms should make proper plan for the credit management which can control the failure of cash management.

CONCLUSION

Working capital management is an impermeable profession for financial manager. The financial manager should manage the working management by the trade-offs between profitability and liquidity. The literature review has given indication that the efficient working capital and liquidity management has positive impact on the profitability. Thus the study has tried to provide evidence between the working capital management and profitability of listed companies in CSE and bring out some credible findings which would improve the present working capital management of sample companies. The study clearly asserts that sample companies listed in CSE have enough scope to enhance their profitability by the use of working capital in more efficient ways. The firms should improve the present structure of current assets and current liability for higher profitability of sample companies. They should build strong relation with supplier, creditors, customers, and other private agencies so that they can get any support from them in this regards.

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