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Effect of Working Capital Management Decisions on Financial Performance: Evidence from Kenya's Tea Sector

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Abstract

Collapse of companies in Kenya has been on the rise in the recent past. Far reaching endeavors to resuscitate these liquidating and ailing firms have generally been attributed on their corporate financial management decisions. Multinationals and KTDA managed tea firms in Kenya have been performing poorly in the recent past where audited financial statements and reports revealed a warning signal on its financial performance. Specific objectives of the study were to determine the effect of the accounts receivables period, accounts payables period, inventory conversion period, cash conversion cycle, financing policy, investing policy and moderating effect of ownership structure on financial performance. The study illustrated that accounts receivables collection period is negatively related to return on assets ($\beta = -0.1299$, $p=0.0160$), accounts payables payment period is negatively related to return on assets ($\beta = -0.0843$, $p = 0.0070$), inventory conversion period is negatively related to return on assets ($\beta = -0.0623$, $p=0.0180$), cash conversion cycle is negatively related to return on assets ($\beta = -0.1107$, $p = 0.0030$), financing policy is positively related to return on assets ($\beta = 0.1589$, $p = 0.0000$), investing policy is positively related to return on assets ($\beta = 0.0291$, $p = 0.0000$).

Keywords: Working capital; Accounts receivable; Accounts payables and Inventory

JEL Classifications: G17; G21

Introduction

Numerous research studies regarding working capital management (WCM) have been conducted in many economies around the globe; however, the understanding of WCM decisions in the context of an organization has not been adequately documented and understood. Several management gurus and research scholars have largely concentrated on establishing complicated/sophisticated financial models for instance Miller- Orr model on cash management (1966), Baumol model on cash management (1952) and the model on inventory management, however, researchers and scholars find these techniques used in making financial decision difficult to employ in actual/real application because of their assumptions that are not realistic regarding the obliviousness of ambiguity in operations of business and their intricateness in demonstrating to decision makers (Vahid & Mohsen, 2016). Indeed, corporate directors/managers require simple and easy to use models (Gitman et al., 2015). In such events, it is argued that the failure of research studies on WCM to show or reflect the features and challenges of contemporary organizational settings has result into a lack of understanding and therefore necessitated the need for a conceptual framework explaining current WCM decisions. While the remarkable performance of the tea sector in Kenya has been widely documented, the WCM decisions and its contribution to the sector's financial performance remain largely unexplored (Gesimba et al., 2018). Suffice it to note that the exploration of this study's research problem should help shed light on these dilemmas particularly for the Kenyan tea industry and its financial performance. This study sought to fill the gap in the literature by assessing the effect of WCM decisions variables on financial performance of tea firms in Kenya.

Regarding the statement of the problem, firstly, Kenyan tea industry is struggling to thrive. Multinationals and KTDA managed tea firms in Kenya have been performing poorly in the recent past where audited financial statements and reports by Tea Board of Kenya and Kenya National Bureau of Statistics of 2014 to 2019 revealed a warning signal on its financial performance. The most affected region was West of Rift (Kericho, Bomet and Nandi Counties). This drop in earnings has been focused mainly on WCM decisions adopted by tea firms in Kenya. Corporate managers and finance practitioners still lack adequate guidance on how to attain sufficient threshold in regard to proper WCM decisions, thus the need for this study. Secondly, several studies have been carried out internationally, regionally and locally on the effect of WCM decisions on financial performance of different firms. However, it is instructive to note there is still vagueness pertaining the relevant variables that may be used as proxies for WCM. These studies produced conflicting results and do not give clear guidance or distinct direction on the association between WCM decisions and firm's financial performance, thus the need for the current study. Thirdly, currently available empirical literatures on WCM decisions were done in other geographic jurisdictions other than Kenya, especially in developed economies such as the USA and Europe. However, since Kenya differs from developed and other developing countries regarding capital markets, economy and infrastructural development, this limited evidence in the context of tea industry in Kenya and especially in Kericho, Bomet & Nandi Counties, calls for a research to be undertaken, thus necessitating this study. Therefore, this study sought to bridge these gaps in the literature. Lastly, there is relatively little evidence available on the moderating effect of ownership structure on the association between WCM decisions and financial performance, and in particular, tea industry in Kenya. Therefore, this study sought to bridge these gaps in the literature.

Pertaining the research objectives, the general objective is to investigate the effect WCM decisions on financial performance of tea firms in Kenya. On the other hand, the specific objectives are:

- To determine the effect of accounts receivables collection period on financial performance of tea firms in Kenya.
- To establish the effect of accounts payables payment period on financial performance of tea firms in Kenya.
- To examine the effect of inventory conversion period on financial performance of tea firms in Kenya.
- To explore the effect of cash conversion period on financial performance of tea firms in Kenya.
- To determine the effect of WCM policies on financial performance of tea firms in Kenya.

Regarding the scope of the study, the study covered all multinationals and KTDA managed tea firms in Kericho, Bomet and Nandi Counties in Kenya for the period 2014-2019, and comprise of 23 multinationals and 17 KTDA managed tea firms.

Literature Review

The Theoretical Framework that this study is anchored on are as follows:

First, is the agency / stakeholder theory. The applicability of agency theory to WCM could be scrutinized from the point of view of manager of finance, who in many times the agent of the principals of the company, and who executes overall fundamental decisions pertaining the liquidity of a firm. He plays the stewardship role taking control of the leading and indispensable decisions pertaining accounts receivables, accounts payables, inventories and liabilities of the company. Shareholders many times are not in consensus regarding to their amount of resources invested in the company. The level of each individual's shareholder's interest depends on the degree of his exchange of relationship and stake with the company which is measured on the amount of investments injected and committed to the firm (William, 2016). Based on arguments of the agency theory, therefore, this study sought to determine whether accounts receivables collection period had any effect on the financial performance of tea firms in Kenya.

Secondly, is the risk and return theory. The applicability of risk and return theory to WCM could be seen from the overriding/prime decisions in trade-off between liquidity and financial performance. Certainly, if a company prefers to be liquid it should be at the expense of the returns and vice-versa. Undoubtedly, choices surrounding any one of these two conflicting arrangements may give rise to in either too high or too little of the components of WC and the current assets of a business. In the same vein, the risk and return theory which is an fundamental or central part of the portfolio theory can be associated to WC when we look inwardly at the ability of a firm or financial manager to determine the collection of assets, or portfolio to be acquired, since it is impossible to own everything, decisions on what the composition of receivables, inventories, incentives and stocks viz-a-viz the profitability concern are all within the context of risk and return theory. Based on arguments of the risk and return theory, therefore, this study sought to establish whether Accounts payables payment period had any effect on the financial performance of tea firms in Kenya.

Thirdly, is the the operating cycle theory. The applicability of operating cycle theory to WCM is that the traditional policy of relying on current or acid-test ratios as solvency indicators is quite defective compared to the operating cycle policy of relying on current or compared to the operating cycle policy where accounts receivables and inventory turnover measures are incorporated as useful in liquidity management. This is quite clear because ARCP as a proxy for firms average receivables investment is converted to cash. One critical aspect to note is that changes in collection and credit policies have a direct effect on the balance of accounts receivable outstanding, in relation to annual firm's sales (Richard & Laughlin, 1980). Based on arguments of the operating cycle theory, therefore, this study sought to establish whether inventory conversion period had any effect on the financial performance of tea firms in Kenya.

Fourthly, is the cash operating cycle theory. The applicability of COC theory to WCM is that the theory centers on expounding a cycle that starts from the payment for the raw materials purchase, all through to finally processing and the new product emergence, to the collection of accounts receivables from the debtors of the interaction as a result of the sale of stock. Indeed, finance directors and managers and all the financial management analysts embrace at least at an intuitive level that all WCM investments does not have similar life expectancy, and their processing rate to usable flows of liquidity is normally not at the same speed (Richardr & Laughlinn, 2018). In the overall, one can conveniently say that the COP theory is the most central one in explaining WCM as it is concerned with all the concepts and components, ranging from raw materials to finished products, and outputs representing inventory levels, to receivables and payment representing the cash aspect. Based on arguments of the COP theory, therefore, this study sought to examine whether cash conversion period had any effect on the financial performance of tea firms in Kenya.

Fiftly, is the corporate risk management theory. The applicability of corporate risk management theory to WCM is that this theory offers two alternative policies of WCM, that is, conservative WCM policies and aggressive WCM policies. The literature contains an extensive debate on the risk/return trade-off among different WC policies (Gitman, 2005; Moyer et al., 2005). While more aggressive WC policies are associated with higher returns and risk, conservative WC policies offer both lower risk and returns (Gardner et al., 2016). This study sought to determine the effect of WCM policies on financial performance of tea firms in Kenya.

Pertaining the empirical literature review, Muscettola (2018) explored the influence and all the effect of the accounts receivables collection period on the financial performance of companies by employing data from an extensive sample of companies engaged in manufacturing Italy. The findings of this research study

revealed that accounts receivables collection period had a significant positive association with financial performance. Akoto et al., (2017) also investigated the association between WCM decisions and financial performance of listed firms engage in manufacturing in Ghana. The research utilized secondary data sourced from all the 14 manufacturing firms listed in Ghana for the time period of 2004 to 2012. The study findings established a significant negative association between financial performance and accounts receivable collection period.

Other scholars with similar outcome of negative association between financial performance and ARCP include (Mathuva, 2014; Lazaridis and Tryfonidis, 2011; Falope and Ajilore, 2013; Mansoor and Muhammad, 2016; Naimulbari, 2016, Raheman and Nasr, 2012; Dong, 2014; Arunkmar and Ramanan, 2017).

WCM rule dictates that companies should strive to lag their payments to creditors as much as possible, taking care not to spoil their business association. Through this, Mathuva (2014) in the study on the influence of WCM components on corporate financial performance, a survey on listed firms in Kenya showed that APPP has a positive association with financial performance. The positive association revealed that an increase in the accounts payable payment period by 1 day is strongly associated with an increase in financial performance.

Although studies by (Ruichao, 2017; Muthuva, 2014; Naimulbari, 2016, Gill, Biger and Mathur, 2016) show positive association between APPP and financial performance other more research by (Ray, 2016; Mekonnen, 2015; Deloof, 2009; Reheman & Nasr, 2012; Vural, Sökmen and Çetenak, 2016; Saghir, Hashmi and Hussain, 2015; Reheman et al., 2014) suggest a negative association between APPP and the firm financial performance. Garcia-Teruel and Martinez-Solano (2012) failed to provide the association that exists between APPP and financial performance.

Indeed, inventory management is one of the fundamental variables in WCM as it is one of the principal pillars of current assets. A research study by Arabahmadi et. al., (2017) evaluated the efficiency of WCM on corporate firms in Iran on automobile industry for the time period 2001-2014. The outcome showed that inventory management had a positive association with WC. In addition, the research study revealed that the relationship between WC and raw material purchase was positive. In addition, Muturi et al., (2015) also investigated the effect of ICP on financial performance of tea firms in the County of Meru for the time period of 5 years from 2012 to 2016. The study findings revealed that ICP negatively affected the financial performance.

Although most empirical research suggest a negative relation between inventory turnover in days and financial performance (Ruichao, 2017; Lazaridis and Tryfonidis, 2011; Falope & Ajilore, 2013; Mansoor & Muhammad, 2016; Raheman & Nasr, 2012; Dong, 2014), find contradictory findings on the association between inventory turnover in days and financial performance. Gill, Biger and Mathur (2016) and Mathuva (2014) suggest a positive association between inventory turnover in days and financial performance.

Ehiedu (2018) investigated the effect of liquidity on financial performance of selected corporate firms. The research study utilized secondary data from the selected corporate firms yearly audited reports and financial statements. The research study revealed that there exist a significant positive association between current ratio and financial performance; however, there was no clear-cut significant relationship between Acid-test ratio and financial performance. Egbide et al., (2017) investigated the association between liquidity and financial performance based on a sample of 30 manufacturing companies listed in the Nigeria securities exchange for the period 2011 to 2014. The research study revealed that liquid ratio and current ratio were positively correlated with financial performance whereas the cash conversion period was negatively correlated with financial performance of manufacturing companies in Nigeria.

Despite many authors postulating a negative association between CCP and financial performance, (Azam & Haider, 2015; Mansoor & Muhammad, 2016; Mekonnen, 2015; Ray, 2016; Vural et al., 2016; Saghir et al., 2015; Nireesh, 2016; Reheman et al., 2014; Naimulbari, 2016), there are studies which indicate a positive association between CCP and financial performance (Gill et al., 2016; Lyroudi et al., 2000).

The optimal level of WC is determined to a large extent by the policy adopted for management of current liabilities and current assets. The aggressive policy is considered to be more risky because of the frequent need to refinance to support permanent current assets as well as fluctuating current assets. Moyer et al., (2005) observed that if a firm relied on overdraft, it will be vulnerable to a rapid withdrawal of the facility and

if stock and cash are reduced to pay back the overdraft the firm may experience severe disruption, loss of sales and output, and additional costs because of failure to maintain the minimum required WC to sustain optimum profitability. Previous studies have shown that a firm can adopt an aggressive WCM policy with a low degree of current assets as a ratio of total assets or it may also be employed for financing decisions of the companies in the form of high degree of current liabilities as percentage of total liabilities. According to Van Horne and Wachowic (2004), excessive levels of current assets may have a negative effect on the firm's profitability whereas a low level of current assets may lead to a lower level of liquidity and stock-outs resulting in difficulties in maintaining smooth operations.

In their study, Afza and Nazir (2007) examined the association between the aggressive and conservative WC policies for seventeen industrial groups and a large sample of 264 listed public limited companies at Karachi securities exchange for a time of period of 1997-2002. The study found out a significant difference among their WC investment and financing policies across different industries. The study also found out a negative association among the profitability measures of companies and extent of aggressiveness of WC investment and financing policies.

Research and Methodology

The study employed correlational research design. This is a type of research design in which the researcher attempts to identify relationships to make predictions (Kasomo, 2011). The main objective of a correlational research design is the discovery of relationships among different variables (Cooper & Schindler, 2011). This research design was used to identify, describe, show relationships and analyze variables of WCM that affect financial performance among the tea firms in Kenya.

The target population for this study was a census of all multinationals and KTDA managed tea firms in Kericho, Bomet and Nandi Counties of Kenya for the period for the period 2014 to 2019.

This study adopted a census approach where all the 23 tea factories under the multinationals tea companies and 17 tea factories under KTDA in Kericho, Bomet and Nandi Counties in Kenya were taken.

This research study adopted secondary data which were obtained from the annual audited financial statements from all the 40 tea factories in Kericho, Bomet and Nandi Counties in Kenya.

The study utilized secondary data collected from documents, records and reports of others. The data is panel data which consisted of time series and cross-sections. The cross sectional data consisted of all multinationals and KTDA managed tea firms in Kericho, Bomet and Nandi Counties in Kenya, while the time series were the years 2014-2019.

The general empirical model of the study is:

$$ROA_{it} = \alpha + \beta_1(ARCP)_{it} + \beta_2(APPP)_{it} + \beta_3(ICP)_{it} + \beta_4(CCP)_{it} + \beta_5(WCFP)_{it} + \beta_6(WCIP)_{it} + \varepsilon_{it} \dots\dots\dots \text{(Equation 3.2)}$$

Where:

ROA =Return on Assets, ARCP = Accounts Receivables Collection Period, APPP = Accounts Payables Payment Period, ICP = Inventory Conversion Period, CCP = Cash Conversion Period, WCFP =Working Capital Financing Policy, WCIP=Working Capital Investing Policy, α = Constant term, β_1 to β_6 are coefficients of the explanatory variables, ε_{it} = Error term where i is cross sectional and t time identifier, $i = 1 \dots 40$ and $t = 2014 \dots 2019$.

The data was analyzed using descriptive statistics, correlation analysis, and panel multiple regression analysis. The panel methodology was aided by EVIEW software. An excel program was used to compute the relevant ratios for each of the companies across time. Feasible generalized least square estimation was performed after accounting for various violations of classical linear regression assumptions.

The following diagnostic tests were conducted: multicollinearity, autocorrelation, heteroskedasticity and test for Normality of residuals, Panel Unit Root Test and Test for Fixed or Random Effects.

Findings

The descriptive statistics are as under:

Table 1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Returns on Assets	240	0.0810	0.0286	0.0085	0.1798
Accounts Receivables Collection Period	240	182.4715	47.7071	41.0259	472.4709
Accounts Payables Payment Period	240	79.9924	31.5791	19.2293	230.4068
Inventory Conversion Period	240	78.1386	108.3363	14.9669	773.7299
Cash Conversion Period	240	180.6177	116.7593	16.8297	862.9320
WC Financing Policy	240	0.1449	0.0461	0.0188	0.4117
WC Investing Policy	240	0.4633	0.1058	0.0342	0.7877

The results presented in Table 4.1 show the minimum return on assets of the multinationals and KTDA managed tea firms in Kericho, Bomet and Nandi Counties in Kenya for the period between 2014 and 2019 was 0.0085 with a maximum of 0.1798. The mean score of the return on assets was 0.0810. This implied most multinationals and KTDA managed tea firms in Kericho, Bomet and Nandi Counties had ROA of 0.0810 between 2014 and 2019. The study found the minimum accounts receivables collection period for the firms between 2014 and 2019 was 41.0259 days with a maximum of 472.4709 days. The average accounts receivables collection period in the same period of 2014 to 2019 was 182.4715 days. This signified that most of the firms had an accounts receivables collection period of 182.4715 days between 2014 and 2019.

The minimum accounts payables payment period for the firms between 2014 and 2019 was 19.2293 days with a maximum of 230.4068 days. The average accounts payables payment period was 79.9924 days. This meant that most of the firms had an accounts payables payment period of 79.9924 days between 2014 and 2019. The study found the minimum inventory conversion period of the firms between 2014 and 2019 was 14.9669 days with a maximum of 773.7299 days. The average inventory conversion period was 78.1386 days. This implied most firms had an inventory conversion period of 78.1386 days between 2014 and 2019.

The study found the average cash conversion period of the firms has been 180.6177 days for the period between 2014 and 2019. The minimum average cash conversion period from 2014 to 2019 was 16.8297 days with a maximum of 862.9320 days. This implied that most of the firms took 180.6177 days to convert a shilling invested in current assets into cash. The study showed that the working capital financing had an average mean score of 0.1449. The minimum and maximum working capital financing between 2014 and 2019 was 0.0188 and 0.4117, respectively. This implied that most of the firms had working capital financing of 0.1449 between 2014 and 2019.

The study found the average working capital investing of the firms between 2014 and 2019 was 0.4633. The minimum and maximum working capital investing were 0.0342 and 0.7877, respectively. This implied most multinationals and KTDA managed tea firms in Kericho, Bomet and Nandi Counties between 2014 and 2019 had a 0.4633 working capital investing Policy.

Finally, the mean score of ownership structure was 0.5750 with a minimum of 0 and a maximum of 1. The results indicated that multinationals managed tea firms exceeded the KTDA managed firms in the region of Kericho, Bomet and Nandi Counties by 0.0750 units.

The correlation analysis are as under:

Table 2: Correlation Analysis

Variable	ROA	ARCP	APPP	ICP	CCP	WCFP	WCIP
ROA	1.0000						
ARCP	-0.0061	1.0000					
APPP	-0.0165	0.1277	1.0000				
ICP	-0.0426	0.0428	0.3674	1.0000			
CCP	-0.0312	0.6304	-0.1742	0.5567	1.0000		
WCFP	0.2872	0.1245	0.1293	-0.0147	0.0075	1.0000	
WCIP	0.2000	0.0223	-0.0552	-0.0586	0.0258	0.4428	1.0000

Associated with return on asset ($r = -0.0061$). The study also found that the accounts payables payment period is negatively correlated with return on assets ($r = -0.0165$). The study results further illustrated that the inventory conversion period is negatively associated with return on assets ($r = -0.0426$). The study found that the cash conversion period is negatively associated with the return on assets ($r = -0.0312$). It was found that working capital financing Policy is positively associated to return on assets ($r = 0.2872$). The study further depicted that working capital Policy is positively correlated with return on assets ($r = 0.2000$).

The panel regression analysis is as under:

Table 3: Panel Regression Analysis

		Robust		
Return on Assets	Coef.	Std. Err.	z	P>z
Accounts Receivables Collection Period	-0.1299	0.0541	2.4000	0.0160
Accounts Payables Payment Period	-0.0843	0.0315	2.6800	0.0070
Inventory Conversion Period	-0.0623	0.0264	2.3600	0.0180
Cash Conversion Period	-0.1107	0.0276	4.0109	0.0030
WC Financing Policy	0.1589	0.0295	5.3800	0.0000
WC Investing Policy	0.0291	0.0055	5.3000	0.0000
_cons	0.0457	0.0408	1.1200	0.2630
R squared = 0.6529				

The model:

$$\text{ROA} = 0.0457 - 0.1299\text{ARCP} - 0.0843\text{APPP} - 0.0623\text{ICP} - 0.1107\text{CCP} + 0.1589\text{WCIP} + 0.0291\text{WCFP}$$

The results presented in Table 4.9 shows that accounts receivables collection period, accounts payment period, inventory conversion period, cash conversion period, working capital financing Policy and working capital investing Policy explain 65.29% of the variations in the financial performance (return on assets) of the tea firms in Kenya.

The study illustrated that the accounts receivables collection period is negatively and significantly related to return on assets ($\beta = -0.1299$, $p = 0.0160$). This was supported by a calculated t-statistic of 2.4000 that is larger than the critical t-statistic of 1.96. This implied an increase in the accounts receivables collection period by one unit would lead to a rise in the return on assets by 0.1299 units, while other factors are held constant.

The study found that the accounts payables payment period is negatively and significantly related to return on assets ($\beta = -0.0843$, $p = 0.0070$). This was supported by a calculated t-statistic of 2.6800 that is larger than the critical t-statistic of 1.96. This implied an increase in the accounts payable period by one unit would lead to a decrease in the return on assets by 0.0843 units, while other factors are held unchanged.

The study noted that the inventory conversion period is negatively and significantly related to return on assets ($\beta = -0.0623$, $p = 0.0180$). This was supported by a calculated t-statistic of 2.3600 that is larger than the

critical t-statistic of 1.96. This signified an increase in an inventory conversion period by one unit would lead to a rise in the return on assets by 0.0623units, while other factors are held constant.

It was found that the cash conversion period is negatively and significantly related to return on assets ($\beta = -0.1107$, $p = 0.0030$). This was supported by a calculated t-statistic of 4.0109 that is larger than the critical t-statistic of 1.96. This showed an increase in the cash conversion period by one unit would lead to a decrease in the return on assets by 0.1107 units, while other factors are held constant.

The study showed that working capital financing policy is positively and significantly related to return on assets ($\beta = 0.1589$, $p = 0.0000$). This was supported by a calculated t-statistic of 5.3800 that is larger than the critical t-statistic of 1.96. This implied an increase in working capital financing policy would lead to a rise in the return on assets by 0.1589 units while other factors are held constant. The working capital financing policy deals with the sources and the amount of working capital that a company should maintain.

Further, the study found that working capital investing policy is positively and significantly related to return on assets ($\beta = 0.0291$, $p = 0.0000$). This was supported by a calculated t-statistic of 5.3000 that is larger than the critical t-statistic of 1.96. The results implied that when the working capital investment policy improves by one unit, the return on assets will increase by 0.0291 units when other factors are kept constant. This implies the higher the current assets, the higher the return on assets because the working capital investing policy is a function of current assets over total assets. The working capital policy of a company refers to the level of investment in current assets for attaining their targeted sales.

The hypotheses testing is as under:

There is no statistically significant effect of accounts receivables collection period on financial performance of tea firms in Kenya.

The hypothesis was tested by using panel regression and determined using the p-value. The acceptance/rejection criterion was that if the p-value is less than 0.05, we reject the null hypothesis (H_0), but if it is more than 0.05, the H_0 is not rejected. Based on the results presented in Table 4.9 the p-value was 0.0160. The null hypothesis was rejected. Therefore, there is statistically significant effect of accounts receivables collection period on financial performance of tea firms in Kenya.

There is no statistically significant effect of accounts payables payment period on financial performance of tea firms in Kenya.

The hypothesis was tested by using panel regression and determined using the p-value. The acceptance/rejection criterion was that if the p-value is less than 0.05, we reject the null hypothesis (H_0), but if it is more than 0.05, the H_0 is not rejected. Based on the results presented in Table 4.9 the p-value was 0.0070. Thus, null hypothesis was rejected. The study concludes that there is statistically significant effect of accounts payables payment period on financial performance of tea firms in Kenya.

There is no statistically significant effect of inventory conversion period on financial performance of tea firms in Kenya.

The hypothesis was tested by using panel regression and determined using the p-value. The acceptance/rejection criterion was that if the p-value is less than 0.05, we reject the null hypothesis (H_0), but if it is more than 0.05, the H_0 is not rejected. Based on the results presented in Table 4.9 the p-value was 0.0180. The null hypothesis is rejected. Thus, there is a statistically significant effect of inventory conversion period on financial performance of tea firms in Kenya.

There is no statistically significant effect of cash conversion period on financial performance of tea firms in Kenya.

The hypothesis was tested by using panel regression and determined using the p-value. The acceptance/rejection criterion was that if the p-value is less than 0.05, we reject the null hypothesis (H_0), but if it is more than 0.05, the H_0 is not rejected. Based on the results presented in Table 4.9 the p-value was 0.0030. Therefore, there is a statistically significant effect of cash conversion period on financial performance of tea firms in Kenya.

There is no statistically significant effect of WC Financing Policy on financial performance of tea firms in Kenya.

The hypothesis was tested by using panel regression and determined using the p-value. The acceptance/rejection criterion was that if the p-value is less than 0.05, we reject the null hypothesis (H_0), but if it is more than 0.05, the H_0 is not rejected. Based on the results presented in Table 4.9 the p-value was 0.0000. Hence, there is a statistically significant effect of WC financing policy on financial performance of tea firms in Kenya.

There is no statistically significant effect of WC investing policy on financial performance of tea firms in Kenya.

The hypothesis was tested by using panel regression and determined using the p-value. The acceptance/rejection criterion was that if the p-value is less than 0.05, we reject the null hypothesis (H_0), but if it is more than 0.05, the H_0 is not rejected. Based on the results presented in Table 4.9 the p-value was 0.0000. Thus, there is a statistically significant effect of WC investing policy on financial performance of tea firms in Kenya.

Discussions

Based on the descriptive statistics, the average accounts receivables collection period of the firms between 2014 and 2019 was 182.4715 days. The correlation results showed that the accounts receivables collection period is negatively associated with return on asset ($r = -0.0061$). The study illustrated that the accounts receivables collection period is positively and significantly related to return on assets ($\beta = 0.1299$, $p = 0.0160$). This was supported by a calculated t-statistic of 2.4000 that is larger than the critical t-statistic of 1.96.

The descriptive statistics illustrated that the average accounts payables payment period between 2014 and 2019 was 79.9924 days. The correlation results showed that the accounts payables payment period is negatively correlated with return on assets ($r = -0.0165$). The study found that the accounts payables payment period is negatively and significantly related to return on assets ($\beta = -0.0843$, $p = 0.0070$). This was supported by a calculated t-statistic of 2.6800 that is larger than the critical t-statistic of 1.96.

The descriptive statistics showed that the average inventory conversion period of the firms between 2014 and 2019 was 78.1386 days. The correlation results illustrated that the inventory conversion period is negatively associated with return on assets ($r = -0.0426$). The study noted that the inventory conversion period is negatively and significantly related to return on assets ($\beta = -0.0623$, $p = 0.0180$). This was supported by a calculated t-statistic of 2.3600 that is larger than the critical t-statistic of 1.96.

The descriptive statistics indicated the average cash conversion period of the firms has been 180.6177 days for the period between 2014 and 2019. The correlation results showed that the cash conversion period is negatively associated with the return on assets ($r = -0.0312$). It was found that the cash conversion period is negatively and significantly related to return on assets ($\beta = -0.1107$, $p = 0.0030$). This was supported by a calculated t-statistic of 4.0109 that is larger than the critical t-statistic of 1.96.

The descriptive statistics showed most firms had a working capital financing policy of 0.1449 between 2014 and 2019. The correlation results showed that working capital financing policy is positively associated with return on assets ($r = 0.2872$). The study showed that working capital financing policy is positively and significantly related to return on assets ($\beta = 0.1589$, $p = 0.0000$). This was supported by a calculated t-statistic of 5.3800 that is larger than the critical t-statistic of 1.96. The working capital financing policy deals with the sources and the amount of working capital that a company should maintain.

Based on the descriptive statistics, the average working capital investing policy of the firms between 2014 and 2019 was 0.4633. The correlation results depicted working capital investing is positively correlated with return on assets ($r = 0.2000$). The study found that working capital investing policy is positively and significantly related to return on assets ($\beta = 0.0291$, $p = 0.0000$). This was supported by a calculated t-statistic of 5.3000 that is larger than the critical t-statistic of 1.96. This implies the higher the current assets, the higher the return on assets because the working capital investing policy is a function of current assets over total assets. The working capital policy of a company refers to the level of investment in current assets for attaining their targeted sales.

Summary of Findings

The first objective of the study was to determine the effect of the accounts receivables collection period on the financial performance of tea firms in Kenya. Based on the descriptive statistics, the average accounts receivables collection period of the firms between 2014 and 2019 was 182.4715 days. The correlation results showed that the accounts receivables collection period is negatively associated with return on asset ($r = -0.0061$). The regression results found that the accounts receivables collection period is negatively and significantly related to return on assets ($\beta = -0.1299$, $p = 0.0160$). This implied a decrease in the accounts receivables collection period by one unit would lead to a rise in the financial performance (return on assets) by 0.1299 units, while other factors are held constant.

The second objective of the study was to establish the effect of the accounts payables payment period on the financial performance of tea firms in Kenya. The descriptive statistics illustrated that the average accounts payables payment period between 2014 and 2019 was 79.9924 days. The correlation results showed that the accounts payables payment period is negatively correlated with return on assets ($r = -0.0165$). The regression results indicated that the accounts payables payment period is negatively and significantly related to return on assets ($\beta = -0.0843$, $p = 0.0070$). This indicated an decrease in the accounts payable period by one unit would lead to a increase in the financial performance (return on assets) by 0.0843 units, while other factors are held unchanged.

The third objective of the study was to examine the effect of the inventory conversion period on the financial performance of tea firms in Kenya. From the descriptive statistics, it was found that average inventory conversion period of the firms between 2014 and 2019 was 78.1386 days. The correlation results illustrated that the inventory conversion period is positively associated with return on assets ($r = -0.0426$). The study noted that the inventory conversion period is positively and significantly related to return on assets ($\beta = -0.0623$, $p = 0.0180$). This signified an decrease in an inventory conversion period by one unit would lead to a rise in the financial performance (return on assets) by 0.0623units, while other factors are held constant.

The fourth objective of the study was to investigate the effect of the cash conversion period on the financial performance of tea firms in Kenya. The outcome from the descriptive statistics showed that the average cash conversion period of the firms has been 180.6177 days for the period between 2014 and 2019. The correlation results showed that the cash conversion period is negatively associated with the return on assets ($r = -0.0312$). It was found that the cash conversion period is negatively and significantly related to return on assets ($\beta = -0.1107$, $p = 0.0030$). This showed a decrease in the cash conversion period by one unit would lead to a increase in the financial performance (return on assets) by 0.1107 units, while other factors are held constant.

The fifth objective of the study was to determine the effect of working capital management policies on the financial performance of tea firms in Kenya. The descriptive statistics showed most firms had a working capital financing policy of 0.1449 between 2014 and 2019. The correlation results showed that working capital financing policy is positively associated with return on assets ($r = 0.2872$). The study showed that working capital financing policy is positively and significantly related to return on assets ($\beta = 0.1589$, $p = 0.0000$). This designated an improvement in working capital financing policy would lead to a rise in the financial performance (return on assets) by 0.1589 units while other factors are held constant.

Similarly, the descriptive statistics showed that the average working capital investing policy of the firms between 2014 and 2019 was 0.4633. The correlation results depicted working capital investing is positively correlated with return on assets ($r = 0.2000$). The study found that working capital investing policy is positively and significantly related to return on assets ($\beta = 0.0291$, $p = 0.0000$). The results implied that when the working capital investment policy improves or changes by one unit, the financial performance (return on assets) will increase by 0.0291 units when other factors are kept constant.

Conclusions

The study concludes that the accounts receivables collection period is negatively and significantly related to financial performance (return on assets). The study showed that a unit decrease in the accounts receivables collection period by one unit would lead to a rise in the return on assets by 0.1299 units. The accounts receivables collection period is the time taken to collect cash from customers. The shorter the accounts

receivables collection period, the higher the financial performance. Account receivables are part of the assets of the company and they are considered to be fundamental in improving the financial performance of the company. Companies use assets to generate revenue and account receivables are part of the assets of the company. Therefore, having a shorter accounts receivables collection period implies that more money is expected to be generated by the companies after debtors honor their obligations.

The study concludes that the accounts payables payment period is negatively and significantly related to financial performance (return on assets). The study indicated that a unit increase in the accounts payable period would lead to a decrease in the return on assets by 0.0843 units. The account's payment period is the time taken to pay the firm's suppliers. A firm with a long account payment period frustrates the supplier from supplying any more goods or services to the firms. In situations where the payment to the suppliers has been withheld for a long time, suppliers become frustrated after numerous calls or visits. Besides, a business that does not pay invoices on time will eventually find it difficult to report its financial standings accurately. The study concludes the low the accounts payable (creditors), the low will be the accounts payable period and thus high performance.

The study concludes that the inventory conversion period is negatively and significantly related to financial performance (return on assets). The study indicated a unit decrease in the inventory conversion period would lead to a rise in the return on assets by 0.0623 units. Reducing the inventory conversion period could increase the shortage cost and make the companies gain their good credit customers, thus increasing financial performance.

The study concludes that the cash conversion period is negatively and significantly related to financial performance (return on assets). The results indicated that an increase in the cash conversion period by one unit would lead to a decrease in the return on assets by 0.1107 units. The cash conversion period is the interval of time (days) required to convert a shilling invested in current assets into cash. Investors and analysts are interested in a company's ability to generate cash and to have enough cash available to meet everyday demands, and vendors are interested in whether a company will regularly have cash available to pay for purchased goods. The lower the cash conversion period, the higher the financial performance since the company will have enough liquidity to meets its daily operations.

The study concludes that working capital financing policy is positively and significantly related to financial performance (return on assets). The study found an increase in working capital financing policy would lead to a rise in the return on assets by 0.1589 units. The working capital financing policy involves improving cash flow to allow for business opportunities. The higher the cash flow to the organization, the higher the financial performance.

The study concludes that working capital investing policy is positively and significantly related to financial performance (return on assets). The results indicated that a unit improvement in the working capital investment policy increases the financial performance (return on assets) by 0.0291 units. The working capital investing policy entails determining the level of investment in current assets for attaining targeted sales. Investing in the current assets has the chance of increasing the financial performance because of the short-term returns. Some of these short-term investments include high-yield savings accounts, government bonds and Treasury bills and money market accounts.

The study concludes that ownership structure moderates the relationship between accounts receivables collection period, accounts payment period, inventory conversion period, cash conversion period, working capital financing policy, working capital investing policy and financial performance of tea firms in Kenya. The coefficient of determination (R^2) before moderation was 65.69%, but after moderation, the R^2 increased significantly to 78.08%. The ownership structure includes whether the company is Multinational or is managed by KTDA.

The study recommends the tea firms should increase the level of the account receivables by increasing the debtors and develop faster methods of debtor's collection. This will automatically decrease the account collection period because more account receivables are expected to the business. Account receivables are part and parcel of the company's assets and are considered crucial in improving financial performance. The firms should not fear giving their products or services in credit since they will be paid later, which will boost financial performance. Shorter accounts receivables collection period implies that more money is expected to be generated by the companies within shorter time after debtors honor their debts.

The study recommends that the accounts payable period should be made as low as possible. The account payable period entails the time taken to pay the firm's suppliers. A firm with a long account payment period frustrates the supplier from supplying any more goods or services to the firms. Furthermore, in situations where the business does not pay invoices on time, it may be difficult to report its financial standings accurately. Thus, the accounts payable period needs to be maintained as low as possible and the firms need to pay any debts promptly if possible.

The firms need to increase the inventory conversion period. The study's findings found that the inventory conversion period is negatively and significantly related to financial performance (return on assets). Reducing the inventory conversion period could decrease the shortage cost and make the companies gain their good credit customers, thus increasing financial performance.

The study recommends that the cash conversion period needs to be kept low. The tea companies need to ensure the interval of time (days) required to convert a shilling invested in current assets into cash is minimized. This can be possible through increasing the accounts receivables collection period and reducing the accounts payable and inventory conversion period. Investors and analysts are interested in a company's ability to generate cash and to have enough cash available to meet everyday demands, and vendors are interested in whether a company will regularly have cash available to pay for purchased goods.

The study recommends that working capital financing policy and working capital investing policy need to be intensified. The companies can be involved more in improving cash flow to allow for business opportunities. The study recommends that the companies need to make more investment in current assets to accomplish target sales. Investing in the current assets has the chance of increasing the financial performance because of the short-term returns. The firms can make short-term investments such as high-yield savings accounts, government bonds and treasury bills and money market accounts to increase their financial performance.

It is recommended that Kenya Tea Development Agency Holdings (KTDA) need to be more innovative and look at the strategies utilized by the multinational firms to enhance their performance. The organizational structure moderates the relationship between accounts receivables collection period, accounts payment period, inventory conversion period, cash conversion period, working capital financing policy, working capital investing policy and financial performance of tea firms in Kenya. Those multinational firms were more productive than KTDA firms because the coding was that 1 denotes a multinational firm; 0 otherwise.

The study looked at the effect of working capital management decisions on the financial performance of tea firms in Kenya. The study covered multinationals and KTDA managed tea firms in the western part of Kenya (Kericho, Bomet and Nandi Counties). Thus, it is suggested that another study can be conducted on other regions that practice tea farming in Kenya, such as Mt. Kenya, Aberdares, Nyambene hills, Kisii Highlands and Cherangani Hills. Besides, the study can use other variables to determine performance, such as leadership styles, leverage level, employee competency and government policy. This will be fundamental in making the comparison and developing a more comprehensive conclusion.

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