



**EFFECT OF WORKING CAPITAL MANAGEMENT ON FINANCIAL PERFORMANCE OF LISTED COMMERCIAL AND SERVICES FIRMS IN KENYA**

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**ABSTRACT**

*The study established the effect of working capital management on financial performance of the listed firms under the commercial and services sector at Nairobi Securities Exchange. The study specifically, established how average collection period, inventory conversion period, average payment period and cash conversion cycle affects financial performance of listed commercial and services firms in Kenya. This study adopted a descriptive survey research on the 12 commercial and services firms listed at NSE over the period 2008-2017. Descriptive as well as Inferential statistics of correlation and regression analysis were employed to establish the relationships between the variables. The study findings indicated that Accounts Collection Period had a negative and significant effect on financial performance of listed firms in the commercial and services sector in Kenya; Inventory Conversion Period had a negative and significant effect on financial performance of listed firms in the commercial and services sector in Kenya; Accounts Payable Period has a negative but not significant effect on financial performance of listed firms in the commercial and services sector in Kenya and Cash Conversion Cycle had a positive but not significant effect on financial performance of listed firms under the commercial and services sector in Kenya. The study recommended the listed firms in the commercial and services sector as well as other sectors to review their credit management practices so that the time period for repaying is reduced; to come up with effective inventory management practices that would aim to manage inventory holding period and increase conversion period without compromising customer demands; to come up with better debt management policies which aim to have a balance between the repayment period and holding of debts. The debts can be held without compromising the penalties for doing so and to come up with practices and procedures which would increase the rate of converting their inventory into cash some of which is managing credit.*

**Key Words:** Average Collection Period, Inventory Conversion Period, Average Payment Period, Cash Conversion Cycle, Financial Performance, Listed Commercial and Services Firms

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## INTRODUCTION

In the present business environment, firms require actual regulation of working capital that provides a financial metric which signifies effective liquidity accessible to the company for the purposes of refining various aspects of its financial performance (Azeez, Abubakar, & Olamide, 2016). A combination of working capital and fixed assets such as property plant and equipment are entirely considered as working capital. For example, when a firm is capable with assets and profitability, and the assets cannot be turned into cash then it is short of liquidity and consequently it is supreme for the firms to have a positive working capital in order to satisfy maturing of the short-lived debt and imminent operational expenses (Kasiran, Mohamad & Chin, 2016).

According to Azeez, Abubakar, and Olamide, (2016), the most important subject in financial policy making is working capital as all asset venture requires appropriate financing, however Working Capital is disregarded in when making finance related decisions since it always involves investment and finance in short term periods. According to Kimeli (2014), working capital distresses financial performance of a firm by failing to contribute return on equity. Firms that achieve maximum value return always have a perfect level of working capital. Owele and Makokeyo (2015) argue that a firm with larger inventory helps them to reduce stock-out risks since the trade credits stimulates firm sales by letting the customers to assess the quality of product before doing the payments. The accounts payable is another constituent of working capital, firms delaying payments of the suppliers, the suppliers get the chance to appraise quality of supplied products thus making them financial flexible. Shah and Sana (2005) argue that when invoices payments are done late, increases the cost of the firm in case where discount was to be given for early payment.

According to Owolabi *et al.*, (2012) the primary goal of any business firm is to capitalize on the profitability

as well as increase the wealth of firm shareholders or owners, balancing between firm liquidity and profitability during the daily operation of the firm facilitates the smooth running as well as meeting the company's obligation. Uremandu, Ben-Caleb and Enyi (2012) argue that firm profitability, liquidity and growth is directly affected by the working capital management, thus the amount of money invested in a firm as working capital should be similarly high compared to the total assets employed. Financial performance can be quantified by means of financial matrices like liquidity, profitability, solvency, short-term financial management, repayment capacity, financial efficiency and also firm over capacity. Profit connotes the affluence that a firm has made after the consumption of its existing resources (Valentine, 2014). How liquid a firm is controls its capacity to preserve its unbalanced cash and its equivalents to meet its commitments on debt in a timely manner by means of the quick and current ratios. To appraise and organization creditworthiness rates the capability of a business to meet obligations if all its assets are disposed collectively with its ability to recover from financial mayhem (Woodruff, 2014).

Financial performance may also be evaluated on how best it succeeds in management of its short term financial objectives, for example WCM and inventory management (Purdue, 2013). The firm's financial actions can be evaluated in monetary terms to provide an comprehension in the conduct of an organization. This measure may be used to describe the firm's total wealth over a given time horizon. Tippins and Sohi, (2003) claim that the most common measurements of financial performance are ROE and ROA. The ROE measures earnings over a period on investor's equity investment. It means the measurement of returns made and organization's owners or equity holders. ROA determined the return on overall assets after interest and taxes. It provides the management with information on the level of efficiency with which assets are financed by either

equity or debt are generating after tax profits to firm (Orlitzky, Schmidt & Rynes, 2003).

### **Statement of the Problem**

Service and Commercial firms quoted at NSE have confronted challenges in their operating performance in which a few of them have been delisted in the last 10 years (Kihooto, Omagwa, Wachira & Emojong, 2016). This is different to the prospects of their stakeholders who span across equity holders, workforces, customers, and government among others. For example, the Audited annual financial statements of Kenya Airways reported a loss of Ksh 25.7 billion loss after tax for the year ended in 31, March 2015. During the same period, the Annual reports for Uchumi supermarkets exhibited financial distress, forcing it to exit the Ugandan and Tanzanian markets (CMA, 2016). According to Filbeck and Krueger, (2005), value of WCM on profit of the firm is of inordinate significance, and most firms should be encouraged to invest in current assets due to substantial position in overall assets of the company. The company's WCM observe performance on finances for many firms in addition to substantial situation of overall assets. A research work by Kasiran, Mohamad and Chin (2016) found that WCM for companies enhance their profitability and liquidity, a tradeoff for risk and return underlines that optimal level has to balance the solvency and profitability by total liquidity costs and minimize the cost of being illiquid. This provides an impetus for this research work to validate the effect of WCM on finance performance of listed service and commercial firms in Kenya as the above statistics point at a dwindling performance financially for these firms which needs to be turned around.

The study was also motivated by the knowledge gaps in some of the past studies that had attempted to explain on effect that working capital management has on performance but have been limited to different sectors and contexts and therefore their findings might not appropriately apply to the

commercial and services industry in Kenya. Similarly, some of these studies were done in countries with different economic conditions to the prevalent situation in a developing economy like Kenya and therefore may not applicable to the local context. In considering the importance of working capital management the research work dwelt on interrogating the relationship between WCM and financial performance relationships like Gul *et al.*, (2013); Oladipupo and Okafor (2013; Sharma and Kumar (2011); Almazari, (2013); Akoto *et al.*, (2013) and Raheman *et al.*, (2010). The existing local studies on WCM and financial performance have not focused on commercial and services sector in Kenya. Gakure, *et al.*, (2012) examined the association between WCM and performance fifteen Manufacturing firms at NSE, Mathuva (2010) research work revolved on impact of working capital and firm profitability for NSE listed companies and Nyamao, *et al.*, (2012) on effect WCM practices on financial performance. Nevertheless, all of academic works had not given an indication on the effect of WCM on financial performance commercial and services firms in Kenya listed or focus on the variables same as of this study.

### **Research Objectives**

- To establish the effect of average collection period on financial performance of listed commercial and services firms in Kenya
- To determine the effect of inventory conversion period on financial performance of listed commercial and services firms in Kenya
- To examine the effect of average payment period on financial performance of listed commercial and services firms in Kenya
- To assess the effect of cash conversion cycle on financial performance of listed commercial and services firms in Kenya

## LITERATURE REVIEW

### Agency Theory

The proponents of the theory were Berle and Means (1932). The theory suggests that divergence of the benefits among shareholders and managers of firms might result to agency conflicts. In any firm, the manager main duty is guarantee that a company he or she manages yields decent revenues to equity owners, thereby growing the firm's cash flow and profits. Pugliese et al., (2014) contends that costs related to agency or difficulties' arising from agency results of deceiving behavior of agents and as a consequence of conflicting decisions and interests that are not aligned to those of shareholders.

As stated by Dawar, (2014), problems related to agency can be reduced by breaking down of consents and tracking of agreements or decisions beginning from initial stage to execution. Bosse, and Phillips, (2016) maintain that authorization of agreements and supervision of verdicts reflected lessening of risks suffered in the occupational undertakings like guaranteeing highest level of stocks that are outside the process cycle necessities, offering credit terms that are higher than product turnover and ensuring low payment terms that are not aligned to the market practices are accepted. The agency problems can also be minimized by reflecting on in a conventional management of accounts receivables.

### Transaction Cost Economics Theory

The theory was advanced by Hicks and Niehans (1983). The theory argues that firm's decisions are made based on the costs involved in transaction. The theory in addressing this question indicates that the firms exist with a view of minimizing transaction costs of individual transactions that would take place in a market between a buyer and a seller (Maami, 2011). According to Emery & Marques, (2011), the ascertainment ideal inventory level should be founded on benefits and costs connected optimal

level of stock. Costs involved in holding the inventory are the ordering and carrying costs.

Kamuri, (2015) defined the ordering costs as costs related with acquirement of inventory, this includes the costs incurred in preparation of a purchase order, costs incurred in receipt, inspection, and recording the goods expected. The total costs incurred in holding of the stock is known as carrying costs, the carrying costs will always rise owing to storage of stock and opportunity costs. The reason of keeping inventory ranges from organization to the other, cost is the motivation behind management of inventory and in many cases it is associated to Transaction Cost Economics Theory (Emery and Marques, 2011).

### Walker's Three Propositions Theory

The theory was developed by Walker (1964) when he did study on WC of nine firms in 1961. The research outcomes showed a correlation between working capital and rate of return was negative. Walker came up with three propositions. In the first proposition Walker explained that the amount of working capital is fixed capital, firm risks change continuously while the loss or gain opportunities are increasing. Walker (1964) asserted that firms can achieve the lowest possible risks by using the equity to finance working capital; this helps the firm to reduce its opportunities for high returns on equity since the advantage of leverage is not considered.

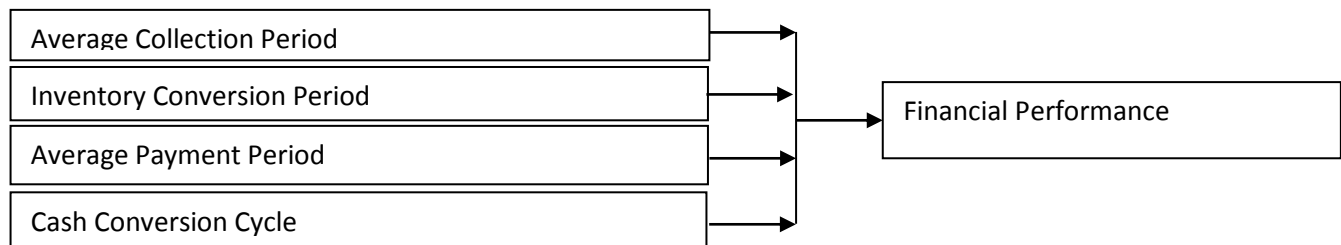
The second proposition posits that the type of capital used in financing the working capital directly affects both the amount of risks the company shoulders and the prospects for gain or loss. According to the subsequent hypothesis, debt-equity ratio and the maturity period for debt affects the risk-return-tradeoff. Long periods for debt translated to lower risk since management would have adequate time to raise funds to meet debt obligations. But long-term debt is very costly, thus advanced the third proposition. The third scheme provides that the bigger the discrepancy between growth of

organization's debt apparatuses and movement of funds produced internally, the higher the risk and vice versa. The model is pertinent in explaining the importance of average payment period of a firm. According to the theory, corporate organization only holds its marketable securities in short-term when it has excess funds after assembling short-term debt responsibilities.

### The Operating Cycle Theory

This is a measurement that is used to determine time taken from when the firm is receiving raw materials to the time collection of cash is done after selling of

goods. According to Mueller, (1972), the Operating Cycle theory is chiefly made up of two short-term asset groupings, namely stock and accounts receivable. The two ratios that is used to measure the operating cycle are average collection period and average ageing of the inventory According to Bhattacharya, (2009), when the firm policy favors the customers to enjoy credit facilities for an extended time period ,the firm profit will prospectively rise, additionally, it will have liquidity problems. This philosophy has generally been disparaged on account of leaving out payables as a constituent of working capital.



### Independent Variables

### Dependent variable

Figure 1: Conceptual Framework

### Empirical Literature

A study by Padachi (2006) on WCM practices amongst the industrial firms in Mauritius by taking a sample of 58 small firms that used secondary data elucidated that the association between Mauritius industrial firms profitability and ACP was negative and of no significance. Afza and Nazir (2009) work dwelt on the association between firm's profitability and management of receivables' policies and established a negative relationship between firm's profits and investment in receivables and financing policies in place. Waweru (2012) utilized data that was secondary to study the relationship between receivables management and the value of firms quoted at the NSE and indicated a reverse relationship between ACP and the net worth of the firm. However, some receivables management practices showed indifferent findings. Nteere (2014)

studied the WCM's effect on profitability in hotel business in Kenya and indicated that the relationship between the CCC, day's inventory outstanding and profitability was statistically insignificant. Macharia (2012) sought to find out how working capital management affected listed firms' performance by utilizing secondary data and revealed that inventory conversion and profitability of the Kenyan manufacturing firms was positively and significantly related.

Kithii (2008) utilizing secondary data of firms listed at NSE and established that WCM and profitability were significantly related. Gakure, Cheluget, Onyango and Keraro (2012) sampled fifteen manufacturing firms and established how the WCM affected their performance captured in terms of profits. It was established that APP, period of holding stock and profitability had negative relationship. Gul and Khan

(2013) connected WCM to profitability of firms but the major focus was on the SMEs. The study findings specified that average payment period positively influenced SMESs performance in Pakistan. Lazaridis and Tryfonidis (2006) explained how WCM explained firms' performance of companies in the Athens Stock Exchange, Greece and found that cash conversion cycle was a significant determinant of the gross operating profits of these firms. In Washington, Upadhyay, Sen and Smith (2015) established whether there was an association between CCC and profitability of companies in health sector with a focus on public hospitals in the State of Washington and found that precisely CCC can be used to enhance performance of the public hospitals in Washington

## METHODOLOGY

This study adopted a descriptive survey research where variables are described by a set of methods and procedures. The study focused on the 12 commercial and services firms listed at NSE over the period 2008-2017. The study adopted a census especially because the population of 12 commercial

and services firms listed at NSE was small. This study specifically used secondary data obtained from comprehensive financial reports of the firms covering a period of 10 years (2008- 2017). The study used both descriptive and inferential statistical techniques to analyse the data collected. Pearson correlation and multivariate regression analysis were adopted to establish the relationship between the variables. The multiple linear regression model was as laid below:

$$Y = \beta_0 + \beta_1 ACP_{it} + \beta_2 ICP_{it} + \beta_3 APP_{it} + \beta_4 CCC_{it} + \epsilon_{it}$$

Where; Y= Financial Performance of listed commercial and services firms;  $\beta_0$ = Constant,  $\beta_1$ = Average Collection Period,  $\beta_2$ = Inventory Conversion Period,  $\beta_3$ =Average Payment Period,  $\beta_4$  = Cash Conversion Cycle,  $\epsilon$  = Error term and  $\beta_1 \dots \beta_4$ = regression coefficient of four variables.

## RESULTS

### Descriptive Statistics

The study established the descriptive statistics that is minimum, maximum, mean and standard deviation of the study variables. The summary of the results was presented in Table 1.

**Table 1: Descriptive Statistics**

	Minimum	Maximum	Mean	Std. Deviation
Average Collection Period	0.03	196.26	90.40	44.58
Inventory Collection Period	0.25	328.04	119.57	84.10
Average Payment Period	0.09	711.04	208.84	163.20
Cash Conversion Cycle	(347.92)	247.22	(20.28)	161.91
ROA	(0.17)	447.83	13.11	74.38

The results indicated that the minimum Accounts Collection Period recorded in the study period was 0.03 and the maximum was 196.26 days. The average Accounts Collection Period was 90.4 days with a standard deviation of 44.58 which implied a high variation from one company to another. The results also indicated that the minimum Inventory Conversion Period recorded in the study period was 0.25 and the maximum was 328.04 days. The average Inventory Conversion Period was 119.57 with a

standard deviation of 84.10 which implied a high variation from one company to another. It was also established that the average Accounts Payable Period for the firms in the study period was 208.84 days with a high variation as shown by a standard deviation of 163.20. The minimum Accounts Payable Period was 0.09 and the maximum was 711.04 days. The results further revealed that the average Cash Conversion Cycle in the study period was 347.92

The results indicated that the companies had an average cash conversion cycle of negative 20.28 which implied that on average, the time period taken to convert inventory to cash is very small. The smallest cash conversion cycle was - 347.92 and the maximum were 247.22 days. The findings implied that the commercial services firms listed at the NSE had better CCC since the period taken to convert inventory to cash was very small / fast. In line with Linh, and Mohanlingam (2018) a negative CCC portrays better cash flow and less need to borrow from outside. The average ROA of the firms in the study period was 13.11. The minimum recorded was negative 0.17 and the maximum recorded was

447.83. A standard deviation of 74.38 indicated a small variation in the ROA of the companies over the study period. The negative returns indicated a financial loss but on average, the firms recorded positive ROA. This agrees with the previous report by CMA (2016) which indicated huge losses among some of the firms in this category and better performance among others.

### Correlation Analysis

The study used Pearson Correlation analysis to establish the relationship between working capital management and financial performance of listed commercial and services firms in Kenya. Table 2 gave the findings of the correlation analysis.

**Table 2: Correlation Analysis**

		ACP	ICP	APP	CCC	ROA
ACP	Pearson Correlation	1				
	Sig. (2-tailed)					
ICP	Pearson Correlation	.389**	1			
	Sig. (2-tailed)	0.003				
APP	Pearson Correlation	0.122	.435**	1		
	Sig. (2-tailed)	0.317	0.001			
CCC	Pearson Correlation	0.237	0.148	-.802**	1	
	Sig. (2-tailed)	0.073	0.268	0.000		
ROA	Pearson Correlation	-.349**	-.270*	- 0.220	0.021	1
	Sig. (2-tailed)	0.003	0.040	0.070	0.875	
	N	58	58	58	58	58

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

The results in Table 2 indicated that ACP had a negative and significant effect on financial performance of listed firms in the commercial and services sector in Kenya ( $r = - 0.349$ ;  $P < 0.05$ ). These findings implied that an increase in the accounts collection period decreases the ROA of the firms significantly. Mekonnen (2011) agreed that higher average collection periods jeopardize the firm's cash flow activities since less cash will be available for investing. Further, a firm may be unable to manage its daily activities. The findings also indicated that ICP

had a negative and significant effect on financial performance of listed firms in the commercial and services sector in Kenya ( $r = - 0.270$ ;  $P < 0.05$ ). These findings implied that an increase in the inventory conversion period decreases the ROA of the firms significantly. If the number of days between the date that materials are acquired and the date that a product or service is sold increases, more cash would be held in the inventory thus decreasing financial performance or ROA. Ruichao (2013) indicated that a



higher inventory turnover ratio indicates that a firm has more inventories, or its sales are deprived.

APP was established to have a negative but not significant effect on financial performance of listed firms in the commercial and services sector in Kenya ( $r = -0.220$ ;  $P > 0.05$ ). These findings implied that an increase in the accounts payment period decreases the ROA of the firms insignificantly. Garcia Teruel and Martinez-Solano (2007) agreed that when the APP is high, the business may be hurt if early payment discount are offered to due to opportunity cost of keeping high account payables. CCC had a positive but not significant effect on financial performance of listed firms under the commercial and services sector ( $r = 0.021$ ;  $P > 0.05$ ). These findings indicated that an increase in cash conversion cycle leads to higher financial performance but the increase is not significant. Linh, and Mohanlingam, (2018) agreed that when the CCC shortens, it enables a firm to have more access to finances which are not expensive as

would have been the case if external borrowing was sort.

### Regression Analysis

The study adopted a multiple regression analysis to predict the effect of working capital management on financial performance of listed commercial and services firms in Kenya. The findings indicated the model summary, ANOVA and model coefficients as discussed below.

### Model Summary

In the model summary, the findings showed the coefficient of determination which explains the variation in ROA of listed commercial and services firms in Kenya. The findings in Table 3 indicated that working capital management (CCC, ICP, ACP, APP) account for up to 18.8% of the variation in ROA of listed commercial and services firms in Kenya ( $R^2 = 0.188$ ). Working Capital management jointly has a positive effect on ROA of listed commercial and services firms in Kenya ( $R = 0.434$ ).

**Table 3: Regression Model Summary**

R	R Square	Adjusted R Square	Std. Error of the Estimate
.434	0.188	0.143	76.05161
Predictors: (Constant), CCC, ICP, ACP, APP			

### ANOVA

The ANOVA findings from the regression model were used to show whether the regression model was fit. As shown in Table 4, the value of F statistic was significant ( $\text{Sig} = .000$ ,  $<.01$ ). This implied that the regression model linking working capital management

(CCC, ICP, ACP, APP) to ROA of the listed commercial and services firms at NSE was fit. The findings implied that the regression model linking working capital management (CCC, ICP, ACP, APP) to ROA of the listed commercial and services firms at NSE can be used to predict future outcomes.

**Table 4: ANOVA**

	Sum of Squares	df	Mean Square	F	Sig.
Regression	72352.99	3	24117.66	4.17	.010
Residual	312327.7	54	5783.847		
Total	384680.7	57			
Dependent Variable: ROA					
Predictors: (Constant), CCC, ICP, ACP, APP					

### Model Coefficients

The model coefficients were used to achieve the study objectives. The coefficients indicated the

nature of the relationship between the study variables. On the other hand, the significance of the coefficients indicated whether the effect was significant or not. Table 5 indicated the results. The results showed that ACP has a negative and significant effect on ROA of the listed commercial and services firms at NSE ( $\beta = - 0. 754$ ;  $P < 0. 05$ ). These implied that an increase in the ACP by one day would significantly reduce ROA of the listed commercial and services firms at NSE by 0.754 percent. This demonstrated that ACP is critical to the financial performance of the firms. The findings were consistent with Afza and Nazir (2009) who indicated a negative association between the profitability of firms and the receivables investment and financing policies. The findings however disagreed with Padachi (2006) who revealed that the relationship between profitability of Mauritius industrial firms and average collection period was negative and insignificant.

It was also established that ICP has a negative and significant effect on ROA of the listed commercial and services firms at NSE ( $\beta = - 0. 143$ ;  $P < 0. 05$ ). These imply that an increase in the ICP by one day would significantly reduce ROA of the listed commercial and services firms at NSE by 0.143 percent. This demonstrated that ICP is also critical to the financial performance of the firms. The findings were consistent with Luchinga (2014) who indicated that inventory turnover in days adversely affected

performance of the investigated firms. The findings however disagreed with Nteere (2014) who established that the association between the Cash Conversion Cycle and profitability was found to be statistically insignificant.

The results also showed that APP has a negative but not significant effect on ROA of the listed commercial and services firms at NSE ( $\beta = - 0.582$ ;  $P > 0. 05$ ). These implied that an increase in the APP by one day would insignificantly reduce ROA of the listed commercial and services firms at NSE by 0.582 percent. The findings were consistent with Gakure, Cheluget, Onyango and Keraro (2012) who indicated that average payment period adversely affected performance. On the other hand, the findings disagreed with Kithii (2008) who revealed that high average payment period was linked to an improvement in performance of the firm. It was also shown that CCC has a positive but not significant effect on ROA of the listed commercial and services firms at NSE ( $\beta = 0.066$ ;  $P > 0. 05$ ). These implied that an increase in the CCC by one day would insignificantly increase ROA of the listed commercial and services firms at NSE by 0.066 percent. The findings were consistent with Gill, Biger and Mathur (2010) and Upadhyay, Sen and Smith (2015) who indicated that cash conversion cycle affected the performance of the firms positively.

**Table 5: Model Coefficients**

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	97.027	24.995		3.882	0.000
ACP	-0.754	0.277	-0.369	-2.719	0.009
ICP	-0.143	0.061	-0.146	-2.344	0.010
APP	-0.582	0.562	-0.572	-1.036	0.305
CCC	0.066	0.064	0.13	1.029	0.308

**Dependent Variable: ROA**

## CONCLUSIONS

The study concluded that firms which have a high accounts collection period perform poorly in terms of

their ROA compared to those with low accounts collection period. When the accounts collection period increases, it reduces a firm's cash inflow which

may make it unable to manage its current liabilities. The study also concluded that an increase in the inventory conversion period adversely affects the financial performance of a firm in terms of its ROA since more cash would be held in the inventory thus decreasing the amount available for investment. The opportunity costs of holding cash in inventory are high in such a situation. It was also concluded that higher accounts payable period would adversely affect financial performance of firms since the firm would lose out on the discounts involved in early payments. The same would however not have any significant effects on the firm. The study also concluded that a faster cash conversion cycle would improve financial performance by availing more cash for investments although the improvement is not significant.

#### **RECOMMENDATIONS**

Based on the findings that a high accounts collection period would significantly reduce the ROA of firms, the study recommended the listed firms in the commercial and services sector as well as other sectors to review their credit management practices so that the time period for repaying is reduced. Since it was established that an increase in the inventory

conversion period adversely affects the financial performance of a firm in terms of its ROA, the study recommended the listed firms in the commercial and services sector as well as other sectors to come up with effective inventory management practices that would aim to manage inventory holding period and increase conversion period without compromising customer demands.

Based on the findings that higher accounts payable period would adversely affect financial performance of firms, the study recommended that the listed firms in the commercial and services sector as well as other sectors to come up with better debt management policies which aim to have a balance between the repayment period and holding of debts. The debts can be held without compromising the penalties for doing so. Since it was established that faster cash conversion cycle would improve financial performance by availing more cash for investments, the study recommended the listed firms in the commercial and services sector as well as other sectors to come up with practices and procedures which would increase the rate of converting their inventory into cash some of which is managing credit.

#### **REFERENCES**

- Akoto, R. K., Awunyo-Vitor, D., & Angmor, P. L. (2013). Working capital management and profitability: Evidence from Ghanaian listed manufacturing firms.
- Almazari, A. A. (2013). The relationship between working capital management and profitability: Evidence from Saudi cement companies. *British Journal of Economics, Management & Trade*, 4(1), 146-157.
- Azeez, O. T., Abubakar, M. A., & Olamide, F. T. (2016). Analysis of the effects of working capital management on profitability of listed Nigerian conglomerate companies. *FWU Journal of Social Sciences*, 10(1), 10-20.
- Bosse, D. A., & Phillips, R. A. (2016). Agency theory and bounded self-interest. *Academy of Management Review*, 41(2), 276-297.
- Dawar, V. (2014). Agency theory, capital structure and firm performance: some Indian evidence. *Managerial Finance*, 40(12), 1190-1206.

- Filbeck, G., & Krueger, T. M. (2005). An analysis of working capital management results across industries. *American Journal of Business*, 20(2), 11-20.
- Gakure, R., Cheluget, J., Onyango, J. A., & Keraro, V. (2012). Working capital management and profitability of manufacturing firms listed at the Nairobi stock exchange. *Prime Journal of Business Administration and Management (BAM)*, 2(9), 680-686.
- Gul, S., Khan, M. B., Raheman, S. U., Khan, M. T., Khan, M., & Khan, W. (2013). Working capital management and performance of SME sector. *European Journal of Business and management*, 5(1), 60-68.
- Kihooto, E., Omagwa, J., Wachira, M., & Emojong, R. (2016). Financial distress in commercial and services companies listed at Nairobi Securities Exchange, Kenya. *European Journal of Business and Management*, 8(27), 86-89.
- Kimeli, M. (2014). Relationship between Working Capital Components and Financial Performance of the Commercial and Services Firms Quoted at the Nairobi Security Exchange. *Unpublished MBA Project*.
- Kithii, J. N. (2008). The relationship between working capital management and profitability of listed companies in the Nairobi Stock Exchange. *MBA Project, University of Nairobi*.
- Linh, N. T. P., & Mohanlingam, S. (2018). The Effects of Cash Conversion Cycle on Profitability: An Insight into the Agriculture and Food Industries in Thailand. *Asian Journal of Business and Accounting*, 11(1), 97-119.
- Luchinga, L. (2014). The Effect of Working Capital Management on the Profitability of Agricultural Firms Listed in Nairobi Securities Exchange. *Journal of Business and Management*, 2(1), 37-45.
- Mathuva, D. (2015). The Influence of working capital management components on corporate profitability.
- Mueller, D. C. (1972). A life cycle theory of the firm. *The Journal of Industrial Economics*, 199-219.
- Nteere, E. N. (2014). The effect of working capital management on the profitability of the hotel industry in Kenya; a study of the five star hotels in Nairobi.
- Nyamao, N. R., Patrick, O., Martin, L., Odondo, A. J., & Simeyo, O. (2012). Effect of working capital management practices on financial performance: A study of small scale enterprises in Kisii South District, Kenya.
- Oladipupo, A. O., & Okafor, C. A. (2013). Relative contribution of working capital management to corporate profitability and dividend payout ratio: Evidence from Nigeria. *International Journal of Business and Finance Research*, 3(2), 11-20.
- Orlitzky, M., Schmidt, F. L., & Rynes, S. L. (2003). Corporate social and financial performance: A meta-analysis. *Organization studies*, 24(3), 403-441.
- Owele, M. L., & Makokeyo, J. W. (2015). The Effects of Working Capital Management Approaches on the Financial Performance of Agricultural Companies Listed at the Nairobi Securities Exchange, Kenya. *International Journal of Advanced Research*, 3(1), 60-69.
- Owolabi, S. A., & Obida, S. S. (2012). Liquidity management and corporate profitability: Case study of selected manufacturing companies listed on the Nigerian stock exchange. *Business Management Dynamics*, 2(2), 10-25.

- Padachi, K. (2006). Trends in working capital management and its impact on firms' performance: an analysis of Mauritian small manufacturing firms. *International Review of business research papers*, 2(2), 45-58.
- Shah, S. A., & Sana, A. (2005). Impact of working capital management on the profitability of oil and gas sector of Pakistan. *Editor-In-chief or e*, 15(3), 301-307.
- Sharma, A. K., & Kumar, S. (2011). Effect of working capital management on firm profitability: Empirical evidence from India. *Global Business Review*, 12(1), 159-173.
- Tippins, M. J., & Sohi, R. S. (2003). IT competency and firm performance: is organizational learning a missing link?. *Strategic management journal*, 24(8), 745-761.
- Upadhyay, S., Sen, B., & Smith, D. (2015). The cash conversion cycle and profitability: A study of hospitals in the state of Washington. *Journal of Health Care Finance*, 41(4).
- Uremandu, S., Ben-Caleb, E., & Enyi, P. E. (2012). Working capital management, liquidity and corporate profitability among quoted firms in Nigeria: Evidence from the Productive sector. *International journal of academic research in accounting, finance and management sciences*, 2(1).
- Valentine, C. (2014). Determinants of corporate financial performance. Retrieved online from [www.dafi.asce.ro/revista/6/costea\\_valentin](http://www.dafi.asce.ro/revista/6/costea_valentin). Pdf on 13th May.
- Walker, E. W. (1964). Toward a theory of working capital. *The Engineering Economist*, 9(2), 21-35.