Assessing the effect of Working Capital Management on the Business Profitability.

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Abstract
Management of working capital play very essential role in the firm's profitability. Therefore, this study aims to inquire the impact of working capital management on firm's profitability. For measuring working capital management inventory conversion period, debtor's conversion period, creditor's conversion period, cash conversion cycle, and cash conversion efficiency are taken as independent variables. Firm's profitability is measured by using the four dependent variables which are net profit margin, return on assets, return on equity, and return on capital employed. Regression analysis is used to discover the impact of working capital management on firm's profitability by using secondary data. This data is gathered from annual reports of 25 companies listed at NSE for five years from 2008-2012. Manufacturing industry is selected because major portion of total assets contain current assets so working capital management efficiency is necessary in this industry. From results of this study, working capital management has significant impact on firm's net profit margin, return on assets, and returns on capital employed and insignificant impact is find out on return on equity of firms. Therefore, it is concluded that working capital management has significant impact on firm's profitability in food sector. It is concluded that if firms in food sector efficiently manage working capital then, firm's profitability is enhanced. This study also find descriptive statistics which tells how well performance of firms in food sector is and how efficiently these firms are managing working capital.
Keywords: Working capital, food sector, financial performance, cash conversion cycle, ICP, CCE, DCP

Introduction

Prior to investigate the working capital we need to understand that what working capital is. The differentiation between current assets and current liabilities are called the working capital. The management of working capital play vital role to recover the financial performance of the firm, through the working capital the firm's obtain the benefits of opportunities(Professor Dun Bush).Make the balance among profitability and liquidity to analyze the firm's performance by the working capital management is most important by make the efficient daily business operations. It is a not easy task for the management team or working management manager to manage the liquidity on the day to day basis. The growth and performance of firm's effect if the disparity arises among the CA and CL.(Dr. Muhammad Azam, 2011).

To initiate the business firm purchase fixed assets. The purposes for which these fixed

assets are purchased require bringing these fixed assets in operation. In these operations, consumable inputs like finance, labor, raw material and overhead are included. To fulfill the firm's objective of profitability and needs of customers, a proper functioning of inputs and outputs is required. Cash is required to continue the day to day business's operations. In managing financial operation; working capital management has great importance because it is considered as related to the firm's profitability. Good organization of working capital is also linked with credit policy such if more attention is given on efficiency of receivable collection period then it may generate bad debts. But if this strict policy of credit is adopted account receivable may be received sooner but sales can be lost.

Value of the firm will be increased and growth will be more if current assets are efficiently managed. Net profit margin ratio is very helpful from the prospective of investors and shareholder, because it measure the overall profitability of a business. Profitability ratio reveals that either management is effectively managing the operation of the firm like controlling cost or operating expenses of producing a product or service. If this ratio is low it means that firm is not able to earn a satisfactory profit on its equity. Return on assets ratio is used to measure that either firm is efficiently using its assets to earn a return or how much return is generated by using those assets. Account receivable turnover in days indicate that in how many days account receivable are received. No of days of account receivable should be less. Because if a firm will receive its A/R earlier so company may use this cash into more operation and more profit will be generated. Account payable days should be more sopay later and use that money for generating more sales and more profit.

This paper will help in understanding the effect of WCM on performance of firms and it will also help that how practices of WCM can be enhanced which better the financial performance of companies. A study, examine the linked among performance and working capital management in India companies .He study the two different school , one management of school said that the performance are not enhance by the working capital. Sometime it influence the negative impact among than. The other school said that business performance is enhancing by the outlay or working capital (Chakroborty, 2008). Straightforward and simple concept of working capital management to make sure the capability of firm to fund the contrast among STA and STL and cover the firm's all activities that are narrate the product, customers and vendors according to Harris (2005).

Literature Review

This paper examine that the companies in Kenya have relationship among profitability and working capital and management. Days of working capital, cash conversion cycle efficiency and days operating cycle these factor are use to measure the performance of WCM.The profitability through the net profit margin, ROA and ROE. In this purpose collect the data from 160 companies in Kenya year to 2000 - 2005. Inventory turnover in days and ROA have positive relationship but ROA and collection period are negative linked examine in this paper. Future examine is that CCC are positive relationship between ROA. Positive relationship existed between profitability performance measure by the ROA and working capital measure by CCC. This direct relationship indicate that when ROA decrease the cash conversion cycle also decrease .The purpose of this study examine that ROA significantly impacted by the variable. Average payment period, average collection period and inventory in days used to measure (Ali, 2011).

In this paper done beverage and food sector has been selected in Kenya. The cash conversion cycle has a positive impact acid test ratio, return on asset and current ratio .Cash conversion cycle positive relationship with net profit margin but not relationship with level of debt (Lyroudi and Lizards, 2000). In order to increase the profit CFO should consider these variable day of operating cycle , cash conversion cycle and day of working capital with decision making.(Anand and Gupta's ,2001).

Recommend for the year of 1992-1996 the companies from nonfinancial sector are selected in which is it conclude that. If the working capital is perfectly manage than manager can easily enhance the value of the shareholder.CCP ,average payment period ,inventory turnover in days and average collection period are indirectly shift the operating profit in view of this paper . Find this study indirect link among the profitability and collection period, (Deloof, 2003).

A study done to find the relationship between profitability and competence of WCM through selecting at least 30 register companies in Nairobi securities exchange in Kenya, from this study it was concluded that CCC has a major negative impact on the inventory turnover in the days, payment period and gross profit margin (Khan ,Shah , and Hijazi , 2006).

Public policy to investigate the impact on performance the objective of this paper .Macroeconomic balance to change got necessitate (Burki , 2008),Profitability and working capital management positive linked according to some author .But appose other .When working capital competently handle the companies receive earning extra .Varied judgment by the India report. Positive relationship verify by the Kenyans (Ali, 2011).

People need alter due to large business in the world. Capital has major part in the management of the capital to maintain the company's position the working capital organized by the very etentioly. The companies obtain the major earning from the working capital management. When financial manager make decision about the companies the working capital management (WCM) impact on the performance. In the manufacturing companies the working capital plays the important role because in which major part of the current assets as compare to non – financial companies (O.N &Ramanan, 2013).

When we check the profitability of companies than we check the performance of the working capital (Richards and haughlin).In inventory turnover in days model were used by 60% companies for working capital management are improved the project while average collection period model are used in 59% companies to make the working capital management (Gilbert and Reichert).

The major efficiency measures the shareholder wealth maximization and supply chain _ oriented approach are argue for the working capital management (Hofman and Kotzab '18).Discourse the linked among performance and working capital management in Kenyan companies do a revision. It shows that working capital management and performance these two indicators have negative relationship between these variable (Raheman and Nasr '11). Examine the linked among companies performance and working capital management of the main non _financial 1009 Belgian companies the purpose of this study is that collision on small manufacturing companies and working capital management tendency find out (Deloof , 9).

In a study discussed the importance of WCM that creates the major impact on the manufacturing companies in India. In this paper study the regression and correlation analysis therefore current assets and current liabilities both required the balance for

maintain the working capital. Performance and other variable fundamental linkedamong both is measure by used regression analysis (O.N &Rahmanan ,2013).

The operating cycle is the most important part of supervision financial firm the goal of it capital investment. It is used for the purpose of minimizing the risk .The major characteristics of flow of assets is the maximization the liquidity increase the performance of operational covering the return from debt by the investment. When manager obtain the large turnover with smallest amount of stocks these are encourage by the offensive policy because the companies are relate with financial institution therefore this policy make the decision more risky . But the neutral result of balance policy (Damuletiu, 2010).

The purpose of this study examine the linked among performance and working capital management in Kenyan companies .Here I studied the two different school , one management school said that the performance are not enhance by the working capital. Sometime it influence the negative impact among than. The other school said that business performance is enhance by the outlay or working capital (Chakroborty ,2008).

The acid test ratio, current ratio, working capital management, average collection period and liquid ratio had statistically force the performance of these companies (Finally , Afza and Nazir , 2009). In this study examine that the important linked among performance and cash conversion cycle. According to this if manager manage this effectively cash conversion cycle through the average collection period (Amorjit gill , Nahum biger , Neil mathur).

The unfavorable condition if stock are less sold , minimizing the cashing and negative organizing the liabilities it is interpret that firm does not maintain the low financial assets to maintain present need . This study examine that to make certain daily operations put down the reserve or safety margin that contain the immobilized asset by enduring assets. So these companies are in positive or favorable conditions. In capital management and performance rate are show the unfavorable situation in the low linked in booth two indicators (Damuletiu, 2010). If the CCC minimize than the manager of the firm can maximize the value of shareholder wealth. If cash conversion cycle decrease and efficient WCM. The function study examines the negative linked among WCM and CCC. The net profit ratio, Net operating profit ratio, ROE, MNPR and ROI these are the different profitability ratio. They examine the working capital management by used cash conversion cycle they identify the performance of firm are influenced by the working capital management. This research identify that working capital management are large impact on firm profitability and performance (Zazardies and Tryfonidis, Teruel and Solano et al). This study examines that if the performance of the firm increases as the CCC decrease. It also generate the linked among cash adequacy with market value of firm. This research analysis that working capital management is measure by CCC. Examine this study linked among cash management, performance of the firm and working capital management (Poirters, Moussawi et al, &Fit beck et al).

This research shows that firm performance is influenced by WCM. It also show the negative linked among GOP, CCC, ACP, ITOD , NOPD and these variable are also negatively linked .This research also analyze the WCM important impact on profitability of firms. The manager maximize the shareholder wealth through minimize average collection period, stock and efficient administrative are large impact on firms performance and productivity ((Alipour, 2011).Inquire those companies that register in stock exchange like Athens and inquire linked for the companies among WCM and

business performance. It is also linked among performance determined by CCC and GOP (Lazarids and Tryfonidis, 2006).

He determined the 58 tiny manufacturing companies that analyze impact on company's performance by the WCM in 1998 to 2003. He find out of WCM are manage accurately and efficiently than it maximize the company's performance, good well and make the positive position. If we designed WCM efficiently. This consequence point out if increase in stocks and debtors is linked with minimize the performance and indicate maximize tendency petite period part of WCM (Padachi, 2006). This study the sample of different firm. If WC maintain efficiently it impact on performance or profitability of the firm is maximize by minimize the average collection period stock. If the NTC and CCC reduce than performance of companies is increase (Deloof, 2003).Increase profitability by large investment in working capital management. If large stock continue up holed in decrease cost of manufacturing procedure, supply cost minimize and loss in companies due to product security (Blinder and Maccini, 1991).

In Kenya, it is important to give the attention and importance on investment in WCM it is collision company profit. In Kenya manufacturing sector provide more attention to investment more in the working capital management In Nairobi Securities exchange 1998 -2007 for big subset of manufacturing 204. The current research concentrate to cover this difference and measure the linked among companies profit and working capital management. The WCM plays the critical task to enhance the profit of companies and increase the value of shareholder wealth this is for the entire second largest manufacturing sector. The negative collision was found on NOP by the NTC and CCC .this study inspect that the easy way to examine the WCM is using the NTC and CCC (Abdul Rehman, 2010).

For the success of the firms the manager have a ability to make the decision for efficiently control the average payment period in days ,average collection period in days and inventories (Filleck and Krueger 2005; Deloof ,2004). Due to this sale decrease and then decline the profitability at the end (Eramus,2010;Deloof, 2003).

In this study examined that not only the working capital management play vital role in performance and risk not only but in it worth. When exchange among performance and liquidity when performance of companies increase than more risk involved. By this discussion and the decline in risk chance of decline profitability (Teruel, 2007). The best measurement tool of WCM is cash conversion cycle. Which show that average collection period in days start sold product and average payment period in days of its suppliers (Deloof , 2003).It is the AND , The period between spending and recovery of cash is the longer CCC (Chariton , 2010 ; Deloof , 2003).

The purpose of this study in which business performance and CCC that measured the linked among cash capital management in the Thailand this also linked between firm performance and WCM (Napomech, 2012). The short term liabilities and STA maintain WC and ignore unnecessary cope in these assets (Mohammad, 2010; Eljelly, 2004). The working capital is the difficult work it enquire the proper measurement .It depend on type on business. PAC, PC, CP, Operation scale and management of raw material therefore a suitable amount is continually invest in form of current assets. The proper time available make the best level of sale that is producer want. If these firm cash one operation to same interpret the cycle the firm are high profitable. Otherwise business takes loan to support need of working capital (Brighman& Houston, 2004)

The goods and service are delivering to customer possible in investment in the current account. But good manager impact on performance or profitability. Cash operating cycle are extending if resources are stop in various step of supply chain (Khan, Jain).

Problem Statement:

The purpose of this study investigates the impact of working capital management on firm's profitability. The data collected from manufacturing companies in food sector that are listed in Nairobi Securities Exchange Kenya. This sector is selected because management of working capital is essential for improving the daily operations which will result in increasing the profitability of this sector. In this study research the WCM are positive or negative impact on the profitability of the firm. Greater number of variable is used in this study for measuring the WCM and firm's profitability. This study provides the better practices to the firm of improving the WCM.

Objectives of Research:

The main objective is to find effect of working capital management (WCM) on firm's profitability (FP).

Sub objectives: Sub objective of this study are:

1. To find the extent of link between WCM and FP in food sector.
2. To examine the level of WCM and FP in food sector of Kenyan companies listed at Nairobi securities exchange.

Questions of Research:

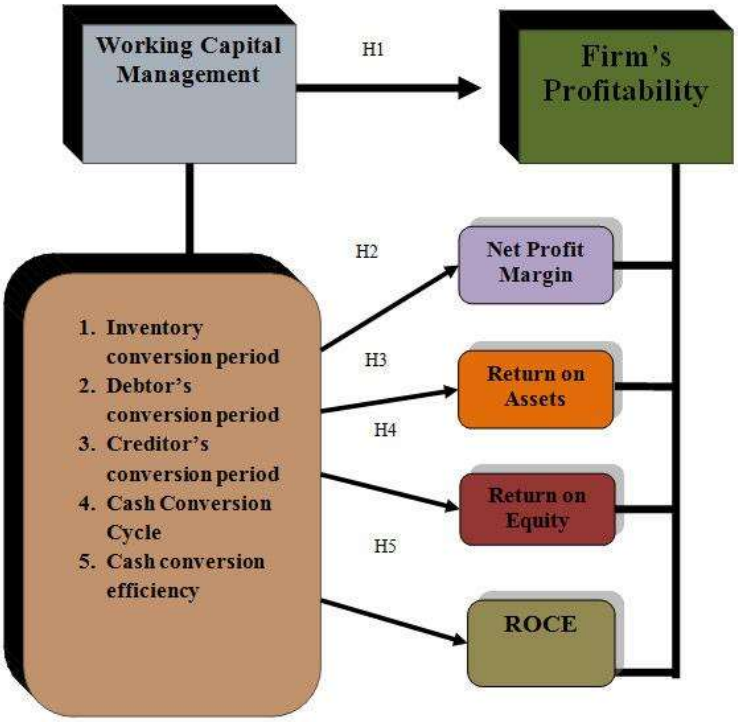
1. What is the significance of effect of WCM onFP?
2. What is the nature of link between WCM and FP in food sector?
3. How is the profitability of companies in food sector and how well working capital is managed

in food sector over the period 0f 2008-2012?

Variables identification:

Dependent Variables	**Independent Variables**
Firm's Profitability 1. NPM 2. ROE 3. ROA 4. Return on capital employed	Working Capital Management 1. Inventory conversion period 2. Debtor's Conversion Period 3. Creditor's Conversion Period 4. Cash Conversion Cycle 5. Cash conversion efficiency

Research Model:



Importance of Research:

The importance of this research is that the firm's provide the more concentrate to working capital management to improve their own performance and profitability. In this research select the food sectors because working capital is important component of this sector because current assets and current liabilities create more impact on manufacturing companies. Therefore Greater number of variable is used in this study for measuring the WCM and firm's profitability. This study provides the better practices to the firm of improving the WCM.

Research Methodology:

Method of Data collection and Sample size selection:

The main purpose of this study is to investigate the impact of WCM and company's profitability. In this study select the 45 companies from food sector that are listed in Nairobi securities exchangeKenya. Because in food sector, firms are involved in the day to day operations and cash is needed to manage this operations. Food sector is the important part of non-financial industry and its demand increasing on daily basis. Therefore to achieve this objective secondary data (quantitative) is gathered from the annual reports of the food sector individually from 2008 to 2012 and some data is taken from FSA of non-financial companies that are listed with NSE and also data collected from the balance sheet, income statement and other financial reports of these listed companies to measure the working capital of these firms and then done the ratio analysis to measure the working capital and profitability of companies in food sectors. Empirical analysis is done for measuring the impact of WCM and FP and also uses the citation analysis.

Study Period:
Study period in this research used from 2008 to 2012 to find the impact of WCM and FP of the food sector these companies are listed with NSE.

Research Method:
Regression analysis is used to find the main aim of study which is impact of WCM and FP. Descriptive Statics is used to find the How is the performance of companies in food sector and how well working capital is managed in food sector over the period 0f 2008-2012?.

Hypothesis formulation:
H1: Working capital management has significant impact on the firm'sprofitability
H2: Working capital management has significant impact on the firm's net profit margin
H3: Working capital management has significant impact on the firm's return on assets
H4: Working capital management has significant impact on the firm's return on equity
H5: Working capital management has significant impact on the firm's return on capital employed

Variable explanation and measurements:
Working capital management is taken as independent variable and profitability is considered as dependentvariable.

Working capital management:
It is define as the difference between CA and CL of measure the impact of working capital management on firm's profitability. Five variables are used to measure Working capital management which is:
Inventory conversion period: point toward on standard how extensive inventory be seated on a firm's shelf. Ifinventory turnover in days is higher than it is favorable for firms and it shows that the stock is turned over quickly.

$$\frac{\text{Average inventory}}{\text{Cost of sales}} * 365$$

Debtor's Conversion Period: It is the time necessary to gather the money from debtors. If the debtorconversion period is low than it is favorable for the firm and show the positive sign. And if it is large debtor's conversion period than it is unfavorable for the form and show the negative sign.

$$\frac{\text{Average Debtor}}{\text{Net credit sale}} * 365$$

Creditor's Conversion Period: It is the duration of time the companies is clever to postpone payments on avariety of recourses buy. If the large creditor's conversion period than it is favorable for the firms and if it is low than it unfavorable for the firms.

$$\frac{\text{Average creditors}}{} * 365$$

$$\text{Cost of sales}$$

Cash Conversion Cycle: It is the span of time among a company's buy of stock and the receiving of moneyfrom debtors.CCCis that cash exchange in to inventory and inventory exchange into debtor and debtors exchange in to cash. If CCC high than it is favorable for the firms and show positive sign and if it is low than it is show the negative sign on firms performance.

$$\textbf{CCC= ICP+DCP-CCPS}$$

Cash conversion efficiency: it is calculated by dividing the cash flows from operating activities on net sales

$$\frac{\text{CFOA}}{\text{Net sales}} * 365$$

Profitability:

Five variables are used to measure profitability of firms which are net profit margin, return on assets, return on equity, return on capital employed, and earnings per share.

NPM: How much profit is generating on net sale. If the NPM is high than the investors are attract toward thefirms and the value of the firms share increase and create the positive impact on the firm if it is low than it show the negative sign.

$$\frac{\text{Net income}}{\text{Net sales}} * 100$$

ROA: It is demonstrate that how a great deal to contribution in net income by the assets. Giving of each assetindicates number of money unit earned.

$$\frac{\text{Net income}}{\text{Average total assets}} * 100$$

ROE: How much profit given on the shareholders equity.If the ROE is high than it is favorable for the firm andshows the positive impact firm if it is low than it shows the negative sign.

$$\frac{\text{Net income}}{\text{Average shareholder's equity}} * 100$$

ROCE: It show the on the whole effectiveness through which capital is utilize. How much capital earned on total capital employed.

$$\frac{\text{Net income}}{\text{Average total capital employed}} * 100$$

Results and Discussions

Descriptive statistics:

Profitability of firms in food sector:

Four variables are used to measure the firm's profitability these are NPM, ROA, ROE, and ROCE. The average,minimum, maximum, and standard deviation of all profitability measures for food sector over 5 years period from 2008-2012 is shown in table 1

Descriptive statistics. Minimum value of net profit margin is 18% and maximum value is -61% these values shows that a large difference exist in the profitability of firms in food sector. Average of NPM is 2.37% shows that as whole, firms in foods sector makes only 2.37% profit on net sales. The value of average return on assets is 8.5% this value shows the ability of firms in food sector to utilize its assets. This value indicates that firms in food sector are not much efficiently using their assets as percentage of profits on assets is low. Mean of return on equity is 32%, this value shows that average firms in food sector are providing good return to shareholders including both common and preferred shareholders. Minimum ROE value of firms in food sector is -61.5% and maximum value is 505% this value shows that on one hand, if a firm is giving good return to their shareholders, another firm is not giving good return. 14.76% is the mean value of ROCE which represents that on average firms are generating about 15% profit on total capital.

TABLE 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
net profit margin	45	-61.45	18.51	2.3719	12.79292
return on assets	45	-11.12	52.15	8.5432	13.95486
return on equity	45	-61.52	505.71	32.0924	85.01381
return on capital employed	45	-85.64	161.35	14.7683	39.92333
inventory conversions period	45	16.53	197.98	78.5011	44.13771
debtors conversion period	45	.12	168.09	14.0473	25.00088
creditors conversion period	45	24.91	736.29	119	127.01641
cash conversion cycle	45	-537.94	141.38	-26.5742	124.63842
cash conversion efficiency	45	-.38	.13	.0056	.10092
operating cycle	45	17.61	228.17	92.5477	50.01284
Valid N (listwise)	45				

Working capital management of firms in food sector:

Variables used to measure the WCM are ICP, debtor's conversion period, creditors conversion period, cash CC, CCE, and operating cycle. Results of descriptive statistics in table 1 indicates that average of inventory conversion period for firms in food sector is 78 days which shows that firms take on average 78 days from purchasing the inventory and converting it into sales. Average of debtor's conversion period values is 14 days, which shows that firms in food sector quickly receives its receivables from customers company. Fewer days for receiving account receivables are good for company because, firm can increase its financial performance by utilizing that cash into more operations. Mean value of creditor's conversion period for the firms in food sector on average is 119 days which indicates that on average firm pays to its creditors after 119 days. Mean value of cash conversion cycle is -26 days, the negative value shows

that on average firms in food sector pay later to its supplier. Average value of cash conversion efficiency is 0.0056 and of operating cycle is 92 days which shows that firms take 92 days in converting inventory into sales and sales into cash.

Regression analysis:

Regression analysis is used to find the impact of independent variables on dependent variables. In this study working capital management is taken as independent variable and firm's profitability is considered as a dependent variable. Each hypothesis is tested by using regression analysis.

Second Hypothesis: working capital management has significant impact on firm's net profit margin

2.1 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.847[a]	.718	.690	7.12329

a. Predictors: (Constant), cash conversion efficiency, inventory conversions period, cash conversion cycle , debtors conversion period

In table 2.1, R measures the strength of relationship between variables, and R square measures that if change occurs in independent variables (working capital management) then how much dependent variable (net profit margin) will change. It is shown that value of R (correlation coefficient) is 0.847 which means that a strong relationship exist between working capital management and net profit margin. Value of R square is 0.718 which shows that 71.8% variability in the net profit margin can be explained by the changeability in independent variables used for measuring working capital management but does not know due to which variable this change occur.

Table 2.2
ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5171.339	4	1292.835	25.479	.000[a]
	Residual	2029.648	40	50.741		
	Total	7200.987	44			

a. Predictors: (Constant), cash conversion efficiency, inventory conversions period, cash conversion cycle , debtors conversion period

b. Dependent Variable: net profit margin

Table 2.2 tells about the statistical significance of whole model used in this study for

measuring the impact of working capital management (independent variable) on firm's net profit margin (dependent variable). Value of F measures that either value of R square shown in table 2.1 is due the chance or not and term (sig) refers to p value which is used to measure the statistical significance, if value of p is less than 0.05 it indicates that working capital management as a whole has statistical significant impact on net profit margin of firms in food sector. In table 2.2, value of F is 25.47 and value of p is 0.000 which is less than 0.05 means that working capital management as whole ha significant impact on the net profit margin of firms.

Table 2.3 Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.786	2.479		1.527	.135
	inventory conversions period	.031	.025	.108	1.238	.223
	debtors conversion period	-.319	.046	-.624	-6.985	.000
	cash conversion cycle	-.012	.009	-.115	-1.290	.204
	cash conversion efficiency	54.915	11.749	.433	4.674	.000

a. Dependent Variable: net profit margin

Table 2.3 measures that which independent variables (used to measure the working capital management) has significant contribution in the variation in dependent variables net profit margin or which variables have not. Values of Regression beta coefficients find out the direct or indirect impact of working capital management on firm' net profit margin by giving positive or negative value. P value of inventory conversion period is 0.223 ($p>0.05$) which means that inventory conversion period has insignificant impact on the net profit margin of firms in food sector. P value of debtor's conversion period is 0.000 ($p<0.05$) which means that debtor's conversion period has highly significant impact on the net profit margin and this value shows the significant contribution in the value of R square. Value of beta coefficient for debtor's conversion period is -0.624, and negative value indicates that net profit margin is decreased by 0.624 units by 1 unit increase in debtor's conversion period. This finding indicates that if firms in food sector quickly receive cash from its debtors then firms can increase its net profit margin. P value of cash conversion cycle is 0.204 and B=-0.115 represents that cash conversion cycle has insignificant negative impact on net profit margin. P value of cash conversion efficiency is 0.000 which is less than 0.05 demonstrates that it has highly significant effect on NPM of firms. Value of beta for cash conversion efficiency is 0.433 positive value prove that cash conversion efficiency has direct impact on NPM as firms are more efficient in converting sales into cash, then profit of firms on sales will be increased. Second hypothesis is accepted because results provide evidence that working capital

management has significant impact on the firm's net profit margin.

Third hypothesis: working capital management has significant impact on firm's return on assets

Table 3.1 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.583[a]	.340	.274	11.88747

a. Predictor (constant): ICP, CCE,DCP, CCC

In table 3.1, R studies the strength of relationship between variables and R square measures that if variation occurs in independent variables (working capital management) then how much dependent variable (returns on assets) will alter. It is revealed that value of R (correlation coefficient) is 0.583 which means that a moderate-strong relationship subsist between working capital management and return on assets. Value of R square is 0.34 which shows that 34% variability in the return on assets can be explained by the variability in independent variables used for measuring working capital management but does not know due to which variable this change occur.

Table 3.2 ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2915.997	4	728.999	5.159	.002[a]
	Residual	5652.476	40	141.312		
	Total	8568.473	44			

a. Predictors: (Constant), cash conversion efficiency, inventory conversions period, cash conversion cycle , debtors conversion period

b. Dependent Variable: return on assets

Table 3.2 check the statistical significance of "goodness of fit" of whole model used in this study for measuring the impact of working capital management (independent variable) on firm's return on assets (dependent variable). Value of F measures that either value of R square shown in table 3.2 is due the chance or not and term (sig) refers to p value which is used to measure the statistical significance, if value of p is less than 0.05 it indicates that working capital management as a whole has statistical significant impact on ROA of firms in food sector. In table 3.2, value of F is 5.159 and value of p is 0.002 which is less than 0.05 means that working capital management as whole has significant impact on the return on assets of firms. It points out that the model used in this study is appropriate for measuring this effect.

Table 3.3 Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.841	4.137		2.621	.012
	inventory conversions period	-.022	.042	-.069	-.519	.606
	debtors conversion period	-.063	.076	-.113	-.830	.412
	cash conversion cycle	.004	.015	.032	.234	.816
	cash conversion efficiency	72.262	19.607	.523	3.686	.001

a. Dependent Variable: return on assets

Table 3.3 measures that which independent variables (used to measure the working capital management) has significant contribution in the variation in dependent variables return on assets or which variables have not. Values of Regression beta coefficients find out the direct or indirect impact of working capital management on firm' return on assets by giving positive or negative value. P value of inventory conversion period is 0.606 ($p>0.05$) and value of beta is -0.069 which means that inventory conversion period has insignificant negative impact on the return on assets of firms in food sector. P value of debtor's conversion period is 0.412 which is greater than 0.05 and value of beta is -0.113 so debtor's conversion period has insignificant negative impact on returns on assets of firms in food sector. P value of cash conversion cycle is 0.816 ($p>0.05$) represents that cash conversion cycle has insignificant impact on ROA. P value of cash conversion efficiency is 0.001 which is less than 0.05 demonstrates that it has highly significant effect on ROA of firms. Value of beta for cash conversion efficiency is 0.523, positive value prove that cash conversion efficiency has direct impact on ROA as firms are more efficient in converting sales into cash, then ROA will be increased. Value of beta coefficient for cash conversion efficiency is 0.523, and positive value indicates that ROA is increased by 0.523 units by 1 unit increase in cash conversion efficiency. Third hypothesis is accepted because results provide evidence that working capital management has significant impact on the firm's return on assets.

Fourth hypothesis: working capital management has significant impact on firm's return on equity

In table 4.1, R inspects the strength of relationship among variables and R square measures that if change occurs in independent variables (working capital management) then how much dependent variable (return on equity) will change. It is shown that value of R (correlation coefficient) is 0.262 which means that weak relationship exist between working capital management and return on equity. Value of R square is 0.069 which shows that 7% variability in the return on equity can be explained by the changeability

in independent variables used formeasuring working capital management but does not know due to which variable this change occur.

Table 4.1 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.262[a]	.069	-.024	86.04325

a. Predictors: (Constant), cash conversion efficiency, inventory conversions period, cash conversion cycle, debtor's conversion period

Table 4.2 ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21865.657	4	5466.414	.738	.571[a]
	Residual	296137.619	40	7403.440		
	Total	318003.276	44			

a. Predictors: (Constant), cash conversion efficiency, inventory conversions period, cash conversion cycle , debtors conversion period

b. Dependent Variable: return on equity

Table 4.2 give results about the statistical significance of whole model used in this study for measuring the impact of working capital management (independent variable) on firm's return on equity (dependent variable). Value of F measures that either value of R square shown in table 4.1 is due the chance or not higher the F value means the high significance and term (sig) refers to p value which is used to measure the statistical significance, if value of p is less than 0.05 it indicates that working capital management as a whole has statistical significant impact on ROE of firms in food sector. In table 4.2, value of F is 0.738 that is very less and value of p is 0.571 which is greater than 0.05 means that working capital management as whole ha insignificant impact on the ROE of firms.

Table 4.3 provides results that which independent variables (used to measure the working capital management) has significant contribution in the variation in dependent variables return on equity or which variables have not. Values of Regression beta coefficients find out the direct or indirect impact of working capital management on firm' ROE by giving positive or negative value. P value ICP, DCP, CCC, CCE is 0.99, 0.411, 0.12, 0.41 respectively, these findings show that working capital management has insignificance impact on ROE of firm in food sector therefore fourth hypothesis is rejected on the basis of these findings.

Table 4.3 Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	43.944	29.943		1.468	.150
	inventory conversions period	.000	.305	.000	-.003	.997
	debtors conversion period	-.459	.552	-.135	-.832	.411
	cash conversion cycle	.176	.111	.258	1.589	.120
	cash conversion efficiency	-118.267	141.916	-.140	-.833	.410

a. Dependent Variable: return on equity

Fifth hypothesis: working capital management has significant impact on firm's return on capital employed

In table 5.1, R examines the strength of relationship among variables, and R square measures that if change occurs in independent variables (working capital management) then how much dependent variable (returns on capital employed) will change. It is shown that value of R (correlation coefficient) is 0.463 which means that a moderate relationship exist between working capital management and ROCE. Value of R square is 0.214 which shows that 21.4% variability in the ROCE can be explained by the changeability in independent variables used for measuring working capital management but does not know due to which variable this change occur.

Table 5.1 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.463[a]	.214	.135	37.12127

Table 5.1 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.463[a]	.214	.135	37.12127

a. Predictors: (Constant), cash conversion efficiency, inventory conversions period,

cash conversion cycle, debtor's conversion period

Table 5.2 provide findings about the statistical significance of whole model used in this study for measuring the impact of working capital management (independent variable) on firm's return on capital employed (dependent variable). Value of F measures that either value of R square shown in table 5.1 is due the chance or not and term (sig) refers to p value which is used to measure the statistical significance, if value of p is less than 0.05 it indicates that working capital management as a whole has statistical significant impact on ROCE of firms in food sector. In table 5.2, value of F is 2.723 and value of p is 0.043 which is less than 0.05 means that working

Table 5.2 ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15010.853	4	3752.713	2.723	.043[a]
	Residual	55119.540	40	1377.989		
	Total	70130.393	44			

a. Predictors: (Constant), cash conversion efficiency, inventory conversions period, cash conversion cycle , debtors conversion period

b. Dependent Variable: return on capital employed

capital management as whole has significant impact on the ROCE of firms.

Table 5.3 Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.597	12.918		.046	.963
	inventory conversions period	.188	.131	.207	1.428	.161
	debtors conversion period	-.103	.238	-.065	-.434	.666
	cash conversion cycle	.002	.048	.006	.043	.966
	cash conversion efficiency	170.408	61.226	.431	2.783	.008

a. Dependent Variable: return on capital employed

Table 5.3 shows results that which independent variables (used to measure the working capital management) has significant contribution in the variation in dependent variables return on capital employed or which variables have not. Values of Regression beta coefficients find out the direct or indirect impact of working capital management on firm' ROCE by giving positive or negative value. P value of inventory conversion period

is 0.161 (p>0.05) which means that inventory conversion period has insignificant impact on the ROCE of firms in food sector. P value of debtor's conversion period is 0.666 (p>0.05) which means that debtor's conversion period has insignificant impact on the ROCE and this value shows the insignificant contribution in the value of R square. P value of cash conversion cycle is 0.966 represents that cash conversion cycle has insignificant impact on ROCE. P value of cash conversion efficiency is 0.008 which is less than 0.05 demonstrates that it has significant effect on ROCE of firms. Value of beta for cash conversion efficiency is 0.431 positive value prove that cash conversion efficiency has direct impact on ROCE as firms are more efficient in converting sales into cash, then profit of firms on total capital employed will be increased. Fifth hypothesis is accepted because results provide evidence that working capital management has significant impact on the firm's ROCE.

Overall results indicates that working capital management has significant impact on the profitability (NPM, ROA, ROCE) of firms in food sector therefore first hypothesis is accepted.

Conclusion and Recommendations:

This study aims to inquire the impact of working capital management on firm's performance. For measuringworking capital management inventory conversion period, debtor's conversion period, creditor's conversion period, cash conversion cycle, and cash conversion efficiency are taken asindependent variables. Firm's profitability is measured by using the four dependent variables which are net profit margin, return on assets, return on equity, and return on capital employed. Regression analysis is used to discover the impact of working capital management on firm's profitability by using secondary data. This data is gathered from annual reports of companies listed at NSE for five years from 2008-2012.Results indicates that working capital management has significant impact on the profitability (NPM, ROA, ROCE) of firms in food sector therefore first hypothesis is accepted. Second hypothesis is accepted because results provide evidence that working capital management has significant impact on the firm's net profit margin. This finding indicates that if firms in food sector quickly receive cash from its debtors then firms can increase its net profit margin. Cash conversion efficiency has direct impact on NPM as firms are more efficient in converting sales into cash then profit of firms on sales will be increased. Third hypothesis is accepted because results provide evidence that working capital management has significant impact on the firm's return on assets. positive value prove that cash conversion efficiency has direct impact on ROA as firms are more efficient in converting sales into cash, then ROA will be increased. Findings show that working capital management has insignificance impact on ROE of firm in food sector therefore fourth hypothesis is rejected on the basis of these findings. Fifth hypothesis is accepted because results provide evidence that working capital management has significant impact on the firm's ROCE. Value of beta for cash conversion efficiency is positive which prove that cash conversion efficiency has direct impact on ROCE as firms are more efficient in converting sales into cash, then profit of firms on total capital employed will be increased. Descriptive statistics results show that performance of firms in food sector is well on the basis Of ROA, ROE, and ROCE and not well on the basis of NPM and firms in food sector receive sooner and pay later. A strong relationship is found among working capital management and firm's profitability in food sector. This study suggests that firms in food sector should manage working capital efficiently

because by doing this performance is increased. This study is conducted in one sector, future studies should be done in other industries of Kenya.

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