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Mediating Effect of Operating Cash Flow on the Relationship between Working capital and Financial Performance of Tea Firms in Kenya.

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Abstract

Purpose: Many corporate firms incorporating those in the tea sector are normally interested in their corporate financial performance. This is particularly in regard to the manner in which their activities pertaining financing, investing and operating assignments, not only aid in generating incomes but similarly on how to maintain and manage the expenditures and costs of all these activities to their very minimal, with an objective of optimizing on firm's profitability. Notwithstanding the agitation for corporate financial performance generally and in particular profitability, still it is unclear on how the management of operating cash flow influence the corporate financial performance of firms in the tea industry in Kenya. The divergence in the management of operating cash flow policies across the tea industry is depicted in the discrepancy in the operating cash flow fluctuating from very high of these ratios to low current asset to total asset ratios.

Methodology: Regardless of the fluctuation in the management of operating cash flow management policies, still there is inadequacy of theoretical and empirical explicitness on the manner in which management of operating cash flow influences profitability of these corporate firms.

Findings: Empirically, numerous research studies arrives at varied findings on how operating cash flow is correlated with to the corporate financial performance. Theoretically, whereas the Miller- Orr model (1966) and Baumol model (1956) suggest optimal structuring of operating cash flow to enhance risk minimization and thus uplift financial performance. On the other hand, the Jensen and Meckling agency theory (1976) shortfall in pointing out an explicit relationship between the operating cash flow collection period and corporate financial performance. The stewardship theory of Gitman (1974), showcased an inverse association between operating cash flow collection period and profitability. The present research study is developed as a correlational research designed study employing the 40 multinationals and KTDA managed tea companies in tea sector in Kenya over a 6 year period covering 2014 to 2019. This forms 240 firm-year observations. Random-effects model regression model was employed after conducting specification tests for the model. The hypothesis testing was analyzed by employing the t-statistic at 95% confidence interval.

Unique contributor to theory, policy and practice: Having the foundation on the philosophy of positivist research design, the research results established that operating cash flow as measured by the ratio of cash and cash equivalent to current liabilities showed that it does not mediate the relationship between working capital management decisions and financial performance as measured by earnings before interest and taxes to total assets. This research study was confined to the tea factories under multinational and KTDA managed tea firms in Kenya and recommendation thereof is an increased sample for all tea firms in Kenya could be included in order to check out how it will influence the robustness of the findings.

Keywords: *Operating cash flow; Profitability; Financial Performance.*

I. Introduction

Globally, 1000 companies lose about \$2billion per year due to poor operating cash flow (UNCTD, 2017). The recent global financial and economic crisis has shown how important it is for firms to maintain a healthy cash position (World Economic Forum, 2015). The risk of becoming illiquid always increases in times of credit constraints and economic downturn. However, companies are still unable to properly assess their cash needs (Frankfurt Business Media, 2016). Maradi *et al.*, (2016) carried out a study at University of Florida, USA on operating cash flow and long-run stock-market performance, the study covered the time period of 2010-2016. The research study found out that, major investments were mostly financed with working capital providing at least half (50%) the required funds in the year of the investment. Only about 15-20% of the typical investments were financed by sale of equity, with internal funds supplying most of the remainder. In Regional Perspective, many sub-Saharan nations including Nigeria and Ghana finance their major operations using working capital. In Nigeria, studies found that large dividend payments reduce firms' free cash flows thereby reducing funds available for investment projects. In Ghana, 61% of SME's fund their operations using working capital, the remainder of finance being from other equity and debt. (Onoja & Ovayioza, 2015). In Kenya, external financing sources accounts for 79% of the total finances for the 2014-2017 period with the rest of 21% generated from internal sources (Kibet *et al.*, 2015). Working capital contributed about 61% while long-term sources accounted for the remaining 18% (Gathogo & Ragui, 2018).

Operating cash flow requires special attention in present days when cost of capital is rising and funds are scarce. It has been generally established that the financial performance of a firm largely depends upon the manner of its operating cash flow. If a firm is inefficient in managing operating cash flow, it will not only reduce profitability but may also lead to financial crisis. Both inadequate and excessive working capital is detrimental for a business concern. The excessive working capital can result in idle funds which could be used for earning profit while the inadequate operating cash flow will interrupt the operations and will also impairs financial performance (Chowd & Amin, 2012). Besides, a company's financial performance is an essential metric to management as it is an outcome which has been achieved by an individual or a group of individuals in an organization related to its authority and responsibility, not against the law, and conforming to the morale and ethic. Such performance is the function of the ability of an organization to gain and manage the economic resources in several different ways to develop competitive advantage (Hansen & Mowen, 2005). Naser & Mokhtar (2010) contend that high financial performance depicts effectiveness of the management and efficiency in utilizing company's resources, and is often expressed in terms of growth of sales, turnover, employment, or stock prices.

Although studies on operating cash flow have been carried out by various scholars such as Binti *et al.*,(2014); Wajahat & Syed (2014); Gul *et al.*,(2017); Oladipupo & Okafor (2017); Ahmad (2017); Akoto, Awunyo & Angmor (2017); Maradi *et al.*, (2016); Sharma & Kumar

(2015); Gill *et al.*, (2014); Wajahat & Syedr (2014) and Rahemann *et al.*, (2014), it is enlightening to take that largely there is still some degree of mixed understanding pertaining the relevant variables that might serve as proxies for operating cash flow management. These researches do not give distinct/definite direction of the association between working capital and firm's financial performance. Further analysis of these researches showed that there is minimal empirical proof on the operating cash flow management and its impact on the firm's financial performance in case of tea sector of Kenya. Therefore, the present study is an attempt to fill this gap and estimates the association between operating cash flow on financial performance of tea firms in Kenya.

A number of studies on working capital have been undertaken around the globe, however, majorly of them in the first world or western nations, with lack of clarity as to how operating cash flow affect financial performance among the tea firms particularly in the developing countries (Takhia *et al.*, 2016). These comprises of companies domicile in countries in Africa, which face peculiar tests or challenges regarding their accomplishments given unstable political environment, inadequate financing and unsatisfactory/deficient advancement in technology among others (Global/World Economic Forum, 2016). Similarly, myriad of theories have been established on operating cash flow management comprising the Miller- Orr model on cash management (1966), Baumol model on cash management (1952) and the model on inventory management. On contrary, 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). Studies on operating cash flow on Kenyan firms and in particular, the tea industry which is the cornerstone to the economy of Kenya, are not explicit, thus the need of this study.

While a number of studies on operating cash flow management have been carried out by various scholars such as Mutungi (2014); Wainaina (2014); Apuoyo (2014); Omesa *et al.*, (2017); Maradi *et al.*, (2016); Nyabwanga *et al.*, (2016); Gakure *et al.*, (2016) and Mathuva (2014), it is evident that there is still no consensus in respect of the relevant variables that might serve as proxies for operating cash flow management. These studies do not provide clear-cut direction of the association between working capital and firm's financial performance. Further analysis of these researches shows that there is minimal of empirical evidence on the operating cash flow management and its impact on the firm's financial performance in case of tea sector of Kenya. Therefore, the present study sought to fill this gap by estimating the association between operating cash flow on financial performance of tea firms in Kenya.

Operating cash flow management is a fundamental area of study in the field of financial management (Malhotra & Singh, 2018). The discipline of financial management is among the numerous discipline areas in management which is critical and established as fundamental to the success of all business organizations. It entails controlling, organizing, coordinating, planning and

managing the entire resources of a financial nature of any business concern and dictates how these resources can be properly managed to attain success of an organization. In summary, it surrounds the major of managers of financial resources of the firm in regard to risk , dividend, capital structure, working capital, financing and capital budgeting. Poor management of finance, summed with business environment's uncertainty normally drives business entities to huge financial management problems (Dew, 2012). In a nutshell, businesses firms are encouraged to employ stringent financial measures geared toward at uplifting their corporate financial performance.

According to Bedir and Vijir, (2016), poor operating cash flow management practices are the major forces behind failure of business entities and poor corporate financial performance. Irrespective of whether it is managed by the owner or manager that has been hired, incase the management of the operating cash flow are wanting, financial performance of the firm could be negatively affected and as a result, the whole business enterprise (Carry *et al.*, 2017). Oladipupo and Okafor, (2017) pointed out that the decisions employed for managing the operating cash flow are critical due to the fact that they have implications of risk and return.

Gesimba, Langat & Wolukau (2018) posit that the success of tea industry in Kenya is correlated with the operating cash flow management strategies employed by the firm. Many empirical studies (Javed & Akhtar, 2016; Mukras & Oginda, 2017 Mutungi, 2014; Wainaina, 2014; Apuoyo, 2014; Omesa *et al.*, 2017; Maradi *et al.*, 2016; Nyabwanga *et al.*, 2016; Gakure *et al.*, 2016; and Mathuva, 2014) hold the view that operating cash flow management efficiency is vital especially for tea firms, where a greater percentage of assets comprises of current assets especially trade receivables and inventory. The fundamental objective of accounts' receivable management is to reduce and alleviate the loss occasioned by the irrecoverable debts. To establish a perfect management of debt, the manager in charge of finance must aim at analyzing policy on credit, undertake analysis of credit and evaluate collection Policy. The operating cash flow management and the associated working capital are geared towards optimization of the balance between the returns and risks of managing and holding these said assets. Therefore, this study sought to establish the mediating effect of operating cash flow on financial performance of tea firms in Kenya. Hence, this study hypothesized that:

H₀: Operating cash flow has no significant mediating effect on financial performance of tea firms in Kenya.

II. Theoretical Framework

Three perspectives in relation to literature have been adopted and are analyzed in this segment, where entirely all are summing up to the hypothesis of this research study. They comprises of the conceptual perspective, theoretical perspective and empirical perspective to the related literature. In regard to conceptual approach, operating cash flow in simple terms is defined as the relative proportions short term assets of many categories of working capital that are due from debtors in

the business firm (Javed & Akhtar, 2016). Carried to its final conclusion, the meaning of this shows that of the many classes of working capital identified by Gill (2015), each specifically can be associated with the other or the sum total and entirely these could remain fundamental concepts of working capital. Mathuva, (2014) pinpoints working capital as short term assets, which comprises of inventory, cash and accounts payables.

Pertaining the theoretical perspective, there are several theories that attempts to expound on how operating cash flow can be correlated with to the corporate financial performance of a firm. The Jensen and Meckling (1976) agency theory fall short on pinpointing an explicit relationship between the operating cash flow and corporate financial performance. Its assumptions theoretically mean that managerial conflict of interest and their opposition with maximization interests of the owners' wealth could generate operating cash flow that are huge, different and not in harmony with the manner in which these interests are organized. The result is that the tendency of managerial influence by personal interests may make operating cash flow poor like management of earnings which ultimately would affect the manner in which how operating cash flow influence to financial performance. Therefore, since finance managers are in control of both the reporting operating cash flow and financial performance, they can correlate both to their personal merit making it cumbersome on how the two associate with each other.

Regarding the related studies in the global environment, Binti & Saad (2014) revealed in the study of 171 listed Malaysian firms that current ratio is negatively significant to financial performance. Their study emphasized the importance of proper management of working capital as it affects firm's market value and financial performance. They also suggested that operating cash flow management should be part of the company's strategic and operational processes in order to be effective. Wajahat *et al.*, (2014) found no significant association between financial performance and operating cash flow when grouped as aggressive, defensive or conservative based on operating cash flow of 37 listed firms in the OMX Stockholm Stock Exchange. The ratio of current asset to total assets of the observations in this study was another proxy variable for operating cash flow management, but the data failed the tests of normality. Because of this limitation, dummy variables were used instead to capture the effect of operating cash flow on financial performance.

Pertaining related studies in the Kenyan environment, Mutungi (2014) sought to find out the association between operating cash flow management and financial performance of oil marketing firms in Kenya registered with the Petroleum Institute East Africa within Nairobi and its environs. Her sample consisted of 59 registered oil marketers in Kenya. She noted that operating cash flow have a huge effect on the company's risk, return and share price. The study concluded that for a company to operate efficiently, receivables and inventory must be tightly monitored and controlled. More fundamental is the effect of having an adequate level of working capital which is very important for the growth and sustainability of a company. Wainaina (2014) sought to establish the association between financial performance and working capital of small and medium

enterprises in Kenya. This research study focused on a sample of 42 corporate firms whose sales turnover was in the range of Sh. 15 Million and Sh. 600 Million. Her research study focused on corporate firms in the information, communication and technology, construction industries and general trade sectors. The study revealed that there exists no association between operating cash flow and financial performance for companies in the construction, ICT and transport sector. However, there was a positive association between financial performance and cash conversion for industries in the General Trade and Agricultural Sectors. The study further revealed that there was a positive association between financial performance and inventory days in all the sectors of the study. The study concluded that higher inventory is needed to meet higher demand and thus inventory should be maintained at reasonable levels.

From the foregoing review of relevant literature, it is evident that research in the area of operating cash flow has been done but not in a comprehensive policy. Previously, there have been many studies both internationally and locally on the variables in the current study and their associations. Some of these studies have tried to explain the association between operating cash flow and financial performance and others on accounts payables, inventory focusing on sampled firms within the various economies. ROE was used to measure financial performance. Other studies have sought to establish the effect of other financing decisions on the long-run market performance of Companies. There have no concrete conclusions on the same within the tea industry in Kenya. This study seeks to bridge any gaps by specifically addressing the effect of operating cash flow management on the financial performance of tea firms in Kenya.

Above all, the literature review indicates that operating cash flow have impacts on financial performance, liquidity and performance of a firm. The company's efficiency on operating cash flow has lasting impact on company performance. Cash conversion efficiency days operating cycle and days working capital in the overall working capital performance criterion not only helps in performance evaluation but also will capture the dynamics of risk-return trade off. Hence, economic value added, Tobin's Q ratio, ROI, ROE, and ROA are the most important measure of firm's performance and financial performance. Indeed, the company's inventory, debtors' management and creditors' management play an important role in its financial performance.

Even if, the literature review indicated that operating cash flow has impact on the financial performance, liquidity and value of a firm but there still vagueness regarding the appropriate variables, hypotheses and effect size measures that might serve as proxies for operating cash flow management as a whole. Hence, literature review consisting some of previous studies though limited in scope, methodology and overall output. Likewise, lack of not incorporating all relevant and most important variables (independent and control) used to measure both working capital and firms performance, it creates difficulty for comparability of studies conduct in similar areas. Moreover, it is evident from the literature that not much of the studies have been able enough to develop a model that will assist managers to establish an optimum working capital under different

operating environments or even industries. Instead the literature and studies suggest the existence of an optimum level without necessarily suggesting the same level or how to be established. As a result, first the researcher will attempt to identify major relevant variables which are missed or not included in previous studies. So as to reveal the contents or new variables, all variables would enhance the finding and fill the problem of missing important variables which was observed in previous studies and in their dimensions in depth.

Despite the fact that operating cash flow management is a frequent area of research in finance and accounting, there is very little study that has been carried out on tea firms in Kenya, especially on the mediating effect of the operating cash flow. Emerging from the literature review, there are several literature gaps that are filled by this study. Firstly, there is lack of knowledge with respect to the level of operating cash flow management among the tea firms in Kenya, yet investors and other stakeholders rely of financial statements for vital decision making. The studies done on the effect of operating cash flow management have almost exclusively been derived from studies on firms outside of Kenya particularly Western nations like UK, USA, and others in Japan, India and Australia. The seminal work of Beattie & Thomson (2011) in UK has been followed up by Brigham & Ehrhardt (2005) of Ohio, USA and Hsueh (2017) of South East Asia all with conflicting results from the foreign markets.

The existing studies relating operating cash flow management variables to financial performance have not considered the interactive effect of the different operating cash flow management components on financial performance. The studies, instead, focus on the effect of individual operating cash flow management variable on performance. Some of the studies, for instance, have considered the operating cash flow alone on financial performance (Abdul, 2016; Javed & Akhtar, 2016; Abdulahi, 2015; Pratheepkanth, 2015; Salehi & Biglar, 2013). Others were on accounts payables alone on financial performance (Campello 2011, Dube 2017, Zender, 2014). Other studies have considered effect of inventory management only on financial performance (Ogundipe *et al.*, 2016; Bhunia & Das 2016; Mathuva, 2013). The present study will contribute to the knowledge gap by adding a new dimension in the examination of the mediating effect of the operating cash flow on the relationship between working capital management and financial performance in Kenya. This study, therefore, will attempt to fill these gaps in the literature.

In conclusion, whereas empirical studies on operating cash flow in Kenyan produced mixed results (Gathogo & Ragui, 2018; Gesimba *et al.*, 2018; Gweyi & Karanja, 2018.; Kibet *et al.*, 2015), the existence of moderating effect of ownership structure has never been determined. This brings into light serious literature gap in the corporate sector in Kenya. This study therefore, will form a foundation upon which an investigation of the effect of operating cash flow on financial performance among the tea firms in Kenya will be carried out.

Evident from the literature, there is lack of consensus as to whether and how operating cash flow influence financial performance. Some of the studies faults data collection methods and

others data analysis techniques (Azam & Haider, 2015 and Butt *et al.*, 2014). Memba and Nyanumba (2017) disputed this argument and were supported by Mule and Mukras (2015). Many other scholars stood on extreme opinions while others maintained moderate policy and they indicated that indeed there is a moderating effect of ownership structure (Munene, Memba, 2015 and Xayphone, Tatsuo, 2016), while others accepted that ownership structure actually moderate the association between operating cash flow and financial performance (Abdulahadi & Jean 2018, Ibrahim & Sangiru 2015). Odhiambo (2018) for instance cited that operating cash flow management do not influence financial performance, with ownership structure being a moderator.

Despite numerous studies, the association between operating cash flow and financial performance is not clearly understood, A number of studies support a negative association between the variables (Fama & French, 2008, Booth *et al.*, 2001) while some studies have found a positive association (Javed & Akhtar, 2016; Berger & Bonaccorsi, 2011; Hadlock & James, 2008). Further, Ebaid (2013) indicate that operating cash flow management has a weak-to-no impact on firm's performance. In addition, the studies relating to financial leverage have focused more on long-term operating cash flow management. The present study will consider both long-term and short-term operating cash flow management and their effect on financial performance of tea firms in Kenya.

Studies relating operating cash flow management as measured by ARCP have also yielded contradictory results. Whereas Sharma and Kumar (2015) indicate that financial performance increases with increase in ARCP, other studies (Ogundipe *et al.*, 2016; Dong & Su, 2014; Mathuva, 2013) reveal a negative association between ARCP and financial performance. The current study, therefore, seeks to establish the effect of ARCP and financial performance of tea firms in Kenya.

Many of the reported studies on the association between operating cash flow and financial performance have been conducted in developed countries where capital markets are well-developed (Pratheepkanth, 2015; Salazar & Soto, 2016). The Kenyan capital market is relatively under developed and therefore the traditional capital structure theories that have their origin in the developed countries needed to be tested in the Kenyan context as in the present thesis. The present study sought to investigate the effect of operating cash flow on financial performance, and further, examined the moderating effect of ownership structure (multinationals and KTDA managed tea firms) on the association between operating cash flow and financial performance of tea firms in Kenya.

In summary, the literature review provides numerous literature gaps that lay the foundation for this current study. It points out that there is shortage of knowledge regarding the effect of operating cash flow among companies in Kenya, especially in tea sector; however much of these information is needed by potential investors to facilitate them make informed investment decisions. Similarly, available literature disregards the aspects moderating effect of ownership structure in influencing the association between operating cash flow and financial performance. In

addition, there is complete silence in the literature on how financial performance of tea sector in Kenya is influenced by operating cash flow management. In a nutshell, the availability or lack of it, of the moderating effect of ownership structure of operating cash flow components on the relationship between operating cash flow management and financial performance of tea firms in Kenya has never been established, hence the need for this study.

III. Methodology

The leading theoretical and empirical literature leads to the conclusion that it is implicit how accounts receivable influences the financial performance of multinational and KTDA managed tea firms in Kenya. This was presented as follows:

H₀: Operating cash flow has no significant mediating effect between working capital management and financial performance of tea firms in Kenya

Using return on assets (ROA) as the dependent variable and operating cash flow (OCF) as measured by the ratio of cash and cash equivalent to current liabilities, mathematically this hypothesis can be depicted that in a bi-variate relationship of ROA and OCF, then the coefficient of OCF is not significantly different from zero.

$$H_0 = \beta_1(OCF)_{it} \approx 0$$

The results of this research study add to the knowledge of financial performance of tea firms in Kenya. The results of financial performance of tea firms in Kenya in this research study generally stretch the literature of the discipline of financial and in particular on financial performance of tea firms in Kenya. The results of the research study provide fundamental contributions for both practical and theoretical viewpoints where it expands the general understanding of the function of financial performance of tea firms in Kenya.

III. Methodology

The foundation and orientation of this research study is built on the philosophy of positivism according to Kasim *et al.*, (2015) which encompasses the scientific approach to design that began from identification of the problem of the study, that, it is explicit on the manner in which operating cash flow influences corporate financial performance of tea firms in Kenya. Therefore, this was then conceptualized on the solid foundation on review of literature long before testing of hypothesis was undertaken. Correlational research design is employed. This was perceived to be appropriate and relevant since firstly, it examines the inter-correlation between operating cash flow collection period and corporate financial performance in the tea firms in Kenya and secondly, there is some predicted linear relationship as earlier postulated in the research hypothesis of the study.

This research study employed census approach of all the multinational and KTDA managed tea firms in Kenya. The tea firms were selected due to the fact that published financial

statements were available of from the audited financial statements sources because this research study depended on secondary data. The research data was therefore collected by applying data abstraction tools and data collection sheets and it included, among others, the earnings after tax (EAT), the sales turnover, creditors, the current assets, inventory and the total assets. The scope of time of this research study was 6 years capturing the years 2014 to 2019. A bi-variate panel regression model was employed in the data analysis as indicated in the model 1.

$$ROA_{it} = \beta_0 + \beta_1(OCF)_{it} + \varepsilon_{it} \dots\dots\dots (1)$$

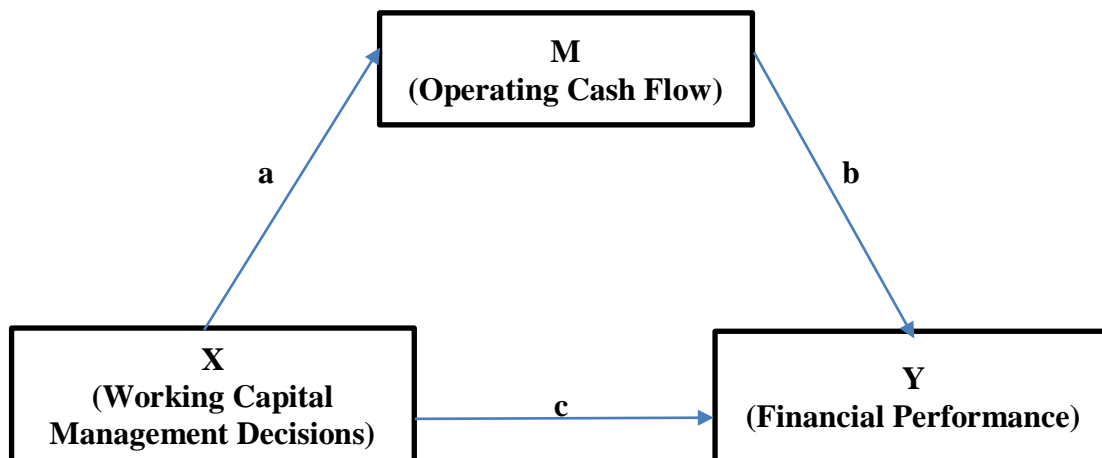
$$OCF_{it} = \text{Cash and Cash Equivalent}_{it} / \text{Current Liabilities}_{it} \dots\dots\dots (2)$$

β_0 =Constant

OCF = Operating cash flow of tea firms in Kenya

ε = Error term

Mediating Variable (Operating Cash Flow)



Independent Variables
(RAD, PAD & ITD)

Dependent Variable
(ROA)

Figure 3.1: Mediating Effect Model Analysis

Source: Baron and Kenny (1986, pp. 1176)

The identification of the most appropriate panel data to be applied for this research study was formed on the basis of specification of the tests of the model in selecting between random effects and fixed effect of the study model. The hypothesis testing of was undertaken at 95% confidence interval by employing the p-value at 0.05 level of significance and t-statistic. This was

undertaken for the purposes of the analysis of inferential statistics and was executed after the analysis of descriptive statistics.

IV. Findings and Discussion

The correlation between variables of the research study was examined and the analysis of the discussion of the panel regression is presented below.

For this research study, the researcher aimed at investigating the mediating effect of operating cash flow on the association between the receivable accounts in days, payable accounts in days and inventory turnover in days and financial performance of tea firms in Kenya. The null hypothesis of this research study was that operating cash flow does not significantly mediate the association between WCM decisions and financial performance. For the researcher to achieve this objective, the research study first undertook the test to determine whether the root between the mediator and the dependent variable, between the independent variables and the mediator, between the independent variables and the dependent variable, were actually statistically significant. The study specified the model by having the return on asset as the dependent variable, then tested whether accounts receivable in days, Payable accounts in days, inventory turnover in days, firm size and sales growth, show any statistical significant relationships with operating cash flow. The results for the regression are as shown in table 1.

Table 1: Regression of mediator with Independent Variables

Variable	Coefficient	Std. Err.	Z	p>z
Receivable Accounts in Days	-0.0034859	0.0083618	-0.32	0.594
Payable Accounts in Days	-2.492847	2.025837	-1.18	0.149
Inventory Turnover in Days	0.0611945	0.7159349	0.07	0.817
Firm Size	0.0034184	0.1705375	0.01	0.979
Sales Growth	0.8471583* *	0.2073949	2.41	0.213
Constant	-7.893483	4.174936	-1.95	0.072

Source: Study Data (2022)

The correlation between receivable accounts in days and operating cash flow (OCF) is presented in Table 4.9, and established it is not statistically significant at 10 percent level. The coefficient of receivable accounts in days is -0.0034859 and the associated p-value of 0.594, which is greater than 0.1 critical value. Similarly, the results shown in Table 1 further indicates that payable

accounts in days shows a coefficient of -2.492847, which is negative and insignificant relationship with OCF at 10 percent level, while the associated p-value is 0.149 which is higher than 0.1. In addition, the results in Table 4.9 further reveal that the inventory turnover in days reveals a coefficient of 0.0611945, which is positive but insignificant relationship with OCF at 10 percent significant level, while the associated p-value is 0.817, which is higher than 0.1. Therefore, in light of the recommendations as proposed Baron and Kenny (1986), the presented results at this stage regarding regression of mediator with independent variables reveal that operating cash flow has no mediating effect on the relationship between WCM decisions and financial performance.

Based on the above outcome, this research study supported this result by undertaking further tests to find out whether operating cash flow determines return on asset and whether accounts receivable in days, Payable accounts in days, inventory turnover in days and the firm size as the control variable, significantly predicts return on asset. Table 2, Table 3 and Table 4 presents the results for testing for this relationship, which depicts that this research study revealed that operating cash flow lacks a mediating effect on return on assets as was proposed by Baron and Kenny (1986).

Table 2: Regressing Independent Variables on ROA (Path c)

Variable	Coef.	Std.Err.	Z	p>z
Receivable Accounts in Days	-.0001395	.0002748	-0.30	0.073
Payable Accounts in Days	-.103728	.093483	1.85	0.094
Inventory Turnover in Days	.0479383	.0238294	1.96	0.081
Firm Size	0.01784	0.19043	0.11	0.395
Sales Growth	0.05643**	0.3897	2.85	0.267
Constant	.0373894	.1738585	0.28	0.765

Source: Study data (2022)

The presented results contained in Table 4 above shows that the relationship between receivable accounts in days and returns on assets (ROA) is statistically significant at 10 percent level. The coefficient of receivable accounts in days is -.0001395 and the associated p-value of 0.073, which is less than 0.1 critical value. Similarly, the results shown in Table 4.9 further indicates that payable accounts in days shows a coefficient of -0.103728, which is negatively and significantly related to return on assets at 10 percent level, where the associated p-value is 0.094 which is less than 0.1. In addition, the results in Table 4.9 further reveal that the inventory turnover

in days shows a shows a coefficient of -0.0479383, which is negatively and significantly related to return on assets at 10 percent significant level, where the associated p-value is 0.081, which is less than 0.1. Therefore, in light of the recommendations as proposed Baron and Kenny (1986), the presented results in Table 2 regarding regression of independent variables with returns on assets reveal that independent variables is negatively and significantly related to and financial performance.

Table 3: Regressing Independent Variables on Mediator (Path a)

Variable	Coef.	Std.Err.	Z	p>z
Receivable Accounts in Days	-0.0036828	.0078352	-0.38	0.739
Payable Accounts in Days	-2.387520	2.159370	-1.43	0.474
Inventory Turnover in Days	-.0683026	.7173839	0.06	0.385
Firm Size	0.01785	0.14495	0.01	0.1784
Sales Growth	0.7694* *	0.10532	2.095	0.175
Constant	-5.937392	4.539493	-1.84	0.096

Source: Study data (2022)

The presented results contained in Table 2 above shows that the relationship between receivable accounts in days and operating cash flow (OCF) is not statistically significant at 10 percent level. The coefficient of receivable accounts in days is -.0036828 and the associated p-value of 0.739, which is greater than 0.1 critical value. Similarly, the results shown in Table 1 further indicates that payable accounts in days shows a coefficient of -2.387520, which is negative and not statistically significantly related with OCF at 10 percent level, where the associated p-value is 0.474 which is higher than 0.1. In addition, the results in 1 further reveal that the inventory turnover in days shows a shows a coefficient of -.0683026, which is negative but not statistically and significantly related with OCF at 10 percent significant level, where the associated p-value is 0.385, which is higher than 0.1. Therefore, in light of the recommendations as proposed Baron and Kenny (1986), the presented results in Table 4.10 regarding regression of mediator with independent variables reveal that operating cash flow has no mediating effect on the relationship between WCM decisions and financial performance.

Table 4: Regressing ROA on OCF and Independent Variables (Path a & b)

Variable	Coef.	Std.Err.	Z	p>z
Operating Cash Flow	.0074917	.0013648	-4.73	0.731
Receivable Accounts in Days	-.0002374	.0004989	-0.23	0.848
Payable Accounts in Days	-.0228528	.065285	1.39	0.551
Inventory Turnover in Days	-.0357494	.0211280	1.57	0.648
Firm Size	0.019043	0.10548	0.02	0.503
Sales Growth	0.7494**	0.10564	2.72	0.643
Constant	-.0821794	.2758317	0.794	-.3712584

Source: Study data (2022)

The presented results contained in Table 4 above shows that the relationship between operating cash flow and returns on assets (ROA) is not statistically significant at 10 percent level. The coefficient of operating cash flow is .0074917 and the associated p-value of 0.731, which is greater than 0.1 critical value. Further, the results contained in Table 4 above shows that the relationship between receivable accounts in days and returns on assets (ROA) is not statistically significant at 10 percent level. The coefficient of receivable accounts in days is -.0002374 and the associated p-value of 0.848, which is greater than 0.1 critical value. Similarly, the results shown in Table 4.12 also indicates that payable accounts in days shows a coefficient of -.0228528, which is negative and not statistically significantly related with ROA at 10 percent level, where the associated p-value is 0.551 which is higher than 0.1. In addition, the results in Table 4 further reveal that the inventory turnover in days shows a shows a coefficient of -.0357494, which is negative but not statistically significantly related with ROA at 10 percent significant level, where the associated p-value is 0.648, which is higher than 0.1. Therefore, in light of the recommendations as proposed Baron and Kenny (1986), the presented results in Table 4.10 regarding regression of mediator and independent variables on ROA reveal that operating cash flow has no mediating effect on the relationship between WCM decisions and financial performance.

The hypothesis to be tested was;

H₀₄: There is no statistically significant mediating effect of the operating cash flow on the relationship between receivable accounts in days, Payable accounts in days, inventory turnover in days and financial performance of tea firms in Kenya.

The hypothesis was tested by was tested by employing the mediation test of Sobel-Goodman. This research study used the step-wise regression process, which is the logic of Baron and Kenny (1986) and determined using the p-value. The acceptance/rejection criterion was that if the p-value is less than 0.1, we reject the null hypothesis (Ho), but if it is more than 0.1, the Ho is not rejected. In light of results presented in appendices 12 and 13, shows the p-values that indicates bootstrapped standard errors, the Sobel-Goodman mediation test proposed that operating cash flow lacks any influence return on assets through either accounts receivables, accounts payables, inventory turnover in days and firm-size and sales growth as a control variables. Therefore, there is no statistically significant mediating effect of the operating cash flow on the relationship between working capital management and financial performance of tea firms in Kenya.

V. Summary and Conclusions

The objective of this research study was to investigate whether operating cash flows mediate the relationship working capital management and financial performance of tea firms in Kenya. By employing the stepwise regression, the Sobel-Goodman test revealed that operating cash flow did not mediate the relationship between WCM decisions and financial performance of tea firms in Kenya. However, the results of this research study revealed that operating cash flow had a significant positive relationship with financial performance of tea firms in Kenya.

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