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Moderating Effect of Ownership Structure on the Relationship between Working Capital Management Decisions and Financial Performance of Tea Firms in Kenya

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Abstract

Purpose: The general objective of this research study was to examine the moderating effect of ownership structure on the relationship between working capital management decisions and financial performance of tea firms in Kenya. Expansive research studies are available on the strategies employed by tea firms to boost their financial performances. However, Very minimal of these research studies are geared towards the contribution of working capital management decisions employed by these companies within the tea sector in Kenya.

Methodology: The study employed a correlational research design. The data was collected was collected from the audited financial statements of all the multinationals and KTDA managed tea firms in Kericho, Bomet and Nandi counties of Kenya. The data was analyzed by employing both descriptive and inferential statistics.

Findings: This research study revealed that there exists a moderating effect of ownership structure on the relationship between working capital management decisions and financial performance of tea firms in Kenya.

Unique contribution to theory, practice and policy: The research study recommended that the KTDA managed tea firms should be advised to adopt the strategies employed by multinational tea firms in order to boost and improve their financial performance. Tea firms are strongly cautioned against increasing accounts receivables period, accounts payables payment period and inventory conversion period because this would minimize their financial performance in the long-run.

Keywords: *Tea sector, financial Performance of tea firms, multinational, Ownership structure*

I. Introduction

Performance of business organizations in any sector of the economy is fundamental to management since it depicts the results which have been attained by an employees or a group of

employees in that business firm. Top executives and managers in various business firms normally target to attain a economies of scale in their companies in various sectors where they are domiciled or do business. In order to attain certain goals of their organization and achieve targeted objectives, firms implement, design and conceptualize, several strategies used to manage firms resources. These strategies may include among others, functional, business and corporate strategies, among them working capital decisions (Mutungi, 2014).

Production of tea in Kenya has placed the country Kenya visible on the global map, with in excess of 70 countries purchasing Kenyan tea (Nyabwanga, *et al.*, 2016). The Kenya's economy produces 11% of the sum aggregate of the world's production tea and remarkably commands a 23% of world's exports of tea beyond the borders of producing countries. The Kenya's tea sector accounts for up to 15% of the GDP from agricultural, which is equal to approximately 5% of GDP of Kenya's economy (KNBS, 2016). An approximately 4 million populations of Kenyan (approximately 11% of the aggregate population) earn their living from the production of tea. Presently, tea is ranked as second in the Kenya's foreign exchange earner just after tourism, accounting for approximately 27% of the aggregate earnings from foreign exchange (TBK, 2015). In Kenya, tea manufacturing and growing takes place in rural areas, therefore accounting to the rural infrastructural development, at the same time boosting the well-being of the rural community's economy.

The vibrant industry is characterized by two sectors that have different ownership structures: estate plantations (owned by multinationals tea firms) established in the early 1920s with production units larger than 20 ha, and smallholders (KTDA Managed tea firms) established after independence in 1964 with smaller units averaging only 0.25 ha per farmer. Smallholders continue to dominate tea production in Kenya. Small-scale production accounts for 65 % of area and about 62 % of production (Jared & Albert, 2017). However, according to Kagira *et al.*, (2016) the average yield per hectare is higher in large estates than smallholder farms largely due to better use of technology, inputs, and economies of scale. While yields in the estates have declined/stagnated in the last decade, smallholder yields have continued to rise overtime.

Mathuva, (2014) posit that the success of tea industry in Kenya is correlated with the WCM decisions employed by the firm. Many empirical studies (Javed & Akhtar, 2016; Mukras & Oginda, 2017; Gesimba *et al.*, 2018, Maradi *et al.*, 2016; Nyabwanga *et al.*, 2016; Gakure *et al.*, 2016; and Mathuva, 2014) hold the view that WCM efficiency is vital especially for tea firms, where a greater percentage of assets comprises of current assets especially trade receivables and inventory.

In a nutshell, 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 (Kagira *et al.*, 2016). Numerous research studies regarding 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, however, directors/managers requires simple and easy to use models (Kagira et al.,2016)). In such events relating to changes in organizational context, 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 necessitate the need for a conceptual framework explaining current WCM decisions. 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 (ARCP, ICP, APPP, CCP, WCIP and WCFP) on financial performance of tea firms in Kenya. In addition, the study explored moderating effect of ownership structure (multinational and KTDA managed tea firm) on the association between WCM decisions and financial performance, albeit within the context of tea firms Kenya.

Regarding the statement of the problem, Tea sector is famous as one of the fundamental pillars of development of an economy in the world at large because it enhance foreign exchange and further giving the citizen an opportunity to earn a living by carrying out their daily business operations (Nyabwanga et al., 2016).Its financial performance and working capital management decisions therefore cannot be disregarded. Numerous research studies undertaken by different research scholars have tendency of leaning towards areas of firm's profitability, for instance (Nyabwanga et al., 2016), accounts recivables (Gesimba et al., 2018), inventory management (Cheluget, *et al.*, 2014) and cash management (Otieno, 2016) thus leaving the moderating effect of ownership structure on the relationship between working capital management decisions on financial performance unattended. Related studies on financial performance of tea firm was undertaken out by Gesimba et al., (2018) on performance of Nigerian firms, where they found that the correlation between accounts receivables and tea firm's financial performance was significantly and adversely affected by the level of geographical diversification. In light of these, even though research studies on tea industry have been undertaken, there is little literature on research studies undertaken that are associated with the moderating effect of the ownership structure on the financial performance of tea firms within the tea industry in Kenya. This research study therefore aimed to bridge this existing gap in the literature by embarking on the study to establish the moderating effect of the ownership structure on the relationship between working capital management decisions and financial performance of tea firms Kenya.

Pertaining the specific research objectives, the aim of this research study is to establish the moderating effect of the ownership structure on the relationship between working capital management decisions and financial performance of tea firms Kenya.

The research hypotheses of this research study was that there is no statistically significant moderating effect of ownership structure on the relationship between accounts receivables collection period, accounts payment period, inventory conversion period, cash conversion period, WCM policies and financial performance of tea firms in Kenya.

II. Theoretical Framework

Accordingly, a moderating variable specifies when or under what conditions a predictor variable influences a dependent variable (Baron & Kenny, 1986). A moderator variable may reduce or enhance the direction of the association between predictor variables and a outcome variable, or it may even alter the direction of the association between the two variables from negative to positive and vice versa (Mukras & Oginda, 2017).

Literature review provides evidence that ownership structure represents an important monitoring variable regarding management decisions and managerial opportunistic behaviour of different firms. It is one of the factors explaining the performances of firms across the board; yet the level and direction of its effect remained contentious (Ongore, 2015).

Mukras & Oginda, (2017) examines how different forms of ownership structures including foreign ownership, government ownership, and managerial ownership moderate the association between free cash flow and asset utilization. This cross-sectional study involved companies listed on Bursa Malaysia. The results of a hierarchical multiple regression analysis showed a negative association between free cash flow and asset utilization. This study has also empirically demonstrated that foreign and managerial ownership provides monitoring on the use of the companies' assets, especially in companies with high free cash flow. The findings contribute to the understanding of the role of the various dimensions of ownership structure in overseeing the use of the firm's assets.

Regarding foreign verses domestic firms, there are scholars who claimed that foreign firms perform better with high profit margins and low costs compared to domestic owned firms (Su and Tam, 2014). This is so because foreign owned firms are believed to have tested management expertise in other countries over years. Moreover, foreign firms often customize and apply their operation systems found effective at their home countries (Ongore, 2015). It is also assumed that firms crossing boundaries are often those big and successful ones. Foreign banks were found to be more profitable than their domestic counterparts. The major reason behind these assertions is that foreign banks were believed to be strong & efficient.

Accordingly, in reference to business research, various moderating variables is being employed. Specifically, the most widely applied moderating variables in researches in business field are turbulence in the market, turbulence in technology, ownership structure, intensity in competitive, type of strategy employed, strategic orientation, age of the firm, size of the firm, type of the industry, mindset of the entrepreneur, culture of the organization, structure of the

organization, dynamism in the environment, etc. A synopsis of the salient features of these moderators, their application in the contexts of research and findings are hereby analyzed as given below:

Market Turbulence: This is extensively applied as moderator in research in business field. Normally, it is measured on a likert scale with an objective of examining the degree to which the architecture or content and choices of a company's debtors tend to change over a period of time. Turbulence in the market moderates the association between business performance and market orientation. The greater is the sensitivity of customer choices and their architecture/formation, the greater the effect of market orientation (Jawoski & Koli, 2017).

Technological Turbulence: This connotes the extent of change related to process and product technologies in the industry in which a firm located/installed (Hanvan et al., 2016). Normally it is measured on a likert scale. Turbulence in Technology moderated the association between market orientation and performance in business in some particular studies (e.g., Slat and Naver, 2009; Grew & Tansu, 2011; Ross and Shoh, 2012; Pulend et al., 2013; and Sulliv & Butl, 2015). Nonetheless, it failed not moderate market orientation and business performance association in other different studies (e.g., Pulendran et al., 2010; Harr, 2011; Kirc et al., 2015; and Azizi & Yass, 2012). The association between market orientation and innovation in organizational is moderated by turbulence in technology (Ham et al., 2008). Turbulence in technology moderated the association between total quality management, market orientation and performance of hotel organizations (Wanng et al., 2013).

Ownership Structure: This stands for the degree to which companies inside an industry exerts pressure among each other to gain market share. Besides, these firms have various unique differentials/gaps such as wage gaps (employment culture), skill gaps (management competence), and labour relations gap (management culture & industry politics), productivity gaps, growth gaps (economies of scale), profitability gaps, technology gaps, and, among others which offers them competitive advantage over others. Many business researchers have employed ownership structure as moderating variable in their researches to moderate financial management decisions and performance of firms (Ross and Shoh, 2012; Azizz and Yass, 2011; Huiis et al., 2014, Vijr and Faroq, 2015; Bed and Vijr, 2016; Azizz and Sam, 2017; and Raf et al., 2015).

Competitive Intensity: This connotes the degree to which firms within an industry exerts pressure on each other and curtail each other's potential for profits. Review of related literature indicates the application of intensity of competition as a moderator in several researches (e.g., Slate & Narve, 2016; Pulend et al., 2015; Grew and Tansuh, 2011; Harr, 2012; Subra & Gopal, 2013; Ross & Shoh, 2012; Azizz & Yassinn, 2014; Wangin et al., 2013; Garcí et al., 2012; Adnann et al., 2015; and Rank & Streng, 2017).

Strategy Type: Regarding research in business field, type of strategy is normally operationalised in two folds; namely in terms of Snow & Miles (1979) classification or Porter's (1981) generic strategies. Several researchers in the field of strategy have applied the type of strategy as a moderator in their researches (For example Hitten et al., 2012; Hombur et al., 2011; Matsun et al., 2014; and Pelh, 2016). Matsun et al., (2014) revealed that the influence of market orientation on performance deviates across types and there is more substantial association between market orientation and performance of business among companies which apply a prospector strategy or analyzer strategy instead of employing the defender or reactor strategy.

Entrepreneurial Orientation: This is referred to as the company's predisposition to embrace processes of entrepreneurial, making decisions, as evident by its choices for being innovative, taking risk and being proactive. Pro-activeness and innovativeness is commonly applied in moderating the association between market orientation and performance of business (Lit et al., 2018; Merlir & Auhar, 2014). Entrepreneurial orientation has been applied to moderate the association between entrepreneurial intention and entrepreneurial skills (Ibram & Masid, 2017). Entrepreneurial orientation showed negative moderation in the association between risk of business failure and family involvement (Revil et al., 2017).

Firm Age: There are several of researches which have employed age of a firm to moderate associations among variables (For instance; Hann & Freem, 2014; Rang, 2007; Han, 2012; Hender, 2000; Soren & Stuartt, 2013; Gopalak & Bierl, 2016; Balasub & Leer, 2018; Carry et al., 2011; Chell et al., 2015; Savin & Petruzzell, 2013; Huid et al., 2014, Vijr & Faror, 2015; Bedir & Vijir, 2016; Azizz & Sama, 2017; and Rafar et al., 2017). Age of the firm is usually employed as categorical variable, depicting the period that the business has existed. Researchers have concluded that size of the firm is an enabler/contextual variable in using technology and this is a common phenomenon for small manufacturers to keep behind larger manufacturers in implementing modern/state-of-the-art technologies (Kalkann et al., 2012). Age of the firm has normally been used to moderate the association between innovativeness and learning orientation, that is; firms which are older are likely to apply knowledge learned and transform it into innovative activities. Firms which are younger are required to explore an efficient method for internalizing knowledge rapidly (Calanton et al., 2012). Age of the firm doesn't moderate the association between firm innovativeness and learning orientation (Nybak, 2013). Age of the firm moderates the association between financial performance and customer management performance. The association was more evident for young firms in comparison to old firms (Ramas et al., 2015). Sorensen & Stuartt (2014) researched on the effect of age of the firm and showed that older firms which are experienced and provide more innovativeness and are therefore are incremental in nature and of lower quality.

Firm Size: This has been variously measured based on the amount of investment, number of employees, market value of equity and total assets. Size of the firm being a moderator has earned a lot of the attention of many researchers in strategic management field (For instance; Hag, 2000;

Ettliee & Rubenstaeinn; 2001; Acss & Audrets, 2003; Damanp, 2004; Rothwel & Dodgson; 2006; Swamid & Koth, 2007; Stockin et al., 2009; Temtim, 2010; Gopalakrishn & Bierlin, 2011; Ramaswam et al., 2012; Corsin et al., 2013; Noorr et al., 2014; Varumv & Roch, 2015; Vijj & Farooqir, 2016; Bedir & Vijir, 2016; Vijir and Farooqir, 2014; Beyen et al., 2017; & Vijj & Faro, 2015). Size of the firm has been employed to moderate the association between both operational and financial performance and innovation. Similarly, size of the firm has been used to moderate the association between business performance and business strategy (Kannadhas & Nandagop, 2012). In addition, size of the firm has further been applied to moderate the association between organizational innovation, organization learning and organizational performance. Significantly, size of the firm moderated the association between business performance and knowledge sharing orientation. As the size of the firm based on the number of employees rises, the need for having improved knowledge sharing orientation rises for facilitating performance of businesses. Firms which are smaller (based on investment) are required to employ better ideas for sharing good climate in organization, propensity, excellent culture for sharing knowledge and good support from senior management for superior performance of business (Vijj & Faror, 2015).

Industry Type: Type of industry has also been employed as a moderator in several researches in business field. Industries are variously categorized, for instance; service vs. manufacturing industries, private industry vs. public etc. There are numerous researches which have used type of industry as a moderator (For instance; Hittir et al., 2002; Banerj et al., 2004; Orteg et al., 2005; Tangit et al., 2006; Tawf, 2007; Chenn & Chenin, 2008; Vijir & Farooqir, 2011; and Bed & Vijir, 2016). Hit et al. (2009) showed that type of industry moderated the association between functional importance and company performance. Further, type of industry moderated the association between leverage and profitability (Chenin & Chenn, 2012).

Entrepreneurial Mindset: This is defined as specific state of mind which directs/control conduct of humans towards activities entrepreneurship and outcomes. Persons with entrepreneurship mindsets are normally attracted to new value creation, innovation and opportunities. Phiph and Priet (2013) revealed that entrepreneurship mindset moderates the association between creativity and knowledge management. Entrepreneurship mindset gives advantage to individuals by facilitating him/her to benefit from these business opportunities as and when they develop.

Job Autonomy: This refers to the degree to which a job facilitates discretion employees, independence and freedom in the undertaking the assigned activities or tasks. Job autonomy has been employed as a moderator in management human capital, strategy and entrepreneurship researches. Similarly, job autonomy moderates the association between job performance and proactive personality (Barric & Moun, 2003; and Fullerr et al., 2011). Kimin et al. (2013) examines the moderating effect of job autonomy on the association between work business performance emotional competences. In addition, job autonomy moderated the association between creativity

and benevolent leadership (Wangin & Chen, 2011). Besides, job autonomy also moderated the association between work outcomes and self leadership behaviors of job satisfaction, objective work performance and performance rating, (Horr & Nesbitt, 2015). Finally, job autonomy moderated the association between service innovative behavior and leader-member exchange (Dharr, 2017).

Organizational Culture: This concept is seen generally as a set of fundamental norms, understandings, values and assumptions shared in common by members of a company and taught to new membership. Organizational culture is a vital moderator in researches in business field. It is usually measured on likert scale. Researchers have employed organizational culture as moderator between job satisfaction and organizational commitment (Yiingin & Ahma, 2013), organizational citizenship behavior and organizational justice (Erkut, 2012), quality management decisions and leadership styles (Alharb, 2013), employee affective commitment to change and leadership styles (Ahm & Gelaid, 2014), implementation success and critical success factors of ERP projects in Kenya (Chockaling & Ramay, 2014), leader member exchange and justice (Erdog et al., 2016), firm's performance and accounting information systems (Aliz et al., 2015).

Organizational Structure: This concept measures organicity, which stands for the degree to which organization is structured in mechanistic manner versus organic. It's measurement is on likert scale. Numerous researches in business have employed organizational structure as moderator, for instance; between business performance and innovativeness (Linn et al., 2018), between job performance and knowledge management capability (Laiin, 2014), between supervisory support and justice (Ambron & Schmin, 2012), between firm performance and entrepreneurial orientation (Kreise & Daviss, 2011) and between business performance and innovativeness (Vijj & Bedin, 2017). Organizational structure is applied as a moderator to facilitate the effect of servant leadership on behavior creativity and also satisfaction of patients through satisfaction of nurse job (Neube et al., 2015)

Perceived Organizational Support: This stands for organization's recognition of a person's socio-emotional loyalty, commitment, efforts and needs. This is measured on likert scale. Perceived organizational support (job information, role clarity, colleague support, participation in decision making and supervisory associations) has been applied to moderate the association between the intention to leave the organization and workplace bullying (Rhoad & Eisenberg, 2012; and Van et al., 2014). Further, perceived organizational support has been employed to moderate the association between organizational citizenship behavior and organizational stressors (Jainn et al., 2010). Similarly, perceived organizational support moderated the association between job outcomes and job crafting (Chengin et al., 2018).

Environmental Dynamism: This is defined as the degree of unpredictable change in an environment of an organization. It significantly moderates the association between new venture

performance and transformational leadership, and a significant negative moderating effect on the association between new venture performance and transactional leadership (Enslle et al., 2016). Environmental dynamism is a fundamental moderator in modern researches, for instance; environment dynamism moderated the association between firm performance and emotional capability (Akgünn et al., 2018), between firm performance and entrepreneurial orientation (Kreis and Daviss, 2013), between firm performance and innovation strategy (Tingin et al., 2013), between new product success and product and process innovation (Zamoran et al., 2014), between resource acquisition and entrepreneurial orientation (Huan & Wangin, 2014), between business performance and innovativeness (Vijin & Bedin, 2017), and between firm profitability and green product innovation (Chann et al., 2018). Environmental dynamism effect the CEO transformational effectiveness and behaviors of transactional leadership on innovation of organization (Prasan & Junnin, 2017).

Situational Strength: This stands for the idea that numerous features of situations have the capacity to restrict/control the expression. The situational strength has been applied to moderate the association between job performance and job satisfaction (Bowlin et al., 2016). Similarly, situational strength has further been employed to moderate the performance association and the conscientiousness and it concluded that conscientiousness predicts better the performance in a more characteristically low degree occupations than in characteristically higher degree occupations (Meyerr et al., 2010).

In conclusion, several other fundamental moderators in used in various researches business fields are environmental uncertainty (Bstiel, 2015; and Boon & Paulo, 2018), organizational citizen behavior (Chienn, 2012), knowledge integration (Alma et al., 2014), knowledge management strategy (Lingin, 2015), organizational policies (Wickramasin & Nisafir, 2016), competitive advantage (Wunnav & Ellis, 2010; Martinette (2011) and Lees, (2012), locus of control (Sween et al., 2012; Kolbin & Aiell, 2008; Srivastav, 2012; and Lefcour, 2014), organizational competencies (Subraman et al., 2012), market growth rate (Sulliv & Butle, 2012), corporate social responsibility (Brikim et al., 2012); creative role identity (Wangin & Chenger, 2011); and critical incidents (Walsham et al., 2015).

Based on the above empirical literature, it is evident that there exist performance gaps between multinational enterprises and their domestic counterparts which this study intends to explore. These performance gaps arise in such fields as productivity, technology, profitability, wages, skills and growth. Similarly, these firms differ with each other in terms of employment culture, management culture, management competences and economies of scale among others. This study therefore employed ownership structure as the most preferable moderator in order to capture differentials in financial performance reported by tea firms based on unique WCM decisions that they make. This made ownership structure the most suitable variable that was used

in this study to moderate the association between WCM decisions and financial performance among tea firms in Kenya.

While a number of studies on WCM 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 WCM. These studies do not provide clear-cut direction of the association between WC and firm's financial performance. Further analysis of these researches shows that there is minimal of empirical evidence on the WCM 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 WCM decisions (ARCP, ICP, APPP & CCP, WCIP and WCFP) on financial performance of tea firms in Kenya.

From reviewed relevant literature, it has come out strongly from several writers like; Dew (2012), Lerner (2011), Iftekhar *et al.*, (2013), Nadia *et al.*, (2009), Nofie (2015), Hirtle and Stiroh (2012), Agboola (2011), Malhotra & Singh, (2013), Hernando and Nieto (2011), DeYoung (2005), and Acharya & Kagan (2013) that WCM have positive impact on financial performance indicators. They have agreed on the moderating effects of ownership structure on the association between WCM and financial performance. However other scholars like; (Shen, 2016; Sharma & Kumar, 2015; Pratheepkant, 2015; Rehman, 2017; Onoja & Ovayioza, 2015; Abdul, 2016; Berger & Patti 2011; Chebii *et al.*, 2015; Campello, 2011) found out that WCM have negative effects on financial performance indicators. In addition some studies like (Memon *et al.*, 2014; Mbatha, 2016; Liow, 2014; Maina & Kondongo 2017) disputed that moderating effect of ownership structure is insignificant in enhancing the association between WCM and financial performance. Other studies (Mollik, 2012; Burja, 2015; Beattie & Thomson, 2011; Luther, 2016; Memon *et al.*, 2014) accepted the role of moderating effect of ownership structure and others rejected (Momanyi & Naibei, 2016; Nazir & Afza, 2013; Njanja & Pelissier *et al.*, 2014).

Similarly from the literature, it is evident that studies carried out in Kenya (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), targeted firms listed in NSE and excluding non-listed companies. The results can only be interpreted in relation to listed firms. Therefore, these mixed results and alternative views from different countries and writers are mainly as a result of lack of comprehensive analysis of multiple WCM and financial performance indicators. This study intends to take a departure from past studies and incorporate several WCM variables and their effect on financial performance indicators. There is also concentration of studies on WCM mostly undertaken in developed and emerging economies leaving a few of WCM literature for Africa and specifically tea industry in Kenya. This gap in the literature will be addressed by this

comprehensive study. Moreover, moderating effect of ownership structure was not considered and therefore this study attempts to fill this gap in the literature.

III. Methodology

The philosophy of a research study is a knowledge concerning the manner in which data and informational concerning a phenomenon should be collected, analyzed and applied. The terminology in research called epistemology, meaning what is perceived to exist as opposed to the research term doxology, meaning what is believed to be true comprises of several research philosophies (Gallierr, 1992). In light of this, this research study employed the approach of positivism because it is scientifically oriented in reaching at its findings and conclusions. The similar philosophy approach to research study was employed by Uyar (2013) in his research study on the influence of innovations on corporate financial performance of banking industry in Kenya.

This research study employed a correlational research design. The researcher collected data from all the multinational and KTDA managed tea firms in Kericho, Bomet and Nandi counties of Kenya. The study utilized secondary data that was sourced from audited financial statements of 40 multinational and KTDA managed tea firms in Kericho, Bomet and Nandi counties of Kenya. The data abstraction tool and data collection sheets were used to record the data. The similar approach was employed by Nyabwanga *et al.*, (2016) in his research study on the effect of working capital management decisions on financial performance: SME's in Kisii County, Kenya. This research design proposed has been accepted to be relevant and sufficient when data are sourced from secondary sources (Creswel, 1995). In this research study, both descriptive and inferential statistics were employed to arrive at finding and the conclusions.

For the purposes of this research study, the researcher restricted himself to all the all the multinational and KTDA managed tea firms in Kericho, Bomet and Nandi counties of Kenya. In this research study, the data analysis was performed by applying descriptive statistics with a view to investigate minimum, mean maximum standard deviation and coefficient of determination. Thereafter, analysis was followed by inferential statistics which was undertaken for the researcher to fully comprehend the degree to which the dependent variable is explained by independent variables.

3.1 Multiple Regression Analysis

In this research study, the dependent variable which is the financial performance of all the multinational and KTDA managed tea firms in Kericho, Bomet and Nandi counties of Kenya was linked with the five independent variables (accounts receivable collection period, accounts payables payment period, inventory conversion period, cash conversion period and working capital management policies). A moderating variable of ownership structure was also linked to resultant influence of the independent variables with an objective of to establishing the influence of it on the financial performance (dependent variables).

The research models are given below:

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

..... **Equation 1 (Direct relationship with Variables)**

In the equation one (1) the researcher employed both inferential, descriptive statistics and non-parametric test for instance analysis of variance (ANOVA) to test the significance of the overall model at 95% confidence level. The other test statistics that were applied in this research study comprises of T-statistic and F-Test to examine the relationship between the dependent variable and the independent variable.

The equation two (2) of the research study pertains the moderating variable. To tests on how the continuous moderator variable has influence, was undertaken by calculating an independent variable intersecting with the moderating variable from the data, and processing it as a predictor to a regression model. Tests were undertaken on the overall influence of independent variables to investigate the moderating effect of the ownership structure.

$$ROA_{it} = \alpha + \beta_1(ARCP)_{it} + \beta_2(APPP)_{it} + \beta_3(ICP)_{it} + \beta_4(CCP)_{it} + \beta_5(WCFP)_{it} + \beta_6(WCIP)_{it} + \beta_7(ARCP * M)_{it} + \beta_8(APPP * M)_{it} + \beta_9(ICP * M)_{it} + \beta_{10}(CCP * M)_{it} + \beta_{11}(WCFP * M)_{it} + \beta_{12}(WCIP * M)_{it} + \epsilon_{it}$$

.....**(Equation 2)**

Where:

ROA_{it} = Return on Assets of Company i at time t

ARCP_{it} = Accounts Receivables Collection Period of firm i at time t

APPP_{it} = Accounts Payables Payment Period of Company i at time t.

ICP_{it} = Inventory Conversion Period of Company i at time t.

CCP_{it} = Cash Conversion Period of Company i at time t.

WCFP_{it} = Working Capital Financing Policy of Company i at time t.

WCIP_{it} = Working Capital Investing Policy of Company i at time t.

α = Constant term, β_1 to β_{12} are coefficients of the explanatory variables

* represent the product sign

ϵ_{it} = Error term where i is cross sectional and t time identifier, $i = 1 \dots 40$ and $t = 2014 \dots 2019$

M = Ownership Structure (1 = Multinational & 0 = KTDA managed)

IV. Findings And Discussion

4.1.Descriptive and Factor Analysis

The independent variable of the ownership structure was taken as a moderating variable of this research study. A moderating variable is taken to mean that variable that may strengthen or reduce the relationship between other independent variables. In this study, the moderating effect of ownership structure was investigated by a process of regression comprising of the moderating variable. The model of the regression for the moderating effect of ownership structure incorporated the computation of the interaction between the independent variables and the ownership structure as a moderating variable. The process of regression analysis was therefore executed incorporating the interaction of variables calculated, which resulted into the equation model shown as under.

$$ROA_{it} = \alpha + \beta_1(ARCP)_{it} + \beta_2(APPP)_{it} + \beta_3(ICP)_{it} + \beta_4(CCP)_{it} + \beta_5(WCFP)_{it} + \beta_6(WCIP)_{it} + \beta_7(ARCP * M)_{it} + \beta_8(APPP * M)_{it} + \beta_9(ICP * M)_{it} + \beta_{10}(CCP * M)_{it} + \beta_{11}(WCFP * M)_{it} + \beta_{12}(WCIP * M)_{it} + \epsilon_{it} \dots\dots\dots(\text{Equation 3})$$

This is the r- squared (R²) for equation 1 which stands for the degree of variance that is found in the dependent variable and is explained by the equation 1 which is similar to the equation (model) for the multiple regressions. This indicates that the equation above which is without the effect of moderation explains 65.69% of the independent variable’s variation. The r- squared (R²) for equation 2 which stands for the degree of variation in the dependent variable that is explained by the equation in relation to the amount of variation that has been explained. The r - squared (R²) for equation 2 is 78.08% which means that the equation incorporating the moderating variable explains 78.08% of the variation in the dependent variable. This is higher than the r - squared (R²) for equation 2 for the first equation. This shift in the statistics indicates to us that adding of the interacting term in equation 2 improved significantly the fitness of the model. It is evident that the F Change possesses a p-value of 0.003 which is less than 0.05. This therefore shows there exist a significant improvement in the fitness of the equation model by incorporating the interacting terms of the independent variables with the moderating variable of the ownership structure. This indicates that, additional variance in the dependent variable has been explained by equation 2 (Model 2) which incorporated the interacting terms of independent variables than equation 1 (Model 1) which do not have the interaction terms, that is the equation with direct relationship.

Table 4.15: Model Summary of Moderation Effect

Model	R	R Square	Adjusted R Square	Std. Err. of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	0.809	0.656	0.656	0.108	0.756	81.715	6	98	0.000
2	0.883	0.780	0.786	0.479	0.103	1.472	12	93	0.003

Source: Study Data (2022)

In regression, the application of ANOVA is in exploring whether the research study model provides a good degree of prediction that is significant of the dependent variable. The ANOVA statistics of the study relating to equation 1 (model 1), reveals a significant F- statistic which means that the research study model without the moderating effect (interaction of variables) possesses a significantly good degree of prediction overallly of the dependent variable.

For equation 2 (model 2), the ANOVA statistics similarly reveals that the equation/model with the moderating variable (interaction) with independent variables similarly possesses a significantly good degree of prediction overallly of the dependent variable. The two (2) equations/models amount to good degrees of predictions, that is significant of the outcome variable. Nonetheless, the ANOVA seems not to provide details concerning the predictions of the individual variables.

Table 2: ANOVA table; Moderating Effect

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	77.2979	9	18.6282	83.2728	.000b
	Residual	19.7023	88	0.17349		
	Total	97	97			
2	Regression	79.7506	8	11.1294	41.4292	.000c
	Residual	17.2494	89	0.31639		
	Total	97	97			

Source: Study Data (2022)

In the Table 2 above, the analysis of the individual variable’s predictions on the multiple regressions for the two models is depicted. The results of Model/equation 1 mean that all the independent variables influence the dependent variable significantly. The inclusion of the interacting variables between the independent variables and moderating variable in the Model/equation, the amounts to model as shown below.

$$ROA_{it} = 0.0714 - 0.2034 ARCP - 0.1957 APPP - 0.2192 ICP - 0.1877 CCP + 0.1085 WCFP + 0.2034 WCIP - 0.1994 (ARCP * M) - 0.1494 (APPP * M) - 0.0838 (ICP * M) - 0.1517 (CCP * M) + 0.1270 (WCFP * M) + 0.0374 (WCIP * M) \dots\dots\dots (Equation 4)$$

The model coefficients as indicated as β_1 to β_{12} in model/equation 2 are all significant because they possess a T-statistics having p-values of 0.0010, 0.000, 0.007, 0.0050, 0.017 and 0.0080 which all are less than 0.05. Therefore, since the coefficients of M are all significantly and jointly interacting with the independent variables, this means that the ownership structure variable has moderating effect on the combined association between independent variables (that is the accounts receivable collection period, accounts payables payment period, inventory conversion period, cash conversion period and working capital management policies) and the dependent variable, the Performance of the firm.

Table 3: Moderating Effect Coefficient Table

Returns on Assets	Coef.	Robust Std. Err.	z	P>z
A/C Receivables Collection Period	-0.2034	0.0273	2.5000	0.0070
A/C Payables Payment Period	-0.1957	0.0831	2.4900	0.0030
Inventory Conversion Period	-0.2192	0.0930	2.2800	0.0100
Firm Size	-0.1877	0.0323	4.0402	0.0050
Sales Growth	0.1085	0.0529	5.0900	0.0030
ARCP*Ownership Structure	-0.1994	0.0588	3.3900	0.0010
APPP*Ownership Structure	-0.1494	0.0363	4.1100	0.0000
ICP*Ownership Structure	-0.0838	0.0311	2.7000	0.0070
Firm Size *Ownership Structure	-0.1494	0.0363	4.1100	0.0000
Sales Growth *Ownership Structure	-0.0838	0.0311	2.7000	0.0070
_cons	0.0714	0.0020	35.7900	0.0000

R squared = 0.7708

Source: Study Data (2022)

From the moderating effect coefficients table, this research study went forward in testing the hypothesis of the study, as shown below.

H₀₁ There is no statistically significant moderating effect of ownership structure on the relationship between accounts receivables collection period, accounts payment period, inventory conversion period, cash conversion period, WCM policies and financial performance of tea firms in Kenya.

From the data analysis, it evident that the p value for the T statistic of the interacting variable between working capital management decisions and financial performance are 0.0010, 0.000, 0.007, 0.0050, 0.017 and 0.0080 which are all them are less than 0.05, therefore, null hypothesis is rejected and the conclusion is made that the ownership structure has a significant moderating effect on the relationship between working capital management decisions (accounts receivables

collection period, accounts payment period, inventory conversion period, cash conversion period, WCM policies) and financial performance of tea firms in Kenya.

V. Conclusions And Recommendations

This research study sought to investigate the moderating effect of ownership structure on the relationship between accounts receivables collection period, accounts payment period, inventory conversion period, cash conversion period, WCM policies and financial performance of tea firms in Kenya. Accordingly, this research study examined the association between the accounts receivables collection period, accounts payment period, inventory conversion period, cash conversion period, WCM policies and financial performance of tea firms in Kenya. The analysis was also undertaken on the moderating effect of the ownership structure on each of the independent variables (accounts receivables collection period, accounts payment period, inventory conversion period, cash conversion period, WCM policies) to the outcome variable.

This research study was also in a position to investigate ownership structure whether the tea firm is a multinational or KTDA managed was ideal to influence the financial performance of tea firms in Kenya. This finding similarly are in line with Almazari *et al.*, (2017) who found that the multinational tea firms is normally more effective accountable, and efficient than the KTDA managed tea firms. This means that most companies within the tea industry were in a position of performing better when privately owned as opposed to when it is publicly owned. Finally, the conclusion made is that that financial performance of firms in tea industry in Kenya was more on the tea firm being multinationally managed however, with very little effect on those which are KTDA managed.

5.1 Conclusions

In conclusion, the fundamental gist of this research study was to investigate the moderating effect of ownership structure on the relationship between accounts receivables collection period, accounts payment period, inventory conversion period, cash conversion period, WCM policies and financial performance of tea firms in Kenya. Reference to this, this research study made conclusion on financial performance of tea firms and the outcome from this research study show that there is a significant positive correlation between the moderating effect of ownership structure on the relationship between WCM decisions and financial performance of tea firms in Kenya.

5.2 Recommendations

Regarding the study variable of ownership structure, most of the companies within the tea industry were noted to be multinationally and privately-owned.. This is an evident that the firms within the tea industry are underperforming and are being mis-managed. The same research study on the ownership structure could be undertaken on other sectors and industries for example mining,

tourism or service sectors. This will aid in arriving at informed conclusions and findings on the effect of ownership structure.

5.3 Suggestion for further research

In conclusion, this research study is a foundation for future research in this area, especially in Kenya. The findings of this research study highlighted the benefits of the working capital management decisions which include accounts receivables collection period, accounts payment period, inventory conversion period, cash conversion period, WCM policies and the moderating effect of the ownership structure. The literature that is available shows that for the future, research could be carried out on working capital management decisions in other different industries, other than tea industry which falls within the financial sector and also in other regions. This is necessary find out whether there is a link of working capital management decisions and financial performance can be generalized. Further, the issues of legislation within the tea industry had also be introduced, therefore there is need to undertake a research study on them independently and investigate out whether they will influence positively or negatively the financial performance of tea firms.

References

- 1) Afza, T. & Nazir, M. (2013). Impact of aggressive Working Capital Management on firms' Financial performance. *The IUP Journal of Applied Finance*, 15(8), 20-30.
- 2) Almajali .Y.A., Alamro.A.S. & Al-Soub.Z.Y. (2016). Factors Affecting the Financial Performance of Jordanian Insurance Companies Listed at Amman Stock Exchange. *Journal of Management Research*, 4(2), 226-289
- 3) Arshad, Z. & Gondal, M. Y. (2017). Impact of Working Capital Management on Financial performance: A Case of the Pakistan Cement Industry. *Interdisciplinary Journal of Contemporary Research in Business*, 5 (2), 384-390.
- 4) Barako, D.G., Hancock, P. & Izan, H.Y. (2011). Relationship between corporate governance attributes and voluntary disclosures in annual reports: The Kenyan experience. *Fin. Rep., Reg. Gov.*, 5: 1- 26.
- 5) Bhunia,A. & Das,A.(2016). Affiliation between Working Capital Management and Financial performance. *Interdisciplinary journal of contemporary research in business*, 3(9), 957-968
- 6) Binti & Saad (2014). The effect of market valuation and financial Performance of Firms listed in Malaysia. *International Journal of Business and Management*, Vol 5, No 11, 140-147.

- 7) Brigham, E. F. & Ehrhardt, M. C. (2010). *Financial Management: Theory and Practice*, 11th Edition, South-Western College Publishers, New York.
- 8) Burja, C. (2015). Factors Influencing the Companies' Financial performance. *Annales Universitatis Apulensis Series Oeconomica*, 13(2), 215-224.
- 9) Butt, B. Z., Hunjra, I.H. & Rehman, K.U. (2014). Financial Management Decisions and their Impact on Organizational Performance. *World Applied Sciences Journal*, 9 (9), 997-1002.
- 10) Dongin, H. P. & Sum, J.T. (2014). The Relationship between Working Capital Management and company's financial performance. *International Journal of Finance and Economic*, 3(5), 62-71.
- 11) Dong, H. P. & Su, IT. (2014). The Relationship between Working Capital Management and Financial Performance. *International Research Journal of Finance and Economic*, 3(5), 62-71.
- 12) Eljelly, M. (2011). Tradeoff of Liquidity and Financial performance: An Empirical Investigation in Emerging Market. *International Journal of Commerce and Management*, 14(2), 48-61.
- 13) Filbeck, G. & Krueger, T.M. (2005). An Analysis of Working Capital Management Results Across Industries. *Mid-American Journal of Business*, 20(2), 10-17.
- 14) Gakure, R., Cheluget, K. Onyango, J., & Keraro (2016). Working Capital Management and financial performance of manufacturing firms listed at the NSE. *Prime Journal of Business Administration and Management*, 2(9), 680-686.
- 15) Gill, Bigger & Mathur (2014). The Relationship between accounts receivables Management and financial performance: Evidence from the United States of America. *Economics and Business Journal*, 4 (2), 1-9.
- 16) Greene, W.H. (2012). *Econometric Analysis* (6th ed.). Upper Saddle River, N.J.: Prentice Hall
- 17) Gujarati (2010). *Basic Econometrics*, Fourth Edition. McGraw-Hill Companies. Hall, M., and Weiss.
- 18) Gul, Khan & Raheman (2017). Working Capital Management and performance of SME sector. *European Journal of Business and management*, 5(1), 60-68.
- 19) Hayam (2012). Exploring the Moderating Effect of financial performance on the Relationship
- 20) Between Corporate Environmental Responsibility and Institutional Investors: *Egyptian Evidence*, 15, 361-371.

- 21) Javed, B. & Akhtar, S. (2016). Inter Relationships between Capital Structure and Financial Performance, Firm Size and Growth: Comparison of industrial sector in KSE: *European Journal of Business and Management*, 4(15), 148-157.
- 22) Jayarathne, T. A., (2018). Impact of Working Capital Management on Financial performance: Evidence from Listed Companies in Sri Lanka, *ICME*, 1 (1), 269-274.
- 23) Kagira, Kimani & Githii (2016). Sustainable Methods of Addressing Challenges Facing Small
- 24) Holder Tea Sector in Kenya: A Supply Chain Management Policy. *Journal of Management and Sustainability; Vol. 2, No. 2; 1925-4733*.
- 25) Karduman, (2015). The Relationship between Working Capital Management and Financial performance: Evidence from an Emerging Market. *International Research Journal of Finance and Economics*, 62(2015), 61-67.
- 26) Laitinen, E.K. (2008). A Dynamic Performance Measurement System: Evidence from Small Finnish Technology Companies. *Scandinavian Journal of Management*, 18(1), 65-99.
- 27) Lee & O'Neill (2009). Firm ownerships and R&D investments of U.S. and Japanese firms: Agency and stewardship perspectives. *Academy of Management Journal*, 46, 212-225.
- 28) Makori, D. M. & Jagongo, A. (2017). Working Capital Management and Firm Financial Performance: Empirical Evidence from Manufacturing and Construction Firms listed on NSE Kenya. *International Journal of Accounting and Taxation*, 1 (1), 1-14.
- 29) Maradi, M., Salehi, M., & Arianpoor, A. (2016). A comparison of Working Capital Management of chemical and medicine listed companies in Tehran Stock Exchange. *International Journal of Business and Behavioral Science*, 2 (5), 62-78.
- 30) Mathuva, D.R., (2014). The Influence of Working Capital Management Components on
- 31) Firm's Financial Performance: For firms listed at NSE. *Research Journal of Business Management*, 4, 1-11.
- 32) Mbatha, K, Z., (2016). The effect of ownership structure on the financial performance of sugar Companies in Kenya. *Retrieved from University of Nairobi Digital Repository*.
- 33) Memba, F., & Nyanumba, J.A. (2017) Causes of Financial Distress: A Survey of Firms Funded by Industrial and Commercial Development Corporation in Kenya. *Interdisciplinary Journal of Contemporary Research In Business*, 4, (12), 1171-1185.
- 34) Mousavi, Z., & Jari, A. (2016). The Relationship between Working Capital Management and

- 35) Firm Performance: Evidence from Iran. *International Journal of Humanities and Social Science*, 2 (2), 1-7.
- 36) Muchina, S. & Kiano, E. (2015). Influence on Working Capital Management on Firms' Financial Performance: A Case of SME's in Kenya. *International Business Management*, 5 (5), 279-286.
- 37) Mukras, M.S. & Oginda, M.N. (2017). Ownership Concentration and financial performance of Listed Firms in Kenya: An Econometric Analysis Using Panel Data. *European Scientific Journal*, 9(32), 194-211.
- 38) Mwaura, Nyabundi & Muku (2005). Situation analysis of the small-scale tea growers and their contribution at the local auction market in Kenya. *Tea (2)*: 35-45.
- 39) Naser, K., Nuseibel, R. & Al-Hadeya, A. (2017). Working Capital Management and Financial
- 40) Performance on manufacturing sector in Sri Lanka. *European Journal of Business Management*, 4(15), 23-30.
- 41) Nazir & Afza (2013). Aggressive Working Capital Management and Firms' Financial Performance: *The Journal of Applied Finance*, 15(7), 20- 30.
- 42) Niresh, J. (2016). Working Capital Management & financial performance of Manufacturing Sector in Sri Lanka. *European Journal of Business and Management*, Vol 4, No.15, 23-30.
- 43) Njanja, L. W. & Pellisier, R. (2015). The integrative effects of various management strategies in the performance of MSMES. *International business and management journal*, 2 (2), 105-116.
- 44) Nobanee, Abdullatif & Hajjar (2015). Cash Conversion Period and Firm's Performance of Japanese Firms. *Asian Review of Accounting*, 19 (2), 61-70.
- 45) Nyabwanga, Ojera, Lumumba, Odondo & Otieno (2016). Effects of Working Capital Management Decisions on financial performance: SME's in Kisii County, Kenya. *Africa Journal of Management*, 5 (17), 5807 - 5817.
- 46) Ogundipe, Idowu & Ogundipe (2016). Working Capital Management, Firms' Performance and Market Valuation in Nigeria. *International Journal of Social and Human Science*, 6, 143-147.
- 47) Ongore (2015). The Relationship between Ownership structure and Firm Performance: An Empirical Analysis of Listed Companies in Kenya. *African journal of business management* vol.5.

- 48) Raheman, A. & Mohamed, N. (2012). Working Capital Management and Financial performance Case of Pakistani firms. *International Review of Business Research Paper*, 3(1), 279-300.
- 49) Sharma, R & Kumar, B., (2015). Effect of Working Capital Management on Firm Financial Performance: Empirical Evidence from India. *International Business Review*, 12(1), 159-173.
- 50) Uyar, A. 2013. The Relationship of Cash Conversion Period and Financial Performance: An Investigation in Turkey. *Global Research Journal of Finance and Economics*, 25:187-194.
- 51) Titman & Keown (2015). *Financial Management: Principles and Applications, 11th Edition*. Pearson International Edition.
- 52) Zariyawati, Annuar, Taufiq, & Rahim (2012). Working Capital management and corporate Performance: Case of Malaysia. *Journal of Modern Accounting*, 5 (11), 47-54.