WORKING CAPITAL MANAGEMENT, OWNERSHIP STRUCTURE AND FINANCIAL PERFORMANCE OF TEA FIRMS IN KENYA

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Working Capital Management, Ownership Structure and Financial Performance of Tea Firms in Kenya

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DECLARATION

This thesis is my original work and has not been presented for a degree in any other University.

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This thesis has been submitted for examination with our approval as the University supervisors.

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DEDICATION

This thesis is dedicated to my Beloved son McDavis Kiptoo and my lovely wife Gladys Yegon for their love, support, goodwill and encouragement during the entire duration of the PhD course. Further, my dedication goes to my beloved parents Samwel Kiget, Leah, Martha and Grace for their sacrifice in educating and teaching me the discipline and value of hard work when I least knew the world. Besides, this research work is dedicated to all my relatives. This thesis will be a source of motivation to them.

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ACRONYMS AND ABBREVIATIONS

RAD	Receivable Accounts in Days
PAD	Payable Accounts in Days
CATA	Current Assets to Total Assets Ratio
CCC	Cash Conversion Cycle
CLRM	Classical Linear Regression Model
CMA	Capital Market Authority
FGLS	Feasible Generalized Least Square
GDP	Gross Domestic Product
ICP	Inventory Collection Period
KGS	Kilograms
KNBS	Kenya National Bureau of Statistics
KTDA	Kenya Tea Development Agency
MDP	Ministry of Devolution and Planning
MM	Modigliani and Miller
NSE	Nairobi Securities Exchange
OLS	Ordinary Least Squares Regression
ROA	Returns on Assets

ROE	Returns on Equity
ROIC	Return on Invested Capital
TA	Total Assets
TBK	Tea Board of Kenya
TCA	Total Current Assets
TCL	Total Current Liabilities
UNCTD	United Nations Conference on Trade and Development
WC	Working Capital
WCM	Working Capital Management

DEFINITION OF OPERATIONAL TERMS

Aggressive financing policy This is a management policy that employs greater degree of current liabilities and less long term debt (Nasir & Afza, 2018; Al-shubiri, 2017).

Aggressive investment policy It is the minimal level of investment in fixed assets versus current assets and shows the smallest level of investment in short term assets versus long term assets (Nasir & Afza, 2016).

Conservative investment policy This is a management decision that sets a greater percentage of finance in short term versus long term assets with opportunity cost of low level profit (Nasir & Afza, 2018).

Capital structure Specific mix of debt and equity a firm uses to finance its operations. (Shim & Siegel, 2017).

Cash flow Management This is the management process of controlling and planning cash flows in and out of a business concern, cash flows within the business, and cash balances held by a business at a point in time (Pandey, 2008).

Financial leverage The portion of a firm's assets financed with debt instead of equity (Shim & Siegel, 2017).

Financing decisions It implies sources of corporate financing, in other words it is short term debt, long term debt and accounts receivable (Kochhar, 2016).

Working capital management decisions: His involves the decisions on management of current liabilities and current assets of a firm (Mathuva, 2016).

ABSTRACT

Collapse of companies in Kenya has been on the rise in the risen past. Far reaching endeavors to resuscitate these liquidating and ailing firms have generally been attributed on their corporate financial management decisions. Therefore, corporate directors and managers have the fundamental duty of understanding how their corporate financial management decisions influence the management of the company, in order to see to it that they achieve successful financial performance and on the other hand guarding against corporate collapse. Indeed, a huge predicament or puzzle for investors, management and other stakeholders is whether there exists an ideal or impeccable financial management decisions and how such fundamental decisions influence business financial performance. This study therefore explored the effect of working capital management and ownership structure on the financial performance in Kenya. The specific objectives of the study were to determine the effect of the accounts receivable management decisions, accounts payable management decisions, inventory management decisions, cash management decisions, firm size and sales growth on financial performance. The study also investigated the moderating effect of ownership structure. This study was underpinned by five theories: conservative plan theory, transaction cost theory, economic order quantity model, Baumol's and Miller-Orr models and resource-based view theory. The study employed a correlational research design. The target population included 23 multinationals and 72 KTDA managed tea in Kenya. The study adopted a census approach where all the firms were included in the study. Secondary data was obtained from statistics published by KTDA, TBK and TRFK. A panel regression model was being used in the study. The analysis of the data was done using both descriptive and inferential statistics. The study illustrated that the receivable accounts in days is negatively and significantly related to return on assets (β = -0.1299, p=0.0160). The study found that the payable accounts in days is negatively and significantly related to return on assets (β = -0.0843, p = 0.0070). The study noted that the inventory turnover in days is negatively and significantly related to return on assets (β= -0.0623, p=0.0180). The study concluded that the receivable accounts in days, inventory turnover in days, is positively and significantly related to financial performance, while payable accounts in days and cash conversion cycle is negatively related to financial performance. Ownership structure moderates the relationship between receivable accounts in days, payable accounts in days, inventory turnover in days and financial performance in Kenya. The coefficient of determination (R^2) before moderation was 65.69%, but after moderation, the R^2 increased significantly to 78.08%. The study recommended the tea firms should increase the level of the receivable accounts by increasing the debtors and the payable accounts in days should be made as low as possible. A firm with a long payable accounts in days frustrates the supplier from supplying any more goods or services to the firms. The firms need to increase the inventory turnover in days. The study recommended that the cash turnover in days needs to be kept low. The tea companies need to ensure the interval of time (days) required to convert a shilling invested in current assets into cash is minimized. The companies can be involved more in improving cash flow to allow for business opportunities. The study recommended that the firms need to make more investment in current assets to accomplish target sales. It is recommended that KTDA Holdings need to be more innovative and look at the strategies utilized by the multinational firms to enhance their performance.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Omesa *et al.,* (2019) depict corporate sector as a fundamental component that influences the economic outlook of a country. According to Gakure *et al.,* (2018), corporate failure among companies in Kenya has often been associated with their financial management decisions. The objective of all financial management decisions is wealth maximization and the immediate way of measuring quality of such decisions is to examine its effect on the firm's financial performance. WC being one of such decisions is considered as the life-blood of any business and has significant impact on the financial performance and overall value of a company (Maradi *et al.,* 2018).

Corporate establishments/businesses are formed with an aim of maximizing the value of investment of the owners. To achieve this end/aim demands proper planning of financial resources and inculcating of proper management systems in a firm. This way, a business organization is expected to uphold and to strike a balance between liquidity and profitability in the process of undertaking their daily business activities. Liquidity is a requirement that see to it that that a business entity is in a position to attain their short-term obligations and their continuous flow can be assured from a profitable business venture (Gitman, 2020).

The association between financial performance and WCM may be focused by means of the liquidity and financial performance trade-off theory. This theory examines that there exist a trade-off between liquidity and financial performance; which means that, gaining more of one translate to forfeiting some of the other. On one end of the scale/spectrum, there are highly liquid business organizations which are not very profitable while on the other end are business organizations which are highly profitable but at the same time not

very liquid. The main task is therefore to examine where in the center ground the business organizations should reside (Eljelly, 2018).

The WCM theory explains the manner in which WC should be managed and describes the gains in form of efficiency, solvency liquidity, financial performance and maximization of wealth by the owners/shareholder which are earned by the firm from proper management of its WC. Falling levels of liquidity, unless properly managed, may give rise to insolvency and eventually bankruptcy when the liabilities of the business supersede its assets (Brigham, *et al.*, 2019).

Kenya is properly endowed for the development tea especially in the highlands areas around south rift (Kericho, Bomet and Nandi Counties of Kenya) in the rift valley region of Kenya and also in the central part (Muranga, Nyeri, Kiambu, Kirinyanga and Meru) of Kenya. According to Azamin *et.al.* (2019), despite of the high potential for tea industry development, the Kenya is yet to reap her full potential and benefits. This is can be attributed to high reliance on rain-fed tea farming. Further, the rampant mismanagement and misappropriation of financial resources in KTDA managed tea factories has compromised and sabotage small holder farmers from expanding tea production. Pegged on the several hiccups related with tea production/industry, tea-farmers are organized in tea firms spread across the tea-belt areas/region to collectively minimize the risks. Presently, there are 23 multinational tea companies and 72 KTDA managed tea factories in Kenya with regionally-defined membership. These organizations are understood within the broadest framework of the Tea Board of Kenya with the enactment of Tea Act of 1998 (Azamin *et al.*, 2020).

Over the years, poor management of WC has been the main reason for business insolvency, bankruptcy and the ultimate failure (Mathuva, 2019). Dong & Su (2019) depicts WC as a financial metric which represents operating liquidity available to a business, organization, or other entity, including governmental entity. WCM refers to all management decisions and actions that ordinarily influence the size and effectiveness of the WC (Mbatha, 2018). It is a managerial accounting strategy which focuses on

maintaining efficiency levels of current assets and current liabilities to ensure that a firm has sufficient cash flow in order to meet its short term obligations. WCM is a crucial, fundamental and indispensable pillar of financial management and significantly contributes creation of wealth of a firm because it enhances directly the financial performance of an organization and its liquidity. Therefore, enhancing WCM decisions and ownership structure is fundamental for corporate firms to combat and withstand the effects of economic turbulence (Javed & Nasri, 2019; Takiah *et al.*, 2019).

Undoubtedly, what is the most essential and critical about WCM is the fundamental aspect of liquidity management concerning daily activities of the organization and provides crucial insight into the state of a company's financial position. As a fundamental indicator of financial fitness, the availability of a company's WC is one of the first items a lender or investor will examine on a balance sheet (Financial Executives International Canada, 2019). Efficient WCM decisions and ownership structure seek to improve the operating performance of business concern and it helps to meet the short term liquidity. Hence, the study of WCM decisions and ownership structure is not only a critical fabric of financial management but also an overall management of a business concern (Gill *et al.,* 2018).

WCM 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 WCM. If a firm is inefficient in managing WC, it will not only reduce profitability but may also lead to financial crisis. Both inadequate and excessive WC is detrimental for a business concern. The excessive WC can result in idle funds which could be used for earning profit while the inadequate WC will interrupt the operations and will also impairs financial performance (Lee *et al.,* 2017).

1.1.1 Working Capital Management

Proper management of WC is a critical component of the overall corporate financial performance, which is aimed to develop value and is fundamental platform of competitive advantage in corporate world (Deloof, 2018). In practice, it has develop to become one of

the most fundamental area in a business organizations with several financial managers/executives struggling to find out the critical WC drivers and the appropriate level of WC to hold in order to mitigate on the risk, properly plan for uncertainty, and uplift the overall financial performance of their businesses entities (Jayarathne, 2020).

By definition, WC is the difference between current assets and current liabilities. The main components of current assets includes cash (in hand and at bank), receivable accountsand inventories while that of current liabilities includes bank overdrafts and accounts payable. According to Hayam (2017), WC stands for the net investment in short term assets. These assets are flowing continuously or circulating within and without the business and are essential meant for the daily business operations. Agha (2020) postulates that the several components of WC are interconnected, and can be regarded to belong to a family of a cycle called the cash turnover in days. The WCM decisions employed by a corporate entity dictates the period of time a specific component of WC takes in the cycle.

Van Horne and Agha (2020) argue that firms aims at mitigating risk and uplift the overall financial performance by comprehending the function and drivers of WCM. Consequently, a corporate entity may employ an aggressive WCM policy having a lower degree of current assets as percentage of total assets or it may similarly be applied for the financing decisions of the company in the form of higher degree of current liabilities as percentage of total liabilities. Higher percentage levels of current assets may impact a negative effect on the company's financial performance whereas on the other hand, a lower percentage of current assets could results into a lower percentage level of liquidity and therefore the stock-outs occasioning challenges in upholding proper and smooth business operations. They conclude by emphasizing that the fundamental aim of WCM decisions is to uphold an optimal balance between each of the WC components. According to, Filbeck and Krueger (2016) concludes that the success of corporate firm is highly relied upon the strength of financial managers/executives of the firm to effectively and properly manage payables, inventory and receivables. Teruel *et al.,* (2016) noted that the existence of efficient WCM decisions can cause a fundamental difference between the success and failure of a corporate entity and it is of particular importance to the executives/managers,

because it is they who strive for firm's finances and the opportunity cost of finances; and therefore, for them is usually on the higher side.

1.1.2 Financial Performance

According to Gakure *et al.,* (2018) in the recent past, especially during the last two decades, corporate entities have been subjected to intense pressure to upscale their financial performance and showcase high degree of accountability and transparency. Corporate financial performance entails the actual results or output of a business firm as measured in relation to its intended output, that is, objectives and strategic goals. A plan which measures the current level of financial performance of the business entity and then propose ideas for improving organizational financial performance and infrastructure is critical in attaining a higher level of output. This is a management decision and may take different shapes for instance, surveys on customer satisfaction at a level of a business organization (Reheman *et al.,* 2019).

For many decades, firm's financial performance has been the main key interest to owners/shareholders, policy makers, researchers and managers. Yet there is still small relationship in opinion regarding the measurement of financial performance. To examine a financial performance of a firm, analysts employ certain metrics, the main and frequently applied are ratios. However, in the recent past, focus has change to other performance indicators besides the financial aspect. The application of Balanced Scorecard (BSC); a tool for implementation strategy which brings together non-financial and financial aspects like internal processes of a business concern, learning and growth needs for the customers (Brigham *et al.,* 2017) has become popular among financial management practitioners.

Several stakeholders employ various performance indicators for different interests. In this case, there is absence of clear demarcation in selecting of the most appropriate indicators for performance. In the Kenyan tea industry, the key indicators of performance include financial measures like return on investment and profitability, production quantities, employee satisfaction and market indicators for instance, the market share (Makori *et al.,*

2019). Different owners/stakeholders demands different performance indicators to allow them to make informed choices/decisions. Business performance is affected by implementation of strategy, by giving incentives performance to employees during the phase of implementation, it is argued by Teruel *et al.*, (2016) that financial performance business entity will be influenced positively**.**

A firm's financial performance is a fundamental metric to corporate management because it is a result which has been attained by an individual or a group of individuals in a business firm in connection with its responsibility and authority, as per the law, and in conformity to the ethic and morale. Such financial performance is as a results of the ability of a business entity to manage and invest the economic resources in various and different ways to attain a competitive advantage (Vahid *et al.,* 2018). Naser and Hayam (2017) examined that high financial performance indicates that effectiveness in management decisions and efficiency in employing the resources of the company, and is normally shown in terms of turnover, growth of sales, stock prices or employment.

As per Dong (2017), the financial performance of a corporate firm is influenced by WCM decisions and ownership structure. According to empirical findings, Teruel *et al.*, (2016) supports the role of current assets and fixed in the running a successful business organization. He noted a common feature observed in the business cycle that many of the business organizations uplift their margin for the profits and losses due to compressing the amount of WC in relation to sales. Effectively, if the corporate entity plans to improve or increase its liquidity, then it has to upscale its WC. In regard to this policy, the business firm has to scale down its turnover and hence the profitability and financial performance will be positively influenced due to this action (Teruel *et al.,* 2016).

In the Kenyan tea industry, firm's financial performance comprises of a fundamental component of the corporate firm and it is key for their business survival. Improved and successful financial performance in the tea industry has a positive association with the ability to effectively manage financial matters of the firm (Jayarathne, 2020). Agha (2020) exhibits an extensive evidence of a positive association between financially related

activities (such as financial control and planning) and successful financial performance of Kenyan tea industry. In addition, Agha (2020) contends that financial performance can be one of the huge problems faced by corporate firms in the tea industry, especially with relation to their survival, if management is not properly trained in the manner of handling and managing finance and measure corporate performance. Owuor *et al.*, (2019) argue that financial performance is the life blood of small-scale corporate firms, since without them, there will be no growth decisions that can be made, and, according to Samilog *et al.*, (2017), small business firms fail to grow on the reason that in most cases, there is rampant mismanagement of the business cash flow.

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 (Vahid *et al.,* 2018). Naser & Mokhtar (2017) 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.

Researchers have focused to evaluate the WCM and financial performance association which include Gill *et al.,* 2019; Samilog *et al.,* 2017; Uyar, 2018; Owuor & Ajilore, 2018; Mathuva, 2018; Samiloglu & Demirgunes, 2017; Gul & Khan, 2019; Garcia-Teruel & Martinez-Solano, 2017; Lazaridis & Tryfonidis, 2018; Padachi, 2018; Deloof 2019; Hsueh & Maji, 2019; Wang 2020; Shin & Soenen, 1998; Smith *et al.*, 2017 and Jose, Lancaster and Stevens, 1996 among others. However, most of the studies are analyzing the association between WCM and financial performance for the overall sample firms including firms from different sub-sectors/ industries. Similarly in many studies discussed above like Flope & Ajilore, 2018 (50 firms); Sen & Oruc, 2018 (49 firms); Padachi, 2018 (58 firms) and Eljelly, 2017 (29 firms), the sample size is less than 60 firms and even in case of Shah and Sana, 2018, the sample is 7 firms. Therefore, the findings of these studies

are general and cannot be implicated for all sectors/industries, especially the tea industry in Kenya which have different types of requirements, structure and industry differences.

A number of studies on WC have been undertaken around the globe, however, majorly of them in the first world or western nations, with lack of clarity as to how WCM decisions and ownership structure affect financial performance among the tea firms particularly in the developing countries (Takiah *et al.*, 2018). 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, 2018). Similarly, myriad of theories have been established on WCM comprising the Miller- Orr model on cash management (1966), Baumol model on cash management (1952) and the model on inventory turnover in days. 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, 2018). Studies on WCM decisions and ownership structure 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.

1.1.3 Working Capital Management and Financial Performance

One of the fundamental aspect that requires keen examination is the management of WC in tea industry in Kenya. WC is the difference between current assets and current liabilities. WC meets the short term financial obligations of a corporate entity. It termed as a trading capital, that are not kept/retained in the business entity in a particular form for longer than one year (Padachi, 2017). The money resources invested in it changes in its form and substance in or during the normal course of business operations. WCM is a technique or tool that is employed to immunize and heal business corporates from financial upheavals/challenges and therefore when managed properly can upscale a firm's competitive advantage, position and profitability (Gill, 2018). The wider view/perspective

of WCM gives way to the larger or expanded chances and opportunities to build wealth of the company. Up scaling the speed of a cash turnover in days through payable management and receivable aid improving on liquidity and profitability (Johnson & Soenen, 2018). In addition, proper and effective inventory management is also fundamental to the overall management of liquidity and profitability in many corporate firms.

The efficiency of WCM is very critical in as far as the tea companies is concerned, where a greater percentage of the assets is comprise of the current assets (Agha, 2020). One of the critical elements of WC is the inventory. The inventory of a tea firm composed of the raw materials, work in progress and finished goods. The sum total of the three elements of the inventory forms a huge investment in a tea concern. The Current assets for a typical tea firm forms over half of its overall/total assets (Raheman & Nasr, 2018).

In Global Perspective, 1000 companies lose about $2billion per year due to poor WCM decisions and ownership structure (UNCTD, 2019). The recent global financial and economic crisis has shown how important it is for firms to maintain a healthy cash position (World Economic Forum, 2017). The risk of becoming illiquid always increases in times of credit constraints and economic downtown. However, companies are still unable to properly assess their cash needs (Frankfurt Business Media, 2018). Maradi *et al.*, (2018) carried out a study at University of Florida, USA on WCM decisions and ownership structure and long-run stock-market performance, the study covered the time period of 2017-2018. The research study found out that, major investments were mostly financed with WC 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 WC. 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 WC, the remainder of finance being from other equity and debt. (Onoja & Ovayioza, 2017).

In Kenya, external financing sources accounts for 79% of the total finances for the 2014-2019 period with the rest of 21% generated from internal sources (Kibet *et al*., 2017). WC contributed about 61% while long-term sources accounted for the remaining 18% (Gathogo & Ragui, 2020).

During the present day where there is increasing cost of capital and limited resources, the importance of WC requires special and critical emphasis. It has been widely accepted that the financial performance of a business firm is likely to rely on the manner in which WC is managed (Kaur, 2017). Both inadequate and excessive WC positions are not healthy from the company's view point (Islam & Mili, 2017). Excessive WC results to inefficient use of scarce resources. Excessive WC refers to idle funds and holding costs which earn no profits for the company (Islam & Mili, 2017). This results to minimized profits even though it gives assurance of a low liquidity risk.

The inefficient management of WC sabotage financial performance and compromise the normal business operations as well (Kaur, 2017). This may finally results to a financial crisis and ultimately bankruptcy. Similarly, proper management of WC results to savings on materials and guarantees financial return at the optimum level even though on the lower level of the capital employed (Kaur, 2017). Both inadequate and excessive WC is unhealthy for a business concern. WC and its importance is unquestionable (Filbeck & Krueger, 2016), because it directly have effects on the liquidity and profitability of corporate concerns (Raheman & Nasr, 2018). Just like the blood circulation in the human body is very vital in maintaining life, similarly, the circulation of funds is very fundamental in maintaining smooth business operations (Padachi, 2017). If by any case it becomes weak, then the business concern has minimal chances of survival. Therefore, ignore proper management of WC at your own peril.

WCM is fundamental to tea industry because it compose of over half of the overall/total assets of a business entity. Many tea companies in Kenya are said to be struggling to thrive and that some critical players have been forced to shift their business operations to other countries. Others have been forced to completely shut down their business operations as evidenced by recent closure of some of the multinational tea firms in Kericho County. Generally, all these corporate entities cite high costs of operations as the major cause of the precarious financial condition (TBK, 2018). Several tea firms are closing doors and while others are operating at the bare minimum or breakeven point (TBK, 2017). The closure of a business firm can only be occasioned by liquidity and financial performance challenges. In this case, there was an urgent need to examine the challenges of financial performance and management of WC in the tea firms in Kenya.

Theoretically the percentage/level of investment in current assets has a bearing on the financial performance of the corporate entity. Excessive investment in WC casts a negative effect on the financial performance of a business firm and positive effect on the liquidity. Many studies on the relationship of amount of investment in current assets and the profitability have always claimed negative association in the research on the level of relationship both at macro and micro levels. For many agricultural firms, the current assets, that is, debtors, cash, inventory account for over half of the overall/total assets. Corporate entities with very low levels of current assets may cause difficulties and shortages in maintaining and ensuring smooth business operations (Agha, 2020). Efficiency WCM entails proper controlling and planning of the current liabilities and current assets in such a way that eliminates the risk of inability to meet short term requirements due, on one hand and on the other hand, avoiding high and excessive investment in these assets (Eljelly, 2015). Agricultural firms in Kenya is required to comprehend the relationship between these two variables in order to arrive at optimal financial performance decisions. Even though many theories exist on the topic, the empirical methods are insufficient and do not focused in arriving at the conclusions. The application of statistical methods in understanding the association is scientific and

systematic and, which may give a better understanding for making decisions (Chakraborty, 2020).

1.1.4 Tea Firms in Kenya

Contextually, agriculture is the backbone of the Kenyan economy and contributes to employment and poverty reduction. It directly contributes 26% of the GDP and 60 % of the export earnings (Tanui & Kipsat, 2018). The sector also indirectly contributes a further 27% to the GDP through linkages with manufacturing, distribution and service related sectors. It accounts for 60% of total national employment, with women providing 75% of the labour force. Majority Kenyans (80%) live in rural areas and derive their livelihood from agriculture. With 51% of Kenyan population being food insecure, agriculture is critical in the country's economic development and alleviation of poverty (Gesimba *et al.*, 2020). In the Kenya Vision 2030 document, agriculture has been pinpointed as one of the six key pillars in Kenya's economy that are expected to contribute towards accelerated economic growth rate targeted to reach 10% annually. To achieve this, the government aims at promoting innovative, commercially oriented and a modern agricultural sector. Tea, the subject matter of this study is expected to play a major role towards achieving the growth target.

The agricultural activities in developing countries like Kenya and all over the world, is unergoing profound, huge and fast-moving changes. In Kenya for instance, on average, 60% of the population is depending on agriculture. Even though globalization is advancing in such a rapid momentum in some countries than in others, this has speed up the transformation from traditional characterized by low-productivity agriculture toward a modern characterized by high-productivity agricultural industry. The results of the processes of structural change comprises of profound consequences for risk management, employment, poverty alleviation, poverty alleviation, income generation and the well-being of the households in rural areas in these countries (Jayarathne, 2020). Given that a continuous process of improvements is necessary to equalize market demand and global standards, several value chain participants are left in compromising situation of a "cash-

crunch" during trade or production cycles; this is the point where necessary mechanisms for financial service are highly helpful. Faced with this situation, many stakeholders in a value chain opt to informal financial institutions such as feudal landlords, trade brackets and money lenders for financing.

The tea industry has historically been one of the greatest success stories in Kenyan agriculture. Tea was introduced into Kenya from India by European settlers in 1903. Over the years Kenya has expanded its tea production to be the fourth-largest tea producer, after China, India, and Sri Lanka, and the second largest tea exporter after Sri Lanka. Currently, Kenya is the world's leading exporter of black tea. Estimates from the TBK indicate that the total area under tea production expanded from 24,448 hectares (ha) at independence in 1963, to about 160,000 ha in 2019. On the other hand, tea production has increased from about 18,000 tons in 1963 to just less than 400,000 tons of in 2019, (TBK, 2019). Information from TBK reveals that the country consumes only 5 % of the tea it produces; the remaining 95 % is exported, either directly or through the Mombasa tea auction.

Tea has put Kenya squarely on the world map, with over 50 countries importing Kenyan tea (Nyabwanga *et al.*, 2018). The country accounts for 10% of total global tea production and commands a remarkable 21% of global tea exports outside producing countries. The tea industry contributes about 14% of the agricultural GDP, which is equivalent to 4% of Kenya's GDP (KNBS, 2019). An estimated 3 million Kenyans (about 10% of the total population) derive their livelihoods from the tea industry. Currently, tea ranks second as a foreign exchange earner after tourism in Kenya, contributing 26% of the total foreign exchange earnings (TBK, 2019). Tea growing and manufacturing are undertaken in rural areas, thereby contributing to the development of rural infrastructure, as well as enhancing the economic well-being of rural communities.

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, 2019). However, according to Kagira *et al.,* (2018) 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.

Gesimba, Langat & Wolukau (2020) posit that the success of tea industry in Kenya is correlated with the WCM decisions and ownership structure employed by the firm. Many empirical studies (Javed & Akhtar, 2018; Mukras & Oginda, 2019 Mutungi, 2019; Wainaina, 2019; Apuoyo, 2019; Omesa *et al.*, 2019; Maradi *et al.*, 2018; Nyabwanga *et al.,* 2018; Gakure *et al.*, 2018; and Mathuva, 2019) 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 ownership structure and its contribution to the sector's financial performance remain largely unexplored (Gesimba *et al.,* 2020). Numerous research studies regarding WCM have been conducted in many economies around the globe; however, the understanding of WCM decisions and ownership structure 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 (Gitman *et al.*, 2017). 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 and ownership structure variables

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 ownership structure and financial performance, albeit within the context of tea firms Kenya.

Pertaining the tea company's financial performance, the concept has been understood in many way. In the field of applied studies, it is normal to relate advancement in firm performance with increased higher efficiency, increased output and profitability (Teruel, 2020). The process of assessing managerial performance is an uphill task. Normally, the capital market only has the current financial statement and in addition to other public disclosures with which to evaluate financial performance. These items are insufficient metrics of managerial quality because they do not take into account "soft issues" and strategic off-the statement of financial statement items such for instance, as expansion of production capacity, research and human resource development, whose earnings can only be achieved in the subsequent financial/accounting periods (Njanja, 2020).

The extant research studies attempting to address the financial performance of tea sector has relied on financial indicators based on accounting information (Ogundipe *et al.*, 2018; Njanja *at al.,* 2019), indicators that are market-based, and sometimes a combinations of both (Waweru, 2019). The nature of any indicator on financial performance may be critical, because there is some disagreement pertaining the degree to which any executive or board decisions might impact market-based versus accounting metrics of financial performance.

According to Ongore (2017), depending on accounting and financial metrics has been frequently down played and criticized. It has been argued, for instance, that such measures firstly, are subject to changes/manipulation; secondly, such measures may systematically undervalue the assets; thirdly, such measures create distortions because of the nature of depreciation policies adopted/employed, treatment of certain expenditure and revenue items and inventory valuation; fourthly, such measures deviate in regards to the methods employed for the consolidation of accounts; and lastly, absence of an ideal standard in the

treatment of accounting conventions. Similarly, returns on financial accounting are challenging to interpret or understand especially in the areas where there exist a multi-industry participation by the corporate entities. For instance, it has been shown that the managers of the tea industry normally compares performance of the tea industry in relation to the average industry performance while assessing the performance and managerial decisions (Zariyawati *et al.*, 2017). Further, it has also been noted that financial accounting metrics do not usually capture or account for owners/shareholder risk of investment. Therefore, in the process of safeguarding their jobs, corporate managers might exert excess emphasis on how their decisions impact on short-term profits including other public disclosures. This way, corporate managers may develop a tendency to act/operate myopically (Mathuva, 2019).

The common practice among corporate managers/executives is the emphasis on short-term performance. The danger to this practice is that, current profits are over-valued by the market in relation to managerial decisions that are likely to generate/earn future profits. Therefore, management will apply a very high/punitive discount rate while making decisions on investment. Viable projects that reap their earnings in the distant future will be ignored and unviable projects having with a short payback period are accepted (Titman *et al.*, 2017). However many research studies have, employed financial indicators of company's performance due to the fact that they are readily available to the public for consumption.

The typical financial indicators that have been normally applied includes; return on equity (ROE) and return on assets (ROA) (Cohen, 2019: Meredith, 2017; McMahon, 2018). Over-reliance on financial indicators to assess the overall financial performance is often misleading especially if the tea firm in question has many component of intangible assets in its business operations including Research and Development, human resources and other non-balance sheet assets. Therefore, the requirement to emphasis on non-financial indicators of performance, or at least one that combines elements of both, for a more comprehensive appraisal of business entity performance cannot be overemphasized (Emory, 2019).

Besides, market-based returns possesses many advantages, for instance, firstly, they do show/reflect risk adjusted performance; secondly, they are not adversely affected by multinational or multi-industry issue, however, only may be that market-based performance indicators are normally a subject to forces that are beyond the management control (Owuor, 2019). Hence, since there appears to be no agreement pertaining the efficacy of reliance on one set of indicators, a mix of market-based and financial indicators is advisable in order to net/capture the issues that are within the control of the management, and also those that are widely market-driven. For purposes of the current study, return on assets, net profit and sales growth will be employed to gauge and assess the financial performance.

1.2 Statement of the Problem

Working capital performance provides critical insight into the state of a company's financial position. As an important indicator of financial fitness, the availability of a company's working capital is one of the first items a lender or investor will examine on a balance sheet (Financial Executives International Canada, 2018). Globally 1000 companies lose about $2 billion per year due to poor WCM. The recent financial and economic crisis has shown how important it is for firms to maintain a healthy cash position. 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, 2017).

Accordingly, the problem necessitating this study is four-fold. Firstly, tea sector in Kenya has been identified as one of the core agricultural sectors with ample scope to boost the other sectors of the economy. Further, it has been identified in Kenya's vision 2030 as a key pillar in economic development including; employment creation, income generation, foreign exchange. However, on flip side, tea firms in Kenya are struggling to thrive. Kenyan tea industry is marked by rising competition, decline in tea income, collapsing international prices, a fall and fluctuation of exports and productivity of tea, deteriorating tea quality, among others, which continues to have a depressing effect on financial

performance (KNBS, 2018; UNCTD, 2018; TBK, 2019). Multinationals and KTDA managed tea firms in Kenya has been performing poorly in the recent past and statistics of audited financial statements and reports by TBK & KNBS of 2014 and 2019 revealed a warning signal on its financial performance. Based on the statistics summarized in appendices; 5, 6, 7, 8, 9 and 10, earnings of tea industry dropped significantly during the years 2014-2019. Earnings from tea exports dropped to USD 336.6 million from 335.7 by first quarter of 2018. There was a cumulative decline by 6.5%. Tea production for the year 2018 reached 377.9 Million Kilograms, which was 5% lower compared to 399 Million Kilograms recorded in 2017 (TBK, 2017). According to TBK (2018) & KNBS (2017) statistics shown in appendix 10, the most affected was West of Rift (including Kericho, Bomet and Nandi Counties), with its tea output dropping by 5.5% from 246.1 Million Kilograms recorded in 2017 to 232.6 Million Kilograms. The reasons for the dropped in earnings has been focused mainly on WCM decisions and ownership structure adopted by tea firms in Kenya. However, managers and finance practitioners still lack adequate guidance for attaining optimal WCM decisions (Gakure *et al.,* 2017), thus the need for this study.

Secondly, several studies have been carried out internationally, regionally and locally on the effect of WCM decisions and ownership structure on financial performance of different firms. For instance, internationally, studies by Gul *et al.,* (2018) and others; Regionally, studies by Egbide *et al.,* (2018) and others, and Locally, studies by Gakure *et al.*,(2017) examined the impact of WCM decisions and ownership structure on the financial performance of various firms in Kenya. However, it is instructive to note there is still ambiguity regarding the appropriate variables that might serve as proxies for WCM. These studies produced conflicting results and do not provide clear-cut direction on the relationship between WCM decisions and ownership structure and firm's financial performance, thus the need for the current study.

Thirdly, currently available empirical literatures on WCM decisions and ownership structure were done in other geographic jurisdictions other than Kenya, especially in developed economies such as the USA and Europe. However, since Kenya differs from

developed and other developing countries in terms of capital markets, economy and infrastructural development, this limited evidence in the context of tea industry in Kenya, calls for a research to be undertaken, thus necessitating this study.

Lastly, there is relatively little evidence available on the moderating effect of ownership structure and mediating effect of operating cash flow on the relationship between WCM decisions and ownership structure and financial performance, and in particular, tea industry in Kenya. Therefore, this study intends to bridge these gaps in the literature.

1.3 Research Objectives

1.3.1 General Objective

The general objective sought to investigate the effect working capital management and ownership structure on financial performance of tea firms in Kenya.

1.3.2 Specific Objectives

In order to achieve the overall objective, the specific objectives of the study were:

i. To determine the effect of receivable accounts management decisions on financial performance of tea firms in Kenya.
ii. To establish the effect of accounts payables management decisions on financial performance of tea firms in Kenya.
iii. To examine the effect of inventory turnover in days on financial performance of tea firms in Kenya.
iv. To determine the mediating effect of operating cash flow on the relationship between receivable accounts management decisions, accounts payables management decisions, inventory turnover in days and financial performance of tea firms in Kenya.
v. To investigate the moderating effect of ownership structure on the relationship between receivable accounts management decisions, accounts payables

management decisions, inventory turnover in days and financial performance of tea firms in Kenya.

1.4 Research Hypotheses

The hypotheses of the study were identified as:

i. There is no statistically significant effect of receivable accounts management decisions on financial performance of tea firms in Kenya.
ii. There is no statistically significant effect of accounts payables management decisions on financial performance of tea firms in Kenya.
iii. There is no statistically significant effect of inventory turnover in days on financial performance of tea firms in Kenya.
iv. There is no statistically significant mediating effect of the operating cash flow on the relationship between receivable accounts management decisions, accounts payables management decisions, inventory turnover in days and financial performance of tea firms in Kenya.
v. There is no statistically significant moderating effect of ownership structure on the relationship between receivable accounts management decisions, accounts payables management decisions, inventory turnover in days and financial performance of tea firms in Kenya.

1.5 Justification of the Study

This study sheds light on matters regarding financial performance of a firm. It is expected that this study will help to create awareness on the impact of WCM decisions and ownership structure and how it can enhance corporate financial performance. It will help managers of the firms under study to have better insights on how to maximize their firm's value. Further, it will guide investors to invest in the tea companies under study that are managing their WC well. These investors will have more confidence in the company they want to invest in. Their investing in Kenya will influence the growth of the economy. In

addition, it will also assist decisions makers to implement new set of policies regarding WCM in Kenya to ensure continuous economic growth. It will help to meet the need of management accountants, academia, and students who will be interested in this study. Other researchers on corporate governance will find useful information from this study, it will also add to the existing literature on the topic. The study contributes to the body of knowledge in finance by exploring the moderating effect of ownership structure and mediating effect of operating cash flow on the relationship between WCM decisions and ownership structure and financial performance of tea firms in Kenya.

1.6 Scope of the Study

The study covered all multinationals and KTDA managed tea firms in Kenya for the period 2014-2019, and comprise of 23 multinationals and 72 KTDA managed tea firms in Kenya. The multinationals and KTDA managed tea firms were purposively selected because of two reasons. First, as per the statistics in appendix 10 tea earnings in Kenya was the most affected with its tea output dropping by 5.5% from 246.1 Million Kilograms recorded in 2019 to 232.6 Million Kilograms and Secondly, it is known to host many multinationals and KTDA managed tea firms in Kenya (TBK, 2018). Therefore, it was worth carrying out this study in order to unearth the reasons behind this significant decrease. The period was selected because it represents the time when the tea firms registered a drop in tea income and fluctuating productivity. Therefore, the study was restricted to the effect of WCM decisions and ownership structure on financial performance of tea firms in Kenya. The study utilized secondary data.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter deals with the critical review of the theoretical and empirical literature relating to WCM decisions, ownership structuring and financial performance and shows its linkage to the research questions. It indicates what has been done by other researchers including the methodologies used and identifies the gaps. The conceptual framework is laid out to show the interaction between the variables and finally a summary of the literature review is provided.

2.2 Theoretical Framework

The theoretical framework introduces and describes the theory which explains why the research problem under study exists. Butt *et al.,* (2019) assert that theories are formulated to explain, predict and understand phenomena and, in many cases, to challenge and extend existing knowledge, within the limits of the critical bounding assumptions. The relevant theories explaining these variables are explored, indicating the existing studies and their conclusions. The selection of a theory depends on its appropriateness, ease of application and explanatory power. The theoretical framework connects the researcher to existing knowledge (Kennedy, 2017).This study was underpinned by conservative plan theory, transaction cost theory, economic order quantity model, Baumol's and Miller-Orr models and resource-based view theory.

2.2.1 Conservative Plan Theory

This particular theory dictates that the cost of financing WC is equivalent to the cost of long term finance that is average annual loan multiplied by long term interest rate. The fixed and part of current assets are financed by long term finance as long term and permanent sources are more expensive resulting to reduced risk return. (Agha, 2020);

Efficiency in WC is fundamental especially for production of companies whose assets are current because it directly impact on profitability and liquidity of any corporate entity. This theory largely applies the philosophy of 'play it safe'. It aims to providing sufficient or enough long term financing to meet all the anticipated eventualities. The conservative theory means relatively high degree of investment in current assets in comparison to sales, the ratio of current assets to sales is expected to be comparatively high and the ratio of assets and turnover will be minimized. This approach do not apply short term borrowing and therefore in the long run, may be very expensive because the available finance may not turn out to be fully employed in some periods however, interest on those finance not needed still accrue/accumulate and are therefore paid. Raheman *et al*.,(2017) confirms that, companies are required to employ accurate measures on WC even though their profitability may be positive.

Undoubtedly, the risk and return theory is among the fundamental theories in the discipline of portfolio management. The risk and return relationship has received indispensable attention from multitude of scholars in the fields of finance, economics and business (Mukherji *et al.,* 2017). In addition, all investment decisions are built under strong foundation of risk and return relationship (Richard *et al.,* 2017). Consequently, there are two fundamental attitudes that conflict each other and are normally attributed with the risk. These attitudes are; the risk-seeking attitude and the risk aversion attitude. Risk seekers normally undertake options/preferences that pertains a higher percentage of likely loss or a greater chances of a loss and with a strong belief of over estimating returns. Certainly, the main objective of risk-seekers is on the opportunities for greater returns (Tigen & Bran, 2019). Conversely, risk-averters are completely opposite of risk seekers, in the sense that they (risk averters) over estimate losses and underestimate gains.

Hence, the applicability of risk and return theory to WCM could be seen from the overriding/prime decisions in trade-off between liquidity and financial performance. Certainly, if a company prefers to be liquid it should be at the expense of the returns and vice-versa. Undoubtedly, choices surrounding any one of these two conflicting arrangements may give rise to in either too high or too little of the components of WC and

the current assets of a business. In the same vein, the risk and return theory which is an fundamental or central part of the portfolio theory can be associated to WC when we look inwardly at the ability of a firm or financial manager to determine the collection of assets, or portfolio to be acquired, since it is impossible to own everything, decisions on what the composition of receivables, inventories, incentives and stocks viz-a-viz the profitability concern are all within the context of risk and return theory. Based on arguments of the conservative plan theory, therefore, this study sought to establish whether Receivable accounts management decisions had any effect on the financial performance of tea firms in Kenya.

2.2.2 Transaction Cost Theory

Transaction cost theory is employed to give understanding on a number of various behaviors. Normally, this entails taking into account as transactions not only the obvious cases of buying and selling but also the daily informal gift exchanges and emotional interactions (Williamson, 1975). The transaction cost theory proposes that there are certain costs that individuals normally incur without necessarily having the knowledge that they are actually cost to them. These particular costs must be incurred every time a transaction is undertaken. These costs are referred to as transaction costs. The knowledge that transactions form the foundation of an economic thinking was coined by John R. Common in 1931 (Williamson, 1975).

Transaction cost theory aims at the transactions and costs that attend completing transactions by one institutional mode as opposed to another (Williamson, 1975). The central claim of this theory is that the transactions will be managed in such a way that it minimizes the associated costs that is involved in carrying them out (Muchina & Kiano, 2018). The term transaction, which means, the exchange of good or service is the unit of assessment in transaction cost theory and therefore, the methodology of carrying out the transaction is the fundamental results of interest (Williamson, 1975). The accounts payable management decisions can be understood in the context of transaction cost theory

in that the loss in discounts emanating from the suppliers is attributed as a cost to the debtor.

This theory was developed by Commons (1934) and reinforced by Arrow (1969, 1974), Coase (1937), and Williamson (1985, 1991). According to Arrow (1969), transaction comprises of the costs that are employed in running the economic system. Coase (1988) proposed that there are the normal costs for undertaking the market transactions. In this case, a company would opt for transactions to be managed within the company if the cost would be lower than the cost of undertaking a transaction in the market. However, as other costs of transactions within the company go beyond the cost of undertaking the transaction through the market, the companies' aims at reducing the transaction costs by employing the vertical integration (Williamson, 1991). In this case, the reasoning behind the transaction cost theory is that market costs are normally too expensive for companies to manage individually. This results into the development of linkages for micro/small companies (Thorelli, 2016).

From a perspective of transaction theory, a company requires to put into account two main costs, namely, the control costs and the market transaction costs, as their component of the process of internationalization (Williamson, 1985; Hennart, 1989). These costs emanates from behavioral and environmental uncertainties, asset specificity and opportunism (Rind, 2017). Heide (2015) stated that both behavioral and environmental uncertainties stands for the changes in the market, that is unpredictable including the uncertainty of likely company action of reaction. Such level of unpredictability give rise to the contractual constraints, which means that every consequent and possibility response become more ineffective (Heide, 2018). The opportunism can be termed as action that is based on self-interest with degree of astuteness (Williamson, 1985). Lastly, Williamson (1985) also proposes that asset specificity stands for the fact that the relationship between the partners is a transaction-specific assets that cannot be reorganized with ease. The foundation of transaction cost theory focuses on transaction and the costs that attend completing transactions by one institutional mode as opposed to the other (Williamson, 1975). The transaction, being the transfer of a good or service is the unit of assessment in

the transaction cost theory and therefore the means of undertaking the transaction is the main results of interest (Williamson, 1985).

The theory's core and central claim is that transactions will be undertaken in a manner that will lower the costs that is involved in carrying them out. The goods in this scenario stands for the finances committed to for WCM. In WCM, the four components, that is, inventory, debtors, creditors and cash stand out as the critical challenges, whose management requires rigorous resource commitment and planning. For instance, inventory can be mathematically modeled to develop a key policy giving details on when inventory should be ordered, on what quantity including the related cost. In the environment of tea industry, the techniques for such action may be absent or the cost of such application may offset the benefits of its use. In many practical scenarios, companies can decide between the relative benefits of two basic types of techniques for net WCM; they can lower WC investment or they can employ WC policies developed to boost the turnover. Therefore, the management of a company has to assess the trade-off between expected profitability and the related risk, each of them standing for a forgone cost of the other before finally deciding the optimal level of investment in current assets.

Transaction cost theory has been employed by several scholars in economics (For example, Spence & Zeckhauser, 1971), Accounting (Demski & Feltham, 1978), Finance (Fama, 1980), Marketing (Basu *et al.,* 1985), organizational behavior (Einsenhardt, 1985; Kosnik, 1987), political scientist (Mitnick, 1986) and Sociology (Eccles, 1985; White 1985). Although the theory enjoys wider applicability it is still surrounded by controversy. This controversy aroused as a result of the fact that interest of principals and that of agents diverge. Hence, the focal point of agency is that it should be a theory that looks at how to ensure agents (executives and managers) acts in the best interests of the principals (shareholders and owners) of an organization.

The applicability of transaction cost theory to WCM decisions and ownership structure could be scrutinized from the point of view of manager of finance, who in many times the agent of the principals of the company, and who executes overall fundamental decisions

pertaining the liquidity of a firm. He plays the stewardship role taking control of the leading and indispensable decisions pertaining accounts receivables, accounts payables, inventories and liabilities of the company. Nonetheless, by relating this aspect to relevance of the stakeholder as indicated previously, the correlative and complementary relationship of a firm and various stakeholders like, for instance suppliers, provides the much needed source of finance to the company and in return the exchange demands servicing of loans granted on schedule. The holders of stock supply the company`s capital and in return demands an adjusted return that maximizes risk from their investment. Human capital and stewardship role played by the managers help the company with much needed expertise, time resource, and in addition human skills fundamental and in return they expect improved working conditions for their work, increased incomes and packages of remuneration. Debtors are the crucial providers of the revenues to the organization and in return demands to have value for money coupled with services that are standard and satisfactory. Creditors are providers of input resources to the company, and therefore in return demands affordable prices and reliable buyers. Shareholders many times are not in consensus regarding to their amount of resources invested in the company. The level of each individual`s shareholder's interest depends on the degree of his exchange of relationship and stake with the company which is measured on the amount of investments injected and committed to the firm (William, 2018). Based on arguments of the transaction cost theory, therefore, this study sought to determine whether accounts payables management had any effect on the financial performance of tea firms in Kenya.

2.2.3 Economic Order Quantity Model

The economic order quantity is a model in inventory control and it is develop to ensure costs minimization, between holding of inventory and inventory ordering. It demands that economic order quantity (EOQ) is determined, which stands for the ordering quantity at which the cost of holding inventory are equivalent to the cost of ordering inventory (Saleemi, 2016). It proposes that the optimal size of the inventory is the point at which the cost of ordering of inventory are equivalent to the cost of holding inventory. The optimal size of the inventory is also known as the economic order quantity (EOQ). This model aid

a business concern to organize an effective inventory management system that ensure a reliable and efficient turnover forecasts to be employed for the purposes of ordering (Hayam, 2017). In order to enhance the application of the EOQ model, a number of assumptions must be taken into account. First, the use of products in store is assumed to be steady. Secondly, the cost of placing an order are assumed to be constant, that is, the equivalent amount has to be paid for any size that has been ordered. Lastly, is that the inventory carrying costs which comprises of cost of insurance, handling and storage are assumed to be constant per unit of time and per the unit of the inventory. Therefore the EOQ model simply takes into account the variable costs, however, it can easily be expanded so as to accommodate the fixed costs (Ross *et al.,* 2020). This model has been applied in the past by Nyabwanga *et al., (*2017) in Kenya. The basic EOQ model is developed on the assumptions that annual demand requirements are known, only one product is produced, lead time does not vary, demand is spread evenly throughout the year so that demand rate is reasonably constant, there is no quantity discounts and each order is received in a single delivery.

The fundamental objective of maintaining optimal inventory levels is to minimize the possible interruptions cost or loss of business occasioned by the scarcity of products, minimize the cost of supply and guard against the fluctuations of price (Nyabwanga *et al.,* 2017). Based on arguments of the economic order quantity model, therefore, this study sought to determine whether inventory turnover in dayshad any effect on the financial performance of tea firms in Kenya.

2.2.4 Baumol's and Miller-Orr Models

Baumol (1952) established this model of inventory. The foundation of this model is on the basic principle of economic order quantity (EOQ). The principal aim of this model is to establish the optimal target of the cash balance based on the following basic assumptions: First, the company is in a position to predict its cash needs with high degree of certainty and receive a specific portion at regular/certain intervals, the company's cash payments happens uniformly within a specific period of time, the forgone cost of holding

cash is known and do not change over a certain period. Cash holdings comprise of opportunity cost in the form of opportunity foregone and the company will incur equal costs of transaction whenever it transform its securities to cash. The assumption of no cash receipts during the predicted time period is a main shortcoming of this model.

When the cash balance of a firm reaches its ceiling/ the upper limit, it purchases a specific amount of saleable securities that will aid them to bounce back to the required level. If the balance cash of the firm approaches the lower level then the firm sells its saleable securities and collect enough cash to solve the challenge. It is usually assumed in such scenarios that the average value of the distribution of net flow of cash is zero. It is normally understood that the distribution of net flows of cash has a certain standard deviation. The miller and Orr's model of management of cash further assumes that distribution of flow of cash is normal. The Miller and Orr's cash management model is majorly employed by many corporate firm.

The model was established to lower the sum of opportunity cost related with the exercise of cash holding and costs of trading related with transforming other to cash. The process is the same as that of the EOQ Model for size of the inventory however, it handles different variables. It assumes that the company tend to holds/keep a portfolio of marketable securities which can easily be transformed into cash (Baumol, 1952).

Regarding this model, it is assumed that cash will start from a replenishment level, C, and then reduce slowly and smoothly to a zero value. When cash reduces to zero, it can be replenished immediately by trading another C worth of marketable securities, for which the company has to pay a cost of trading of F (Cornett *et al.*, 2019). According to Baumol model, the financial executive/manager has to make a decision on the separation of liquid funds/finance between marketable securities and cash (Pandey, 2019). Further, there is a trade-off which forms the foundation for this calculation. However, this trade-off is associated to the opportunity costs of cash holding which increase together with the level of cash and the costs of trading which are incurred with every transaction and which reduces when the level cash increases (Cornet *et al.*, 2021).

The opportunity costs stands for the interest forgone for funds/finance which are held in cash as opposed to being invested. The costs of trading conforms to the fixed costs which are incurred when a firm makes a decision to either sell or buy marketable securities (Pandey, 2019). If a firm makes a decision to uphold a low level of cash, then it will have to undertake several transactions attracting a high costs of trading however, low opportunity costs in that there are little idle cash finance/funds. If it uphold a high cash level, then the company's opportunity costs will increase because of the relatively large quantity/amount of un-invested cash however, the costs of trading will reduce because only few transactions will be deemed to be necessary (Pandey, 2019). The Baumol's cash management model possesses three key assumptions; first, the company spent cash at a steady and predictable rate, secondly, cash flows from operations similarly occur at a steady state and lastly, the net out flow of cash occur at a steady state.

Therefore, in applying this formula, a firm can establish the optimal level of cash replenishment. However, despite the fact that Baumol's cash management is a vital tool in management discipline, it suffers from a number of challenges; first, this model assumes that the company possesses a constant, perfectly disbursement cash rate. In reality, the of rates disbursement remains much more unpredictable and variable; secondly, this model assumes that no cash will be earned during the time period in question. Since most companies aspires to make even more money as opposed to what they pay out, and normally have inflows cash at many times, then this assumption is obviously at odd and not working, in line with what we see. Lastly, this model does not give way to any safety inventory of extra cash to buffer/shield/cushion the company against unexpectedly high cash demand (Cornett *et al.,* 2019).

Miller-Orr model was established by Daniel Orr and Morton Miller (Cornett *et al.,* 2019) with an aim to develop a more realistic approach to management of cash over Baumol's model. The model managed to achieve/attain a reasonable degree of realism however not being too elaborate. It assumes that the net flows of cash are evenly and uniformly distributed with zero value of standard deviation and mean. The model apply certain information to develop/derive a mathematical formula. Miller and Orr (1966) was

established together with yet another cash management model. According to the Miller and Orr's cash Management model the firm let their cash balance move within two limits referred to as the lower limit and the upper limit. The firms sell and buy the marketable securities only if the cash balance is equivalent to any one of these. This model corrected/rectified some of the shortcomings/deficiencies of the Baumol model by keeping/accommodating a fluctuating cash flow situation stream that can either be outflow or inflow.

The company sets the lower limit according to its needs and requirements of maintaining cash balance and upper limit as the limit of control and also as its point of return. If cash balance approach the upper limit, the company purchases sufficient securities to return back the balance of cash to a normal level referred to as the point of return. When cash balances approach the lower limit, the company trades/sells securities to return back the balance to point of return (Pandey, 2019). O'Donnell & Goldberger (1964) establish that the sufficiency/adequacy of current assets and cash, together with their effective handling virtually establishes the demise or survival of a business concern. A business firm should keep/maintain sufficient and adequate WC for its smooth functioning of the firm. If materials are recklessly bought without proper plan, then it will amount to slow moving, dormant and absolute inventory. However, insufficient/inadequate quantity of inventory will give rise to stock outs and compromise the smooth business operations (O'Donnell & Goldberger, 1964). Cash should also be kept/maintained at a suitable/ideal level. Similarly, it may give rise to increased cost because of mishandling, theft and waste. Inadequate or too much level of cash balances basically would mean that cash is not properly used/utilized. Inadequate cash balance level for example, can give rise to halt/stoppage in firm's operations (Padachi, 2017). A firm may be profitable but with no liquid cash which can amount to interruptions of the business operations. The firm can also be forced to go into winding up by its lenders/creditors. Based on arguments of the Baumol's and Miller-Orr models, therefore, this study sought to determine whether operating cash flow had any mediating effect on the WCM decisions and financial performance of tea firms in Kenya.

2.2.5 Resource-Based View Theory

The survival of business and financial performance of an entity is based on resources, whether human or material. There is need for differentiating capabilities from resources when company stock resources are being taken. Resources are a vital analyzing unit since they are production process unit. Examples of resource that a company possess include capital equipment, employee skills, brand names, patents, finance etc. when firm operate independently, its productive resource are few.

In resource based view theory, the fundamental assumption is that when the proprietor and managers accumulate the distinctive resources, it in long run provides a competitive edge to the firm. This notation was explained by (Wernerfelt, 1984). Firm resources include both physical and non-physical. Tangible resources refer to those assets which have actual existence in the business environment. Whereas intangible refers to the good will of the business, knowledge and procedures among others. If resources will be productive, then there must be team cooperation and coordination, which is shown by the teams' capability to act on a variety of tasks. Thus, as put across by Grant (2016), a company's capability is defined by available resources. This model is inclusive of individual manager's cognitive ability to make sure that short-term WC is managed effectively (Alvarez & Busenitz, 2018). Therefore, any company manager contain resources that are individual specific that aim at facilitating and ensuring new opportunities are recognized, that the resources are effectively assembled, payments being mad are psyched and receivable recovering as a way of making sure that WC is effectively managed and thus the company's profitability.

This theory asserts that there is no long term finance/funds are employed to finance short term seasonal requirements/needs; that is, current assets are equivalent to current liabilities. It is termed as a moderate policy that attempts to equalizes/matches assets and liabilities to maturities. Jose *et al.,* (2016) noted that current cash ratios and acid test are balance sheet metrics that cannot give accurate and detailed WC effectiveness. The resource based view theory is a risk as it almost full employment/utilization of the

company's capacity to utilize short term finance/funds and in situations of emergency, it may be challenging to satisfy short term requirements/needs. The company utilizes long term sources to fund permanent current assets and fixed assets and short term funds to finance short-term/temporary current assets. Boer (1999); Richards *et al.,* (1989); Schilling (1996) and Gentry *et al.*, (1990) have insisted on employing ongoing management of liquidity. Ongoing liquidity management stands for the outflows and inflows of cash through the company as the collection and payment takes place over a certain period of time. In resource based view theory, a company aspiring to have extra/additional inventories for two months will look for short term finance for two months to equalize/match the inventory purchase. Limited access to short term WC sources which comprises of the suppliers' financings and bank financing provides a challenge/hindrance to the hedging approach. Ross *et al.,* (2018) provide the advice that in most cases, it is reasonable to study the WCM approach in connection to funds application.

Richards and Laughlin (1980) developed this theoretical policy where they focused their attention at looking at WCM and its individual elements. The liquidity flow concept development is through the extension of the analysis of static balance sheet to identify the capability of liquidation coverage of the value including measures of income statement of the operating activity of a firm. Specifically, receivable accounts and measures of the inventory turnover when incorporated into the concept of operating cycle gives a more precise perception of management of liquidity than the solvency indicators which are the current and acid taste ratio. According to operating cycle theory when firms grants more liberal credit terms to its customers there is a higher tendency of having a bigger, but ultimately less liquid investment in cycle (that is, the inventory turnover) shows the number of times with which business firms converts the totality of their raw materials stock, their work-in-progress and ultimately the finished goods into product sales.

The applicability of resource based view theory to WCM is that the traditional policy of relying on current or acid-test ratios as solvency indicators is quite defective compared to the operating cycle policy of relying on current or compared to the operating cycle policy

where receivable accountsand inventory turnover measures are incorporated as useful in liquidity management. This is quite clear because RAD as a proxy for firms average receivables investment is converted to cash. One critical aspect to note is that changes in collection and credit policies have a direct effect on the balance of accounts receivable outstanding, in relation to annual firm`s sales (Richard & Laughlin, 1980). Based on arguments of the operating cycle theory, therefore, this study sought to establish whether inventory turnover in days had any effect on the financial performance of tea firms in Kenya.

This theory is employed where the company is planning to take high risk and where short term finance are utilized to a very high degree to fund fixed and current assets. This method/approach is characterized by decreased/low interest rates. Nonetheless, it's fundamental to highlight that, the risk that is related with short term debt is higher than that of the long term debt. This applies or related mostly to business firms that are operating in an economy that is stable and are quite sure/certain about their future cash flows. A business firm with an aggressive working capita WC policy provide short credit time periods to customers, while holding minimal inventory and possesses a minimal amount of cash in hand. This principle/policy increases/encourages the risk of defaulting because of the fact that a firm might face a challenge of lack of financial resources to meet short term liabilities, however, it provide a high return as it is normally related with high risk (Ross *et al.*,2018).

This theory depicts the interface amid the constituents of WC and the cash flow within a firm, and it can be utilized to decide on the sum of money required for any degree of sales. This theory is utilized as an inclusive evaluation of WC due to its ability to showcase the time delay between the amounts spent for purchasing the raw materials and when the cash for the finished products was being collected (Padachi, 2018). When a company's short term assets and liabilities are continually managed, this will eventually participate in the accomplishment of the company. It is believed that those firms whose long term views are developing and have a sound bottom line often cannot be able to pay all debts the good management of liquidity (Jose *et al.*, 2018).

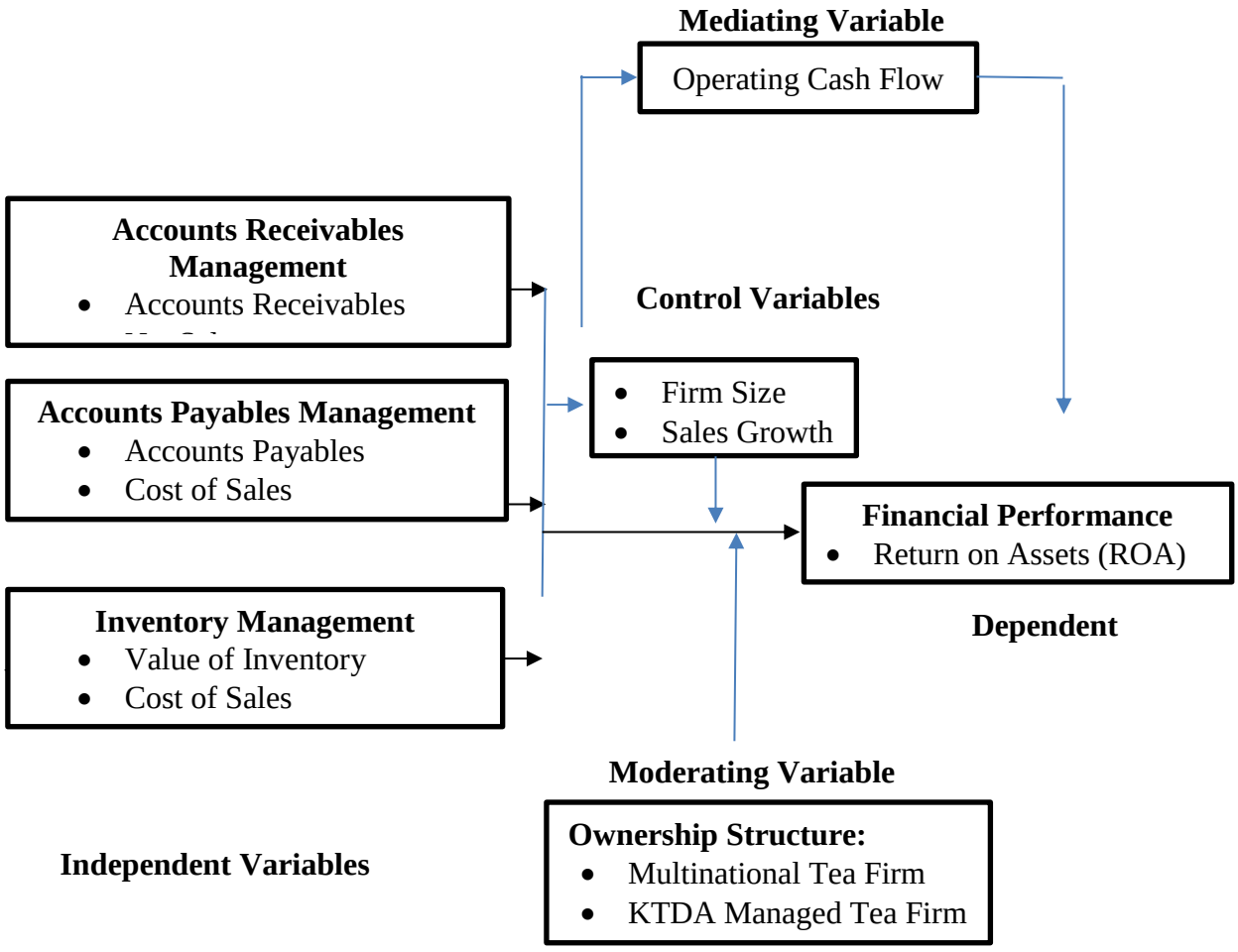
The relevance of resource based view theory to WCM is that the theory centers on expounding a cycle that starts from the payment for the raw materials purchase, all through to finally processing and the new product emergence, to the collection of receivable accountsfrom the debtors of the interaction as a result of the sale of stock. Indeed, finance directors and managers and all the financial management analysts embrace at least at an intuitive level that all WCM investments does not have similar life expectancy, and their processing rate to usable flows of liquidity is normally not at the same speed (Richardr & Laughlinn, 2020). In the overall, one can conveniently say that the COP theory is the most central one in explaining WCM as it is concerned with all the concepts and components, ranging from raw materials to finished products, and outputs representing inventory levels, to receivables and payment representing the cash aspect. Based on arguments of the COP theory, therefore, this study sought to examine whether cash conversion period had any effect on the financial performance of tea firms in Kenya.

The applicability of resource-based theory to WCM and ownership structuring is that it is used in this context to include the cognitive ability of individual managers of businesses as to ensure effective management of the short-term asset of the business (Alvarez & Busenitz, 2016). This therefore connotes that managers have individual-specific resources that facilitates and ensures the recognition of new opportunities, effective assembling of resources, as well as the psyche of making payments, and recovering of receivables as and when due to ensure effective management of WC and ultimately the firm`s profitability. Based on arguments of the resource-based theory, therefore, this study sought to establish whether the moderating effect of ownership structure had any effect on the relationship between WCM decisions and ownership structure and financial performance of tea firms in Kenya.

2.3 Conceptual Framework

Kothari (2016) defines conceptual framework a hypothesized model identifying the model under study and set of broad ideas and principles taken from relevant fields of enquiry, used to show relationship between the independent variables and dependent variable. It is

the researcher's conceptualization of the interactions between the variables of the study. The graphical representation of the conceptual framework for this study is shown in Figure 2.1.



Independent Variables

Figure 2.1: Conceptual Framework

Source: Researcher (2021)

2.4 Review of Variables

The dependent variable of the study is financial performance, which was measured by ROA, which connotes the ratio of earnings before tax and interest to total assets. ROA has been employed by Samilogluu *et al.,* (2018), Vahidir *et al.,* (2018) and Nazir & Afza (2018). The ROA determines the efficiency of management to utilization of assets to build and generate earnings. It is the most relevant and better metric because it relates the company's financial performance to the asset base (Javedm & Akhtarr, 2018).

The independent variables of the study are receivable accounts management decisions measured by the receivable accounts in days (RAD); accounts payables management decisions measured by the Payable accounts in days(PAD) and inventory turnover in days measured by the inventory turnover in days (ITD). The researcher further conceptualized that the variation in the dependent variable (financial performance) is explained by the individual independent variables, when firm size (SIZ) and sales growth (SG) are incorporated in the model as the control variables. Besides, this study further examined the moderating effect of ownership structure and the mediating effect of operating cash flow on the relationship between WCM decisions and ownership structure and financial performance of tea firms in Kenya.

2.4.1 Receivable Accounts Management Decisions

According to Raheman *et al.,* (2017), receivable accounts in days (RAD) is the time period taken to collect cash from customers. Account receivables are customers who are yet to make payments for the goods/services that the company supplied to them. The principal objective of account receivables management is to reduce the time-lapse between completion of sales and receipt of payments. In order to significantly boost sales for the business enterprise, the customers should be offered policies on credit transaction. Similarly, the cash budget should show that credit sales create trenched cash flow otherwise it would create cash flow challenges if they delay the receipt of cash to meet its financial obligations (Zariyawati *et al.,* 2017).

Ongore (2017) suggest that credit customers who either meet their obligations late or don't pay at all only escalate the problem. Therefore, it is critical for the financial director/manager or account receivables director/manager to provide good policies that manages the benefits of offering credit with the related costs. Raheman & Mohamed (2017) upholds the notion of credit policies offered to the credit customers should include; first, setting credit terms which comprises of the portion of the credit policies that is concerned with how long the business organization should offer credit and what type of discount should the business firm extend to encourage credit customers to make early payments. Secondly, is the credit standards that have been developed which give guidance on how should the business firm make decisions regarding which type of customers qualify for credit, what kind of credit data it needs and how stringent should the said standards be. Finally, design relevant and appropriate collection policies which is the component of collection policies that control how aggressive should the business firm be at collecting accounts that are long overdue, at what point of time does it becomes necessary to sue the credit customers who are making late payments of their accounts, or to turn over the outstanding accounts to collection firms/agencies and when it makes sense to work out compromises.

According to Mousavi and Jari (2018), receivables stand for the delay in the cash inflow which should be financed by the company. In other ways, if financing sales on credit is not necessary, companies could utilize these capitals in other purpose of operations of the business. This means that receivables are an opportunity cost to the business firms in economic sense. Gull *et al.*, (2019) asserts that accounts receivable management comprises of selecting the good credit customers and fast-tracking the collections exercise from the customers. Business firms have to understand that keeping accounts receivable incurs the opportunity cost; meanwhile, the finance is tied up in account receivable instead of benefiting the firm by investing in other viable opportunities. Jayarathn (2020) remarked that the third largest and most fundamental item of assets in business firms is the accounts receivable besides the capital investment in stocks of inventory and plant and machinery. Dongam & Suu (2019) expounds that the time period between the business

firms has sold its goods and before the customers pay off their bills, is accounts receivable collection period.

According to Bintii and Saad (2019), accounts receivable is a decision-making if a business firm decides to offer the trade credit terms to the customers. Accounts receivable is a trade-off between reducing the risk of granting the delaying payment from unreliable customers and attracting the new customers by more attractive/generous trade credit terms and policies. The firm's decision as to whether to extend the trade credit determines the degree and quality of account receivable. If business firms tie up excess funds in accounts receivable because of too attractive/generous trade credit policies, then this does increase the high opportunity cost to the business organization. In addition, probability of emergence of bad debts from risky customers becomes more costly to business firms, although the attractive/generous credit policies could boost the sales. However, the business firms should make decisions regarding the level of accounts receivable so that the benefits that accrues supersedes the expenses.

According to Ajibolade and Sankay (2019), business firms would rather choose to sell for cash rather than on credit, however, pressures from stiff competition force many business firms to grant credit. Currently, the utilization of credit in the purchase of goods and services is so common that in many instances it is taken for granted. Selling goods or providing services on credit terms amounts to accounts receivable. When consumers demands credit, business firms in return demands credit from their suppliers to match their investment in credit offered to consumers. The granting of credit from one company to another for purchase of goods and services is commonly referred to as trade credit. Management of WC though commercial banks offer a significant part of requirements for WC, trade credit continues to be the principal source of finance for business firms and accounts receivable that emerges from offering trade credit are main investment for the business firm.

Account receivables are assets representing resources owed to the business firm as a result of the sale of goods or services in the normal/ordinary course of business operations.

Maradi *et al.,* (2018) proposes that credit customers who pay late or don't pay at all only aggravate the problem. Therefore, it is vital for the financial director/manager or account receivables director/ manager to establish good decisions that manages the benefits of granting credit with the related costs. The business firm should establish its receivables policies after systematically/carefully putting into consideration both the advantages and associated costs of different policies (Mbatha, 2018). Therefore, the current study sought to investigate the effect of receivable accounts management decisions on financial performance of tea firms in Kenya.

2.4.2 Accounts Payables Management Decisions

Payable accounts in days(PAD) stands for the period of time it takes to pay the firm's suppliers. The general guidelines for optimizing the management of account payables are in the timing of payments. Corporate firms should attempt to increasing/prolonging the time period of paying their debts so that they utilize the benefit of their suppliers financing their investments until such times when payments has been made. Similar suggestion for extending/prolonging the time for payment is that the producing firms, for instance, requires some time to transform their purchased raw material to finished products so that they can get sold and get cash in return (Niresh, 2018).

Some suppliers grant their customers discount rates as an encouragement to get them to pay their receivables before maturity date which may sound tempting however, this is not always the most profitable option. To avoid being misled by theses discounts offers, corporate firms should carefully take into account every discount offer they get to see to it that it is beneficial on the basis of their conditions. For a discount to be beneficial for the buyer, the discount rate should be higher than the interest rate the business firm would have to pay for a loan over the same time period as the discount period (Oladipupo & Okafor, 2019). If there is no discount offer given business firms should utilize the entire credit period and pay their payables as and when it fall due. Attempts to pay after due date should normally be avoided at all costs unless the business firm has fallen into financial challenges and they don't have any other alternative. The main reason for this is that,

payments delayed can result in unnecessary costs normally referred to as late fees (Dolfe & Koritz, 2019).

Raheman *et al.,* (2019) argues that fundamental objective accounts payable management is to pay creditors as slowly as possible without necessarily putting into disrepute its credit rating. Accounts payable and accruals are the two fundamental spontaneous sources of liability of short-term financing for a typical corporate firm. Accounts Payables are the main unsecured short-term financing for the concerned corporate firm. They emerge from business transactions in which inventory are purchased. The suppliers may grant credit terms together with offering discount to the purchasers.

Samiloglu & Demirgunes (2017) stated that the accounts payable is when a business firm purchase raw materials but does not pay their bills right thereafter. The time interval is referred to as the period of account payable. Prolonging payment is called stretching the accounts payable. Accordingly, accounts payable is one of the sources of short-term financing for the business firm. Javed & Akhtar (2018) suggests that long-term accounts payable has the less liquidity risks compared to short-term accounts payable because the payment period for long-term financing's is longer, however, this benefit also present the long-term financing to have higher expenditures compared with short-term financing because of the greater uncertainties of long term financing. Risk of liquidity may be minimized by employing the policy of hedging to financing, where assets are financed by liabilities with same maturity.

Kesimli & Gunay (2017) in their research study regarding determinants of company's trade credit policies in the Finnish small corporate firms and established that the accessibility to capital markets and creditworthiness are the two principal determinants of trade credit policies making of suppliers. The amount of purchases is significant and positively correlated with the amount of accounts payable. Larger and older companies and firms with strong internal financing are less likely to utilize trade credit, whereas companies with a high ratio of current assets to total assets, and companies subject to loan restructurings use it more. Other fundamental determinants of accounts payable include

loan restructuring, asset maturity, the strength of internal financing as an alternative source of capital, rural and urban categories. Finally, they pointed out that firms that are financially constrained take more benefits of embracing the trade credit as alternative financial resources.

Vahid *et al.,* (2018) posit that the trade credit emerges when supplier sales on credit terms to their customers and grant them permission to prolong their payment when goods has already been delivered. The trade credit is normally described to be the suppliers' debt, collectors and insurance providers. Similarly, the suppliers might be in a better position in comparison to banks in terms of financing to their customers in that suppliers could halt supplying the goods to their customers to signal the borrower. On contrary, suppliers may act as liquidity providers insurance the liquidity adverse shock which may claim the survival of their relationships with customers. But, the suppliers apply their increased power of enforceability to lead based on returns that are stochastic and non-verifiable. In this case, this makes trade credit riskier in comparison with the debt from the banking institution (Omesa *et al.,* 2019). The current study therefore sought to investigate the effect of accounts payables management decisions on financial performance of tea firms in Kenya.

2.4.3 Inventory Management Decisions

Inventory turnover in days is defined as the period of time taken to process inventory held in the company into sales. There are three issues that will linger in your thoughts when you focus agricultural components, that is; stock, machines and men utilizing tools and machines transform the raw materials to finished goods. The success of any business establishment is depended upon the extent to which these vital components are managed efficiently. Inventory is a crucial asset to the company just like other elements of current assets. Inventory forms a very fundamental part of WC or current assets in a business establishment. It is important to manage inventories, that is; value control and physical/quantity control, as these are fundamental components in the process of costing comprising even in excess of 70% of the current assets. Inventory holding is significant

for the reason that, it meets numerous objectives and requirements however, excessive inventory is counter-productive since its costs is a burden to business concern.

The principal objective of the concept of management inventory is to process inventory as quick as possible so that there is no losing of sales when stock run out. It is a fundamental aspect of WCM in that inventories themselves do not generate any revenue. Keeping either too much or too little inventory accrue costs. Nazir & Afza (2018) pointed out that inventory is generally consist of three elements such as finished goods, work-in-progress and raw materials. The element of inventory differs depending on what type of business companies or production is involved in. Many corporate firms have inventory that they more or less rely on their operation. The companies engaged in manufacturing can hold an inventory that comprises of all five different materials and for them holding inventory is significant for their process of production. For most firms, the inventory can be described as costs that cannot be avoidable (Zariya, 2017).

Indeed, the inventory turnover in days is one of the more demanding activities/tasks for WC directors/managers who, if they could make a decision, would like to reduce the inventory as much as possible so as to make it short the CCP and minimize costs. The risk of reducing inventory down to amount nearly to zero is that it increases the probability of running out of materials required in the process of production or running short of finished goods during seasons of a high demand. Such situation would be costly for any corporate firm regarding the revenues they are likely to lose (Dong & Su, 2019). As mentioned previously, one of the key problems for a WC director/manager is to have all the companies' directors/managers to have consensus regarding management of the inventory. Every director/manager has their own interests they first and foremost would like to meet which compromise the activities/task to reach a consensus. Each business firm should establish the balance that they will take advantage or benefit most from (Filbeck & Krueger, 2016).

Gill *et al.,* (2019) discusses that inventories comprise finished goods working-in-process and raw materials. Generally, a tea firm has all the three elements of inventories

comprising of about 25 to 30 percent of the total assets. Karduman *et al.,* (2017) explains that the companies have the raw materials and sell the finished products. The time period between the investment in inventories and date of sales is referred to as the period of inventory. Inventory is considered / viewed as a liability and an asset. Makori & Jagongo (2019) asserts with a case describing that the inventory decisions that has been tightened minimizes unnecessary borrowing to a reduced degree in comparison with faster collection of receivables or slower payments of current liabilities.

Naser *et al.,* (2019) explains out that, on one hand, excess inventory requires additional large and physical space, thus could occasion a financial distress and escalates the chances of damages of inventories, losses and deterioration. Further, keeping huge quantity/amount of inventory frequently shows careless and inefficient management, not scheduled and efficient planned, less consideration for procedures and process. On flipside, too little inventories may lead to operation being interrupted in the process of manufacture, escalates the possibilities of losing sales and consequently reduces the financial performance of the corporate firms. In process of manufacturing cases, good/well managed customs may sabotage and take their business elsewhere if the required/desired product is not quickly made available.

Gakure *et al.,* (2018) posit that corporate firms hold inventories in the store to shield themselves from the risk of running out of the stock and losing sales and customers as well. But, keeping inventories incur huge costs, like the finance which are tied up in inventories, could not have the interest earnings instead; insurance have to be paid and storage, moreover, damage, spoilage and loss of goods lead to incurring of huge costs to the corporate firms. Ejelly (2018) established that management of inventory has become a very fundamental and key point in a company's WCM. In particular, running out of stock is risky for production process and marketing consequences in storage cost. Holding excessive stock minimizes the financial performance of the corporate firms' amounts to holding cost. In the recent years, corporate firms have taken advantage of the lean management, just-in-time (JIT), ERP management and material requirements planning

systems (MRP) to significantly reduce their inventory level to free up the investment tied up the in the inventory.

Naser *et al.,* (2019) remarked that the benefits that accrue because of the management of investment, is to decide the limits/scope of the management of inventory. Decision-making pertaining management of inventory is a trade-off between return and risk. If the amount of inventory is too low, it leads to the delay in process of production and delivery to customers, which encounter the corporate firms to risk however, meanwhile the corporate firms save the finance or holding costs to have low inventory in inventories. If the amount of inventory escalates, consequently holding costs of inventory escalates, such as insurance, storage, damage and losses, cost of goods deterioration; similarly the demand of return on capital investment in inventory is expected more. Therefore, as the inventory of a corporate firm is increases, the associated risk of running of inventories is minimized; however cost of holding inventories increases. The current study sought to investigate the effect of inventory turnover in days on financial performance of tea firms in Kenya.

2.4.4 Cash Management Decisions

Cash management is the process of planning and controlling cash flows into and out of business, cash flows within the business, and cash balances held by a business at a point in time (Pandey, 2019). Naser, Nuseibel and Al-Hadeya (2018) see cash management as the process of ensuring that enough cash is available to meet the running expenses of a business and aims at reducing the cost of holding cash. Efficient cash management involves the determination of the optimal cash to hold by considering the trade-off between the opportunity cost of holding too much cash and the trading cost of holding too little cash (Ross *et al.*, 2019). Hayam (2017) asserts that there is a need for careful planning and monitoring of cash flows over time so as to determine the optimal cash to hold.

A study by Teruel *et al.,* (2016) established that the setting up of a cash balance policy ensures prudent cash budgeting and investment of surplus cash. These findings agreed

with the findings of Kotut (2018) who established that cash budgeting is useful in planning for shortage and surplus of cash and has an effect on the financial performance of the firms. Ross *et al., (*2019) assert that reducing the time cash is tied up in the operating cycle improves a business's profitability and market value. This further supports the significance of efficient cash management practices in improving business performance. Nyabwanga *et al.,* (2017) in their study on effects of WCM practices on financial performance found that small scale enterprises financial performance was positively related to efficiency of cash management. The current study sought to investigate the mediating effect of operating cash flow on the relationship between WCM decisions and financial performance of tea firms in Kenya.

2.4.5 Moderating Effect of Ownership Structure

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, 2019).

Specifically, moderation materialize when the effect of a predictor variable on an outcome variable changes in line with the amount of a third variable, referred to as a moderator variable, which interacts with the predictor variable (Edward and Labert, 2019). A variable 'm' qualifies to be a moderator if the association among the two (or more) other variables, say 'a' and 'b', is a function of the amount of 'm' (Jam and Bret, 2017). The effect of moderation materializes when a third variable or construct changes the association among two associated variables/constructs (Haire *et al.,* 2019). In addition, a moderator is a predictor variable that influences the direction and strength of the connotation between another predictor variable and an outcome variable (Lait, 2017). Similarly, a moderator variable can be considered when the association between a predictor variable and an outcome variable is strong; nonetheless, most often it is preferred

when there is an unexpectedly weak or uneven relationship among a predictor and a outcome variable (Kime *et al*., 2018).

On contrary, unlike regression which indicates the degree of association between predictor and criterion variable, the importance of moderating variables is in finding our whether there exist an association among the predictor and criterion variable and whether it differs for a specific group or it does not differ. For instance, if we are analyzing the association between business performance and innovation orientation, and we wish to find out if this association is similar across groups or is being moderated by some other variables, for instance; firm size, (small & large), firm type (service vs. manufacturing), etc., the moderation will facilitate finding it out whether the association between business performance and innovation orientation is more enhanced in service or in manufacturing organizations (Hanvanich *et al.,* 2018).

An analysis of moderation concept facilitates a method of testing whether an intervention have same effects across groups. Accordingly, it is fundamental, for instance, to show that intervention effects are derived for females and males if the program can be shared to the entire group having females and males. Further, the uniformity of an intervention effect across subgroups gives support for the generalization of an intervention (Mackinon, 2018).

Indeed, moderating variables should be selected with strong and robust support of theoretical literature study. Specifically, there should be some rational and logical foundation and prior theoretical support for why a specific variable is likely to influence the hypothesized association between the constructs. Accordingly, moderating variable can be expressed in terms of a ratio, interval or continuous level or it can as well be categorical in nature, based on the type of moderating variable (Kime *et al*., 2019). Notwithstanding, it must be noted that moderator is not supposed to have any association with the constructs under study, unlike mediating variables where the mediator must be associated to both the constructs. Mediation refers to an indirect influence of a predictor

variable on an outcome variable that goes through a mediator variable (Shroutt *et al.*, 2018).

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:

2.4.5.1 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, 2019).

2.4.5.2 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.*, 2018). 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, 2019; Grew & Tansu, 2018; Ross and Shoh, 2017; Pulend *et al*., 2018; and Sulliv & Butl, 2017). Nonetheless, it failed not moderate market orientation and business performance association in other different studies (e.g., Pulendran *et al*., 2017; Harr, 2018; Kirc *et al*.,

2017; and Azizi & Yass, 2017). The association between market orientation and innovation in organizational is moderated by turbulence in technology (Ham *et al*., 2019). Turbulence in technology moderated the association between total quality management, market orientation and performance of hotel organizations (Wanng *et al*., 2018).

2.4.5.3 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, 2017; Azizz and Yass, 2018; Huiis *et al.*, 2019, Vijr and Faroq, 2017; Bed and Vijr, 2018; Azizz and Sam, 2019; and Raf *et al.*, 2017).

2.4.5.4 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, 2018; Pulend *et al.*, 2017; Grew and Tansuh, 2018; Harr, 2017; Subra & Gopal, 2018; Ross & Shoh, 2017; Azizz & Yassinn, 2019; Wangin *et al.*, 2018; Garcí *et al.*, 2017; Adnann *et al.*, 2017; and Rank & Streng, 2019).

2.4.5.5 Strategy Type

Regarding research in business field, type of strategy is normally operationalized 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 (Foe example Hitten *et al.,* 2017; Hombur *et al*., 2018; Matsun *et al*., 2019; and Pelh, 2018). Matsun *et al*., (2019) 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.

2.4.5.6 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.,* 2020; Merlir & Auhar, 2019). Entrepreneurial orientation has been applied to moderate the association between entrepreneurial intention and entrepreneurial skills (Ibram & Masid, 2019). Entrepreneurial orientation showed negative moderation in the association between risk of business failure and family involvement (Revil *et al.,* 2019).

2.4.5.7 Firm Age

There are several of researches which have employed age of a firm to moderate associations among variables (For instance; Hann & Freem, 2019; Rang, 2018; Han, 2017; Hender, 2017; Soren & Stuartt, 2018; Gopalak & Bierl, 2018; Balasub & Leer, 2020; Carry *et al.,* 2018; Chell *et al.,* 2017; Savin & Petruzzell, 2018; Huid *et al.,* 2019, Vijr & Faror, 2017; Bedir & Vijir, 2018; Azizz & Sama, 2019; and Rafar *et al.,* 2019). 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.,* 2017). 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.,* 2017). Age of the firm doesn't moderate the association between firm innovativeness and learning orientation (Nybak, 2018). 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.,* 2017). Sorense & Stuartt (2019) 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.

2.4.5.8 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, 2017; Ettliee & Rubenstaeinn; 2016; Acss & Audrets, 2018; Damanp, 2015; Rothwel & Dodgsonn; 2017; Swamid & Koth, 2018; Stockin *et al*., 2019; Temtim, 2017; Gopalakrishn & Bierlin, 2018; Ramaswam *et al.,* 2017; Corsin *et al*., 2018; Noorr *et al*., 2019; Varumv & Roch, 2017; Vijj & Farooqir, 2018; Bedir & Vijir, 2018; Vijir and Farooqir, 2019; Beyen *et al.,* 2019; & Vijj & Faro, 2017). 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, 2017). 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, 2017).

2.4.5.9 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.,* 2015; Orteg *et al.,* 2016; Tangit *et al.,* 2017; Tawf, 2018; Chenn & Chenin, 2019; Vijir & Farooqir, 2018; and Bed & Vijir, 2018). Hit *et al.* (2019) 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, 2017).

2.4.5.10 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 (2018) 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.

2.4.5.11 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, 2018; and Fullerr *et al.,* 2018). Kimin *et al.*

(2018) 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, 2018). 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, 2017). Finally, job autonomy moderated the association between service innovative behavior and leader-member exchange (Dharr, 2019).

2.4.5.12 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, 2018), organizational citizenship behavior and organizational justice (Erkut, 2017), quality management decisions and leadership styles (Alharb, 2018), employee affective commitment to change and leadership styles (Ahm & Gelaid, 2019), implementation success and critical success factors of ERP projects in Kenya (Chockaling & Ramay, 2019), leader member exchange and justice (Erdog *et al.,* 2018), firm's performance and accounting information systems (Aliz *et al.,* 2017).

2.4.5.13 Organizational Structure

This concept measures organicity, which stands for the degree to which organization is structured in mechanistic manner versus organic. Its 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.,* 202020), between job performance and knowledge management capability (Laiin, 2019), between supervisory support and justice (Ambron & Schmin, 2017), between firm performance and entrepreneurial orientation (Kreise & Daviss, 2018) and between business

performance and innovativeness (Vijj & Bedin, 2019). 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.*, 2017)

2.4.5.14 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, 2017; and Van *et al.,* 2019). Further, perceived organizational support has been employed to moderate the association between organizational citizenship behavior and organizational stressors (Jainn *et al.,* 2017). Similarly, perceived organizational support moderated the association between job outcomes and job crafting (Chengin *et al.,* 2020).

2.4.5.15 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 (Ensle *et al*., 2018). 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*., 2020), between firm performance and entrepreneurial orientation (Kreis and Daviss, 2018), between firm performance and innovation strategy (Tingin *et al.,* 2018), between new product success and product and process innovation (Zamoran *et al*., 2019), between resource acquisition and entrepreneurial orientation (Huan & Wangin, 2019), between business performance and innovativeness (Vijin & Bedin, 2019), and between firm profitability and green product innovation (Chann *et al.,* 2020). Environmental dynamism effect the CEO

transformational effectiveness and behaviors of transactional leadership on innovation of organization (Prasan & Junnin, 2019).

2.4.5.16 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.,* 2018). 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*., 2017).

In conclusion, several other fundamental moderators in used in various researches business fields are environmental uncertainty (Bstiel, 2017; and Boon & Paulo, 2020), organizational citizen behavior (Chienn, 2017), knowledge integration (Alma *et al.,* 2019), knowledge management strategy (Lingin, 2017), organizational policies (Wickramasin & Nisafir, 2018), competitive advantage (Wunnav & Ellis, 2017; Martinette (2018) and Lees, (2017), locus of control (Sween *et al.,* 2017; Kolbin & Aiell,2019; Srivastav, 2017; and Lefcour, 2019), organizational competencies (Subraman *et al.,* 2017), market growth rate (Sulliv & Butle, 2017), corporate social responsibility (Brikim *et al.,* 2017); creative role identity (Wangin & Chenger, 2018); and critical incidents (Walsham *et al.,* 2017).

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 and ownership structure 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 ownership structure and financial performance among the tea firms in Kenya.

2.4.6 Financial Performance

English (2017) defines the term performance as the results of business activities of a business firm or an investment over a given time period. Jayarathne (2020) argue that, it is fundamental to take note/recognize the multidimensional nature of the construct of performance. Therefore, research studies that considers only a narrow range or single dimension of the performance construct for instance, multiple indicators of profitability, may give rise to a misleading normative and descriptive theory building. Research studies should comprise of multiple performance metrics. Such metrics may comprise of traditional accounting measures for instance, market share, sales growth and profitability. Further, other factors for instance, the overall satisfaction and non-financial goals of the owners are also very fundamental in assessing performance, especially among the firms that are privately held. This is in conformity with the point of view of Wanjoi (2019) that both non-financial and financial metrics should be employed to analyze firm's performance. Van Horne *et al.* (2017) argue that tea industry may be differentiated from larger firms by using a number of fundamental features for instance, severe resource limitations in terms of management, personalized management with little devolution of authority manpower and finance, flexible structures and reactive, reliance on a small number of customers and operating in limited markets; flat and firefighting mentality. The major differences in the philosophy and structure of tea industry shows a requirement to analyze the performance of tea industry differently from other large business corporates. The limitations of resources related with the Kenyan tea industry shows that the dimensions/perspective of time and quality are fundamental in ensuring that the levels of waste are minimized, while at the same time a high level of productivity performance is achieved. In addition, the reliance on a small number of customers indicates that in order to remain competitive, Kenyan tea industry must make sure that satisfaction customer is

always upheld and that they can exercise some degree of flexibility in order to respond rapidly and quickly to changes in the market.

Cohen (2019) asserts that there are four major methods/approaches to assess the performance of a business firm. They includes; the sys- tem resource approach the goal approach, competitive value approach and the stakeholder approach. The goal approach analyses the degree to which a business firm achieve its goals, while on the other hand, the system resource approach measures the ability of a company to develop its own resources. For the stakeholder approach and the competitive value approach, these measures the performance of a business firm based on its strength/ability to meet the requirements and expectations of the external stakeholders comprising of the suppliers, competitors and the customers. Among these, the goal approach/method is most commonly applied method because of its understandability, internally focused and its simplicity. The information is easily obtainable by the shareholders/owners and the corporate managers/executives for the process of evaluation. The goal approach is a better suited for the Kenyan tea industry where targets are being set internally based on the shareholders/owners- managers' interests and capability to attain/achieve.

According to Raheman (2019), the goal approach directs the managers-owners to direct their focus on the non-financial measures (subjective) and financial (objective), and the financial measures comprises of; returns on investment (ROI), profits, revenues, returns on equity and returns on sales, profitability growth and sales growth, while non-financial metrics comprises of; customer loyalty, brand awareness, employment of additional employees, customer satisfaction, overall performance of the firm relative to competitors, employee satisfaction, and owner's satisfaction with way the business concern is progressing. Atieno (2019) claims that financial metrics are easy and simple to understand and compute and objective. Nonetheless, financial metrics suffer because of being historical and are not readily available in the public platform/domain and more especially for Kenya tea industry. Further, profits are normally most likely to be subjected to interpretations and manipulations. The remedy to the shortcomings of financial metrics is to employ the non-financial measures, although they are subjective in nature, and

supplements them with the financial measures. The combinations of these two metrics aid the owners-managers to attain a wider focus/perspective on assessing and comparing their performance. Emory (2019) accept that this is a balanced scorecard approach and a holistic approach to performance analysis for Kenyan tea industry.

The concept of profitability is one of the most fundamental objectives of financial management due to the fact that, one of the goals of financial management is to maximize the wealth of the shareholders/owner's (McMahon, 2018). Therefore, profitability is very crucial in evaluating the failure or success of a corporate entity. At the development level, a firm may not be very profitable because of expenses and investment for developing the firm. During the periods when the firm has becomes mature, then profits have to be generated. Due to the critical nature of profitability, Emory (2019) among other many researchers have propose that small business firms are required to concentrate on profitability. Mona (2017) proved that profitability is a fundamental determinant of a small business entities' credit risk. Holmes (2019) argue the objective of a corporate firm is not only the building/generation of sales, but in addition, generation of profits. The Profit is especially fundamental because it is a requirement for the survival of a business concern. Low profitability give rise to the challenges of under-capitalization because it leads to fewer dollars as retained earnings and in this case leads to a reliance on external capital (Meredith, 2017).

Business entities utilize financial information established by accountants to support their decisions making process. For instance, the cost information and the historical revenue can be employed in budgeting making decisions. The marketing managers can utilize information on sales to assess the effect of a specific strategy on promotion, while the same sales information can be employed by the manager in charge of production to evaluate the levels future production. Income statements are very fundamental in evaluating financial performance where several types of ratio analysis can be computed (Mathuva, 2019).

One of the most challenging characteristics of a company is to assess and conceptualize profitability (Ross, *et al*., 2019). Generally, the accounting profits are the difference between revenues and costs. However, the challenge with accounting-based assessment of profitability is that they tend to ignore the risk. In the economic sense, a business entity is regarded as profitable only if its profitability is larger than what the investors can generate independently in the capital market. In their research study, Ross *et al.,* (2019) proposes some concepts to be applied in assessing profitability which comprises of; return on assets, return on equity, and profit margin or return on sales.

The profit margins are calculated by dividing profits by the overall or total operating revenue and therefore expressing the profits as a percentage of the overall/total operating revenue while return on assets is the percentage of income to average total assets, both are expressed before tax and after tax, and thus assesses/evaluate the performance of business managers.

Cohen (2019) asserts that the measures of profitability are critical in any business concern. In his research study, he depicted several different ratios that can be employed measuring profitability of a business entity. They comprises of; net profit on sales, return on the owner's equity, return on investment and asset-earning power. The power of asset earning is assessed using the ratio of earnings before interest and tax to overall/total assets. It reveals how much operating profit each dollar of overall/total assets earns. Return on the owner's equity is calculated by dividing net profit by average equity, and it shows the returns that the firm earns in exchange for the investment. The net profit on sales is evaluated by the ratio between net profit and net sales, and it evaluates the difference between what the firm collects and what it spends in the process of undertakes the firm's operations. Return on investment is simply calculated by dividing net profit by the overall/total assets.

This measure is fundamental for evaluating profitability. There are many other different ways of computing return on investment and depends upon the purpose of evaluation. Some scholars/researchers, who have studied financial attributes of Kenya tea industry,

also mentioned measurement of profitability. For instance, Teruel *et al.,* (2016) employed three ratios:, return on net assets, return on equity and return on total assets to measures Kenyan tea industry profitability while Hutchinson, *et al.,* (2019) evaluated profitability by the following ratios which comprises of;, earnings before interest and tax/total assets, net profit after tax/sales and net profit after tax/owners‟ equity. Altman (2019), in a research study of financial ratios, and the prediction of corporate failure and discriminant analysis, evaluated profitability by applying two ratios: earnings before interest and taxes/total assets (EBIT/TA) and retained earnings/total assets (RE/TA). According to Altman (2019), percentage of retained earnings to total asset ratio is the assessment of cumulative profitability over a certain period of time and firm's age is implicitly incorporated in this ratio. A relatively young company will likely to exhibit a low RE/TA ratio because it lacked time to develop its cumulative profits. EBIT/TA ratio is calculated by dividing the overall/total assets of a business entity into its earnings before interest and tax reductions. In reality, it evaluates the true productivity of the business entity's assets, abstracting from leverage factors or any tax.

2.4.7 Return on Assets

Return on Assets is a fundamental indicator of how profitable a firm is in comparison to its overall/ total assets. The ROA is computed by dividing a company's yearly earnings by its overall/total assets (Pandey, 2019). This ratio exhibit what the business firm can do with what it has acquired, that is, how much profit it can earn by utilizing one unit of assets that they have acquired and control. It is perfect indicator of the effectiveness of the management in employing the resources that it owns and controls to earn profits (Ross, 2019). This implies that the higher the ratio, the higher the profits that are earned per unit of utilized assets. Return on Assets has featured to be a very critical measure for analyzing competing firms in the same/similar industry. The number will change/vary significantly across different sectors and industries or instance, capital-intensive industries like steel structures and railroads will produce a low return on assets, because they have to own such huge and expensive assets to undertake business activities.

Labor-intensive firms, for instance; job placement and software firms, will possess a high ROA because their requirement on asset is minimal (Shah, 2019). ROA has been widely utilized in several research studies on firm's profitability, and was found to be extremely and significantly robust. Other scholars and researchers who have applied ROA comprises of; Ngaba (2019); Singh (2019); Nyakundi (2019); Sanger (2019); English (2017) and Ondiege (2019) all of whom were exploring several aspects of financial management, and their effect on financial performance.

Return on Assets is extremely relevant to the current research study because it enables us to assess the outcome of the key decisions made by the management on the utilization of the owner/shareholder's assets which have been bestowed/entrusted to them for value creation and stewardship. The main disadvantage of ROA as a measure of profitability however, is that it does not take into account the liabilities and non-balance sheet assets like highly skilled human capital. Therefore, it is ineffective in skills-based firms with huge investments in sophisticated Information Technology processes and human capital.

2.4.9 Firm Size

Vijayakumar and Tamizhselvan (2017) revealed a positive association between size of the firm and profitability. Papadogonas (2018) performed an evaluation on a sample of 3035 Greek manufacturing companies and establish that for all size classes, company's' profitability is positively influenced by the size of the firm. Lee (2019) investigated the role that a size of the firms plays in profitability. The results revealed that the size of the firm plays a fundamental role in explaining/expounding profitability. Amato and Burson (2018) examined size-profit association for companies operating in the field of financial services sector. Using the linear specification in the size of the firm, the researcher established negative effect of the size of the firm on its profitability. Ammar *et al.*, (2018) showed no significant association between the gross operating profit ratio and the size of the firm. The research study of Owuor and Ajilore (2019) also revealed no significant variations in the impact of WCM between small firms and large in Nigeria by employing a sample size of 50 listed firms.

2.5 Empirical Literature Review

This section reviews and discusses recent and modern studies and researches that have done regarding WCM and its effect on financial performance. According to Zikmund *et al.*, (2019), empirical literature review is a directed and academic search of published work which comprises of periodicals, books and other published work. Accordingly, it is a comprehensive and detailed survey of previous inquiries associated with the research questions. Miller and Yang (2017) explains that through the application of a systematic/orderly policy to previous scholarly work, review of the related literature enables a researcher to package his research work into an intellectual and historical context, permits the researcher declare why his research work matters/relevant and indicate the existing strengths, weaknesses and relevant literature gaps in the existing empirical research.

The efficient management of WC is a critical portion of the overall corporate financial performance, in generating the wealth of the shareholders (Deloof, 2018), and companies attempts to maintain an optimal level of WC that maximizes their value (Afza and Nazir, 2018). According to Eljelly (2015), financial performance of business firms is a critical source of concern to the, entire management, financial executive/manager, as well as the owners/shareholders. This is because it is expected that every business firm of any kind should make a significant return to justify its existence. Deloof (2018) examines that the need that firms realize reasonable financial performance demands proper management of WC which has a significant effect on corporate continuity, while Pandey (2015) argue that there is a significant effect of WCM policies on firm's financial stability.

Numerous researches have explored the association of WCM and firm financial performance in different markets. The outcome were quite varied, however, various researchers report a weak negative association between WCM and company's financial performance. The researchers analyzed employed many variables to review the association, with various methodologies like panel data regression and linear regression.

This section presents the chronology of major studies associated to this research study in order to analyze and explore the research gap.

2.5.1 Relationship between Receivable Accounts Management Decisions and Financial Performance

The term accounts receivable refers to those customers who have not paid for their goods or services which the company has sold to them. The main aim of the debtor management is to reduce the time lapse between completion of sales and that of receipts of payment. Accounts receivable management is significantly affected by the collection procedure and the credit policy of the company. Receivable accountsstands for the rate at which the companies collects the payments from its customers (Sharma and Kumar, 2018; Owuor and Ajilore, 2019). The excess level of accounts receivable ratio on profitability may give rise to negative impact. This is because if a company has several Debtors, then they may run short of cash resources which may occasion a difficulty in meeting their short-term financial debts/obligations. Profit may be termed as real profit after receivables are transformed into cash. The accounts receivable management is significantly affected by the collection method of a company and their credit policy. A credit policy dictates the requirements/needs to value the worth of customers and a collection procedure/methods which gives the guidelines to collect unpaid invoice that will minimize delays for customers who have not yet made payment for the outstanding receivables and goods and services. In this research study, Kenya is used the cape study.

Credit sales are necessary and inevitable in the today's corporate world. There is no single business entity that can stand without selling their goods and services on credit. According to Meyer *et al.*, (2016) and Joshi, (2017), argued that receivable accountscomprises of the credit a business offers to their customers when selling products which take the form of either trade credit which the firm offer to other firms or consumer credit, which the firm offer to their ultimate consumers. The firm's effectiveness regarding credit policies can have a huge effect on its overall performance.

Machiraju (2016) similarly stressed that the receivable accountsdevelops out of delivery of goods or rendering of services on credit. Receivables stands for the claims/obligations against others for future receipt of money resources, goods or services whose value depends upon the quantity/volume of the sales on credit and the policy that is employed for collecting such credits. Joshi (2017) showed that the principal aim of the investment in trade debtors is to boost profit by increasing sales in order to attract new customers and at the same time retaining the old customers. By constantly and systematically expanding its sales and profit, the company carves out a huge/bigger niche in the market and lift/elevates its status among its competitors. In the quest of investigating an optimal policy on credit extension, Meyer *et al*., (2016) noted that a firm's financial executives/managers must put into account a number of key controllable variables that can be employed to alter/change the level of receivable accountswhich comprises of credit terms, collection efforts and credit standards.

Singh and Pandey (2019) had an attempt to study the components WC and the influence of WCM on profitability of Hindalco Industries Limited for time period of between 1990 and 2018. The results of the research study depicted that liquid ratio, receivables turnover ratio, current ratio and WC to total/overall assets ratio had statistically significant effect on the profitability of Hindalco Industries Limited. Similarly, as indicated by Michalski (2019), an increase in the level of receivable accountsin a company boost both the net WC and the costs of holding/keeping and managing receivable accountsand both give rise to a decrease in the firm's value. A research study by Dimitrios (2019) and Lazaridis (2018) revealed that companies who pursue increase in their receivable accountsto an optimal level boost their profitability resulting from increased market share and sales.

A research study by Juan and Martinez (2019) stressed that companies can develop value by minimizing their number of days of accounts receivable, therefore confirmed the results of Deloof (2019) who found out that the length of receivables collection period has a negative impact on the company's performance. A research study by Nyakundi (2019) also confirmed that, developing a sound credit policy ensures that a proper debt collection methods/procedures is critical in boosting the efficiency in management of receivables

thus the performance of companies. When goods or services are transferred/handed over to a customer the company becomes a trade debtor or of the supplying company until such period when it pays its debts through making of payments (Singh, 2019). Pandey (2019) affirmed that trade credit is taken as a fundamental marketing/advertising tool, which acts as a bridge/buffer for the smooth movement of products through the production and distribution stages and ultimately to the customers. In addition, a company offers trade credit to cushion its sales from the stiff competition and similarly with a view of attracting potential customers to purchase its goods and services at a favorable terms. According to Shah (2019), while cash sales continue to dominate in manufacturing and processing industries, scenarios where customers buy the products on credit are increasing. Selecting credit customers, determining credit terms and monitoring and analyzing the level of accounts receivable become a fundamental area for decision making by the management (Smith, 2017). In examining the credit policy, companies tend to strike the balance between the cost associated with denying or restricting credit cost and those of granting credit (Sabato, 2019). Mureithi (2019) affirmed that, one of the key issues in modern financial management is the proper analysis/evaluation of the concept of risk and return. The profitability of several companies is depended largely on the ability of the institution to evaluate/analyze and control the credit risk.

Generally, Shah (2017) established that approximately 95 percent of business firms that sold on credit tended to be sold to anyone who is willing and wished to buy. Only 30 percent of the respondents subscribed to a regular/periodical credit reporting service. Most of them had no credit checking methods, guidelines, and procedures, and only 52 percent enforced a charge/penalty on late-payment. 34 percent of businesses firms had no formal procedure/methods for aging accounts receivable. Bad debts averaged approximately1.75 percent of sales, with a high of approximately 10 percent in some business firms. Singh (2019) depicted a very high/significant level of utilization and awareness of systems on credit control in the UK, even in the micro/smallest firms.

Providing trade credit is usually employed by firms as a marketing tool to grow or maintain sales (Pandey, 2015). Efficient management of receivables combined/augmented

by low levels of bad debts, a sound credit policy, and a shortened creditor's collection period, normally boost the firm's strength to attract new customers and accordingly boost financial performance therefore the need/requirement for a sound/robust credit policy that will ensure that value is enhanced and optimized (Lazaridis and Dimitrios, 2016). Costs of managing credit, costs of cash discounts and credit collections constitute/includes the carrying costs that is related with granting a credit which increase when the amount of receivables granted are also increased. Lost sales occasioned by the inability to grant credit amounts to the opportunity cost which decrease when the amounts of receivables are increased (Lazaridis and Dimitrios, 2016).

Michalski (2018) explains that an increase in the level of receivable accountsin a company increases both the net WC and the costs of managing and holding the receivable accountsand both give rise to a decrease in the firm's value. Lazaridis and Dimitrios (2016) argue that companies who pursue increase in their receivable accountsto an optimal level increase their profitability amounting from increased market share and sales. Juan and Martinez (2017) insisted that companies can create /develop value by lowering the number of days of accounts receivable, while Deloof (2018) showed that the length of receivables collection period has a negative influence on a company's financial performance. Sushma and Bhupesh (2018) also confirmed that, establishing a sound credit policy makes sure that enhanced debt collection procedures and is critical in enhancing efficiency in receivables management therefore the performance of companies.

Ranchandran & Janakiraman, (2019), measured the association between earnings before interest and tax and working efficiency of the paper industry in Indian capital market. The study established that inventory days and inventory conversion cycle had negative relationship with earnings before interest and tax, whereas accounts receivable days and accounts payable days are positively related with earnings before interest and tax. Grzeg (2019) in his research study established that a portfolio management approach in accounts receivable management, employed the theory on portfolio management to investigate the level of accounts receivable in a company, he found out that there was an increase in level

of accounts receivable in a company increase both net WC and cost of managing and holding of account receivables.

Ksenija (2018), established how public firms that are listed at the regulated market in the Serbian republic, are able to manage their accounts receivable during the times recession. A sample size of 108 companies was utilized. The policy on accounts receivable were investigated during the crisis period between the years of 2013 to 2018. The short-term impacts were tested and the research study revealed that between receivable accountsand two dependent variables on profitability, operating profit margin and return on total asset, there is a positive but no significant association. This indicates that the effect of receivables on company's profitability is changing during the time period of crisis. Research studies by Samiloglu and Demrigunes (2019), Deloof (2018), Garcia-Jeruel and Martinez-Solano (2018), Laziridis and Tryfonidis (2017) and Mathura (2017), in turkey, U.S.A, Belgium, Greece, Spain and Kenya respectively, generally all pointed out to a negative association between accounts receivable and company's profitability. Contradicting evidence was revealed by Sharma and Kumar (2018) who established a positive association between accounts receivable and ROA.

Singh and Pandey (2019) attempted to study the components of WC and its effect on profitability of hildalco industries limited for a time period 1990-2018. The outcome of this research study revealed that receivable turnover ratio had statistical significant effect on the profitability of hibdalco industries limited. Jack and Matthew (1994) argued in their article on accounts receivable management that the simplest method of recovering your accounts receivable is to take deliberate and active steps to avoid entirely the process. Venkata *et al.,* (2018), in their research study on the effect of receivables management on WC and profitability. A research study of selected cement firms in India sourced their data from the reports of animal the selected cement companies from 2016 to 2017, the ratios which highlight the efficiency of receivables to current assets ratio receivable to total assets ratio viz, receivables management, receivable to turnover ratio, receivable to sales ratio, average collection period, WC ratio profitability ratio have been completed employing ANOVA statistical technique to establish the influence of WC and profitability

of the selected cement companies. WCM and profitability were taken as as dependent variables. The study established that the receivable management across cement industry is efficient and depicts a significant effect on WC and profitability.

Muscettola (2020) explored the influence and all the effect of the receivable accounts in days on the financial performance of companies by employing data from an extensive sample of companies engaged in manufacturing Italy. The findings of this research study revealed that receivable accounts in days had a significant positive association with financial performance. Akoto *et al.,* (2019) also investigated the association between WCM decisions and ownership structure and financial performance of listed firms engage in manufacturing in Ghana. The research utilized secondary data sourced from all the 14 manufacturing firms listed in Ghana for the time period of 2015 to 2017. The study findings established a significant negative association between financial performance and accounts receivable collection period.

Ksenija (2019) examined how public corporate firms listed at the regulated market in the Serbia Republic manage their receivable accountsduring the period of recession. The study sampled total of 106 companies and the receivable accountspolicies were investigated in the crisis period of 2018 to 2019. The research results showed that there is a strong positive but no significant association between receivable accountsand two dependent variables on financial performance, return on total asset and operating profit margin. Madishetti and Kibona (2019) similarly explored the influence of RAD and PAD on tea industry financial performance in country of Tanzania. The study results revealed that there was a significantly negative association between RAD and financial performance.

Mekonnen (2017) suggest that there exists a statistically significant negative association between financial performance and average collection period. This result suggests that firms can improve their financial performance by lowering the accounts receivable collection period outstanding. Also this can be interpreted as the less the time it takes for customers to pay off their bills, the more sufficient cash is available to replenish inventory

hence the higher the sales realized leading to high financial performance of the firm. The negative association between RAD and financial performance reveal that an increase in the accounts receivable collection period by 1 day is related with a reduction in financial performance. Through this, managers can improve financial performance by lowering the credit given to their customers (Lazar and Tryfon, 2018).

The research study by Deloof (2019), proposes that directors/managers can boost corporate financial performance by minimizing the average collection period. The prolong number of day's accounts receivable outstanding, the higher the possibility that the company may sabotage its financial performance. If corporate companies fail to manage debtors, then they would gradually lose control because of the reduced cash flow and could experience an escalating rate of bad debts. Therefore, the longer a person owes the company any money, the higher the probability that the company may never get paid. In this case, profit may only be referred to as real profit after the receivables are converted to cash. As a result, the account receivables management is unavoidable and greatly influenced by the policies on credit and procedure of collection. A policy pertaining credit shows the conditions to value the credit worthiness of customers and therefore procedures of collection stipulates the procedure to collect invoices that are unpaid that will minimize delays in receivables that are outstanding, Brigham and Houston (2019). Therefore, there exists a strong and significant negative association between the time period it takes for companies to collect cash from their customers (receivables collection period) and financial performance.

Other scholars with similar outcome of negative association between financial performance and RAD include (Mathuva, 2019; Lazaridis and Tryfonidis, 2018; Owuor and Ajilore, 2018; Mansoor and Muhammad, 2018; Naimulbari, 2018, Raheman and Nasr, 2017; Dong, 2019; Arunkmar and Ramanan, 2019).

2.5.2 Relationship between Accounts Payables Management Decisions and Financial Performance

A company will normally wish to commit/tie up a small amount of cash in disbursement. The logic in these systems is to ensure that no more than the minimum amount required to pay off bills on deposit in the Bank (Ross, 2019). The major fundamental source of short-term funds is the trade credit and that it is quite easier to obtain; that it varies/changes with the amount that has been granted; and similarly, trade credit is a spontaneous and informal source of funds. It does not demand any form an agreement and negotiations. Besides, it does not possess their restriction which are normally a portion of negotiated sources of funds. Ngaba (2019) defined credit terms as the requirements/conditions under which the school demands students to have fee arrears. This requirements comprises of the cash incentives (discounts) given and the due date.

WCM rule dictates that companies should strive to lag their payments to creditors as much as possible, taking care not to spoil their business association. Through this, Mathuva (2019) in the study on the influence of WCM components on corporate financial performance, a survey on listed firms in Kenya showed that PAD has a positive association with financial performance. The positive association revealed that an increase in the accounts payable payment period by 1 day is strongly associated with an increase in financial performance.

Aminu (2018) alludes that WCM is a fundamental technique in the success story of any company in form of profitability. A positive or good WC facilitates a company to get access funds from long term creditors and even short-term creditors. In the long-run, creditors go for companies with a positive WC because it function as an assurance regarding loan repayment. The concept of a positive WC demands for WCM which, according to Pandey (2015), is the administration of all components of WC- marketable securities, debtors (receivables), cash, creditors (payables) and stock (inventories). In addition, Pandey (2015) affirmed that the financial executive/ manager should establish the composition and levels of current assets by exploring the right source to funds, current

assets and that current liabilities are paid off within the right time. Smith and Sell (2019) agrees that the overall objective of WCM is to make sure that the company is in a position to progress its operation and that it has sufficient/enough cash flows to meet both upcoming operational expenses and maturing short-term debt. This will definitely have fundamental influence on the company's financial performance (Smith and Sell, 2019).

Regarding small and growing firms, an efficient WCM is a critical component of survival and success in terms of both liquidity and profitability (Howorth and Westhead, 2018). Howorth and Westhead (2018) in addition proposed that the small companies are required to focus on some areas of WCM where they can expect to boost marginal returns. In essence, therefore, they are required to employ formal WCM routines/norms in order to minimize the chance of business closure, and similarly in order to boost firm performance. Grablowsky (2017) depicted a significant association between several measures of success and the adoption of formal WC measures and policies. Management cash turnover in days and cash flow is a key component of overall financial management for all companies, especially those who are capital constrained and rely heavily on short-term sources of finance (Grablowsky, 2017).

Melita, *et al.,* (2017) empirically examined the influence of WCM on company's financial performance in an emerging market economy. Their data set comprises of companies listed on the Cyprus Stock Exchange for the time period between 1998 and 2018. Employing a multivariate regression analysis, their outcome/results specifically showed that the cash turnover in days and all its main components, including days' sales outstanding, days in inventory and creditors' payment period are related with the company's profitability. Vida *et al.,* (2018) investigated the association between WCM and firm's profitability of 101 listed firms on Tehran Securities Exchange during the period of 2015 and 2019. The Pearson correlation and multivariate regression analysis techniques were utilized in order to test hypotheses. Findings revealed that cash turnover in days, a key measure of WCM, has a significant association with firm's profitability. Similarly, the findings found that a positive significant association exists between

logarithm of sales and financial performance, and a negative significant association exists between financial debt ratio and financial performance.

In the context Kenya, Bowen, Morara and Mureithi (2019) undertook a research study on management of challenges of firms among small and micro enterprises in the county of Nairobi. It concentrated on amongst other challenges faced by small and medium enterprises, the challenge of WCM and they collected a sample of small and micro enterprises in the county of Nairobi. The research study showed that WCM is one of the serious and huge challenge that faces these business enterprises. Kotut (2018) undertook a research study on WCM practices by Kenyan companies utilizing the listed companies in the county of Nairobi. It employed a stratified sampling of the companies under different sectors that were listed in the NSE. The research study revealed that WCM practices had significant effect firm's profitability in variant proportions which dependent upon on the firm's size as well as the sector in which the companies operated.

Malik and Bukhari (2020) examined the influence of WCM on corporate performance in engineering, chemical and cement sectors of Pakistan. The data was sourced from annual audited reports of the companies during the time period of 2018 to 2018.The technique of pooled ordinary least squares was employed to evaluate the association between the metrics of WCM and financial performance. The results of the study revealed that PAD negatively and significantly associated to ROE whereas CCP positively and significantly associated with return on equity. A research study by Agyemangin and Asiedun (2018) found that there is a significant negative association between accounts payable days and financial performance. This proposes that less profitable companies wait for long to pay off their bills taking advantage of the periods of credit permitted by their suppliers. Madishetti and Kibona (2019) also revealed that there is a significant positive association between PAD and gross operating profit of tea industry financial performance in the country of Tanzania.

Accordingly, prolonging payment of accounts payable to suppliers enables companies to access the quality products of the branch and could be inexpensive/affordable and

flexible/reliable source of financing. Similarly, prolonging of such payables can be very costly or expensive if a company is granted a discount because of paying early. Therefore, there exists a significant positive association between the time period the company takes to pay its suppliers (average payables payment period) and financial performance (Naimulbari, 2018). Although studies by (Ruichao, 2019; Muthuva, 2019; Naimulbari, 2018, Gill, Biger and Mathur, 2018) show positive association between PAD and financial performance other more research by (Ray, 2018; Mekonnen, 2017; Deloof, 2019; Reheman & Nasr, 2017; Vural, Sökmen and Çetenak, 2018; Saghir, Hashmi and Hussain, 2017; Reheman *et al.,* 2019) suggest a negative association between PAD and the firm financial performance. Garcia-Teruel and Martinez-Solano (2017) failed to provide the association that exists between PAD and financial performance.

2.5.3 Relationship between Inventory Management Decisions and Financial Performance

Indeed, inventory turnover in days is one of the fundamental variables in WCM as it is one of the principal pillars of current assets. A research study by Arabahmadi *et al.*, (2019) evaluated the efficiency of WCM on corporate firms in Iran on automobile industry for the time period 2016-2019. The outcome showed that inventory turnover in days had a positive association with WC. In addition, the research study revealed that the relationship between WC and raw material purchase was positive. In addition, Muturi *et al.*, (2017) also investigated the effect of ITD on financial performance of tea firms in the County of Meru for the time period of 5 years from 2017 to 2018. The study findings revealed that ITD negatively affected the financial performance.

The term "inventory" has been explained in various versions. Ballou (2015) termed inventories as the stockpiles of components, raw materials, work-in-progress, finished goods and supplies that appear at various levels throughout a company's logistics and production channels. According to Chase *et al.*, (2015) inventory is the stock of any resource or item utilized in a firm. A system of inventory is the set of principles, policies, controls and rules that constantly check the levels of inventory and find out when stocks

should be replenished, what levels should be kept/maintained and how huge the orders should be. Lastly, Pycraft *et al.,* (2015) explained inventory or stock as the accumulation of stored materials resources in a system of transformation.

The International Accounting Standards (IAS2) dictates that inventories shall be valued or measured at the net realizable value and lower of cost. The costs of inventories composed of all cost of conversion, cost of purchase and cost paid in ferrying the inventories to their present condition and location. Inventory management must be performed to boost the company's value. The company must therefore, put into perspective the returns, risk factors and the related costs in developing the policy on inventory. Inventories represent a fundamental and huge investment for many business firms. The executives or manager, normally would not have control over the management of inventory only however, other functional section/units/departments will normally share authority on decision-making pertaining the inventory. Smith (2018) in his research study on management of inventory affirmed that corporate organizations are faced with the dilemma of simultaneously attempting to manage demands for the ever-increasing and improved customer service; maintain the investment in inventory at a reasonable level and to maintain stable production operations.

Gasse (2017) examined the usage of management techniques in small plastic and shoe manufacturing company in Canada and established that 65.4 percent of plastic and 64 percent of shoe firms adopted formal stock control systems. Rowell (2019) in his research study on the influence of inventory management on performance revealed that many of the respondents had in excess of 30 percent of their capital invested in stocks; besides, the general standard of inventory management was wanting/poor. Only 6 percent of firms in their survey adopted a quantitative technique for optimizing inventory such as economic order quantity and 54 percent had systems which were not able to supply information on reorder points, ordering costs or carrying costs and inventory turnover.

Owuor and Ajilore (2019) utilized a sample of 50 Nigerian listed non-financial companies for the time period of 1996 to 2016. Their research study employed panel data

econometrics in a pooled regression, where cross-sectional observations and time series were combined and analyzed. They established a significant negative association between net operating profitability and inventory turnover in days, the average collection period, cash turnover in days and average payment period for a sample of 50 Nigerian companies that were listed on the Nigerian Securities Exchange. In addition, they revealed no significant variations in the influence of WCM between small and large companies.

Teruel and Solano (2019) investigated the influence of WCM on company's profitability, by employing a sample size of 8,872 small and medium size European firms. They established that minimizing average collection periods and inventory influenced positively the value of the company, as minimizing the cash turnover in days boosts the company's profitability.

Walker (2019) investigated WCM as a whole. In their research study of WC policy among small manufacturing companies in the USA, and the following aspects of WC were explored; WC policy and managing WC components, comprising of payable, cash, inventory management and receivable, and investigated. Their findings/outcome were summarized into the following key areas, including: 30 percent of the firm's total assets were WC, however, only 24 percent of the financial executive/manger's time was spent on WC. Generally, firms had no written policy or an informal procedure for WCM. However, those that had a written policy were likely and probably were more profitable than others.

Abel (2019) stated that cash is fundamental in every firm because it enhances its prosperity and survival. The term cash stands for those assets that are highly liquid, comprising of money market accounts, currency holdings and demand deposits. The crucial components of cash management are administration of cash receipts and disbursements, balances management, cash forecasting, and internal control, that is, bank reconciliation (Gitman, 2019). Proper cash management can have a huge effect on overall WCM. It is utilized objectively to determine and manage the optimal level of the required cash for the firm's

transactions and invested in marketable securities, which is suitable for the unique nature of the operation cycle of the business (Gitman, 2019).

Business executives/managers act logically in the efficiently management of their inventory if they are satisfied that the practice facilitates company performance. Traditionally, work-in-progress components, finished goods and inventories of raw materials were maintained as a buffer to cushion against the probability of running out of required items. However, huge buffer stocks generate hidden costs and consume valuable resources. The concept of inventory management that leads to reduction in inventory has become the principal target, as is normally the case in just-in-time (JIT) systems, where parts and raw materials are produced or purchased just in time to be utilized at each level of the process of production. This method to management of inventory brings substantial cost savings from minimized inventory levels. In this case, stocks have been decreasing in many business organizations (Chen *et al.,* 2016).

According to Chen *et al.*, (2016), companies with abnormally high level of inventories have abnormally poor inventory returns. Besides, companies with abnormally minimal inventories have ordinary inventory returns. Further, companies with slightly minimal level than average inventories perform better over time. Management of inventory give rise to reduction in inventory, as is normally the case in JIT. Fullerton *et al.* (2018) affirms that companies that put in place/implement higher degrees/levels of JIT manufacturing practices must outdo the competitors who do not. Similarly, it was also established that a positive association exists between company's financial performance and the extent to which waste-reducing production techniques, such as uniform workloads, preventive maintenance programs and reduced set-up times are implemented. Eroglu and Hofer (2018) confirmed that lean inventory is the best inventory management technique. Lean production itself takes into account inventory as a form of waste that must be reduced, and in which it has become common with good practices of inventory management.

Cannon (2019) brought up a contradictory thought/perspective that performance of inventory should not be assessed as a robust indicator of the overall financial performance.

Cannon (2019) showed that when the influence of time are taken into consideration, on average improvement in turnover has a slightly negative impact on ROA. In addition, improvement in turnover depicts a common/famous random effect. Similar to Cannon (2019) and Kohas *et al.,* (2018) affirmed that inventory turnover ratio, as a measurement of inventory management, is negatively related with gross margin. Further, there exists a negative correlation between inventory turnover and gross margin. This means that retailers' trade off gross margin for inventory turns in order to attract the same returns on investment of inventory, since if the turnover ratio on inventory is lower compared to the given the level of the targeted gross margin, then the firm management should be alarmed with this anomaly/inefficiency.

Dong (2019) focuses on the variables that include financial performance, cash conversion period and its related components and the association that exists between them. The study revealed that the association among these variables is significant and strongly negative. This shows that reduction in the financial performance emerge because of increase in cash conversion period. Similarly, it shows that if the number of days of inventories and account receivables are shortened then the financial performance increases.

Eneje *et al.,* (2018) also investigated the influence of raw materials inventory turnover in days on the financial performance of corporate firms in brewery industry in the country of Nigeria. They employed cross sectional data of the time period of 1990 to 2018 and they assembled for evaluation the annual audited reports and financial statements of the brewery firms that were sampled. This research study revealed that the variable of the study, which is the raw materials inventory turnover in days, was designed to reveal the influence of efficient raw material inventory turnover in days by a firm on its financial performance is significantly highly positive and influence the financial performance of the brewery companies in Nigeria. Madisheti and Kibonna (2020) examined the association between ITD and tea industry financial performance in Tanzania. The research employed a sample of 27 small and medium size enterprises and secondary data from the small and medium size enterprises yearly audited financial statements for the time period

of 5 years from 2017 to 2018. The research study outcome revealed that there was a weak significant and negative linear association between ITD and financial performance.

Although most empirical research suggest a negative relation between inventory turnover in days and financial performance (Ruichao, 2019; Lazaridis and Tryfonidis, 2018; Owuor & Ajilore, 2018; Mansoor & Muhammad, 2018; Raheman & Nasr, 2017; Dong, 2019), find contradictory findings on the association between inventory turnover in days and financial performance. Gill, Biger and Mathur (2018) and Mathuva (2019) suggest a positive association between inventory turnover in days and financial performance. Maintaining sufficiently high inventory levels reduces costs of possible interruptions in the process of production and possibly loss of doing business due to scarcity of products (Mathuva 2019), while investing too much in inventories unnecessarily blocks the funds in WC that could be invested in revenue generating activities. Since inventory determines the level of activities in a company, managing it strategically contributes to financial performance (Brigham and Houston, 2019). The key to manage inventory of a business is to know how quickly firm's overall stock is moving, the time period each item of stock stays on shelves before finally being sold. Management of stock is a balancing act. Too much inventory places a lot of burden to the liquid resources of the concerned business. Too little inventory can occasion loss in sales, delays in promptly serving the customers etc. The fundamental issue for the concerned business is to identify/locate the slow and fast moving inventory with an aim of finding out optimum levels of stock for each category and therefore reduce the tied up cash in inventory. The inventory lying idle on shelves for an extensive time period ties up cash resources which may compromise the firm's financial performance.

2.5.4 Relationship between Cash Management Decisions and Financial Performance

Cash management is proofing to be ever more sophisticated in the electronic and global age of the 2000s because financial executives/managers are trying to squeeze the last shilling of profit out of their strategies on cash management (Block & Hirt 1992).According to Mclaney (2017), cash is much more than just one component of WC.

As the store of value and medium of exchange, cash facilitates the linkage/bridge between all financial aspects of the company. More precisely, it bridges long-term and short financing decisions with one another, with decision incorporating investment both in WC and fixed assets. Specifically, cash management is one of the critical functions in any business firm of any description and size. Meyer, *et al.,* (2018) affirmed that marketable securities and cash are the most liquid of the assets of the firm. Cash is the sum of currency a firm has as deposit in bank checking accounts and on hand. Cash is the medium of exchange that allows management to undertake the various activities of the concerned business.

Based on the economic theory, numerous writers and researchers have theorized in solidarity with Keynes' that the objective for holding cash are merely, speculative, precautionary and transactional. According to Keynes (1973), firms hold cash for them to bridge the interval/gap between the periods of time of incurring business cost with that of the receipt of the proceeds from the sale. More specifically, firms hold a certain amount of cash to enable them meet the daily expenses of their business activities. Hence, the higher the company's ability to plan/schedule its cash flows (based on their predictability) the lesser the strength of the "transactions-motive" for holding cash will become. The transaction motive demonstrate the cash holding of companies and hence more applicable to Kenya's tea industry.

A research study by Teruel *et al.,* (2016) revealed that the establishing of the policy of cash balance enhance proper investment of surplus cash and cash budgeting. This results are consistent with the results by Kotut (2019) who revealed that cash budgeting is fundamental in planning for surplus and shortage of cash and therefore has an impact on the firm's financial performance. The confirmation by Ross *et al.,* (2019) that minimizing the period of time cash is tied up in the operating cycle boost the market value and firm's profitability and enhance the importance of the efficient cash management decisions in boosting of company performance. Provision of trade credit is usually utilized by firm as a marketing strategy to maintain sales or expand (Pandey, 2019).

Further, cash management entails the cash flow within the company; cash flow management into and out of the company; and cash balances held by the company at a point in time by investigating surplus cash or financing deficit (Pandey, 2019). Cash management entails the management of cash flow cash flow within the company; into and out of the company and cash balances held by the firm at a point one period of time. Companies should develop strategies pertaining: optimum cash level, managing the cash flows, cash planning and investment of surplus cash. The ideal system of cash management is depended on the organization's culture, organization structure, company's product, competition and other options that are available (Raheman, 2019).

Grablowsky *et al.,* (1980) and Grablowsky (1978) executed a questionnaire survey regarding the cash management decisions of 66 small business firms from several industries located in and around Norfolk, Virginia. The findings revealed that 67 percent of respondents responded that they did not undertake cash flows forecasting. When questioned on how they established the level of cash to be held/kept by the firm, less than 10 percent of firms responded employing any type of quantitative technique. The techniques majorly utilized was to maintain cash as a fixed ratio of predicted expenses, anticipated purchases or forecasted sales. Non-quantitative techniques applied comprises of meeting compensating balance needs, keeping the level regarded as safe by management or attaining a level acceptable by outside advisers/stakeholders. In addition, 71 percent of firms in the Virginia survey revealed that they did not have short-term surpluses of cash in their recent past/history. Only 23 percent did have a long-term surplus. Almost 30 percent of respondents had their investments in excess cash in accounts or earnings securities. The major investments were in treasury bills, certificates of deposit, savings accounts, bonds, shares, repurchase agreements, commercial papers and other investments.

According to Cooley and Pollen's (1979) research study, management of cash was taken as the process of controlling and planning cash flows. It comprises of three fundamental elements: cash surplus investment practices, cash-control practices and cash forecasting practices. Cooley and Pullen (1979) investigated cash management decisions of 122 small

firms engaged in marketing of petroleum and showed that 73 percent of respondents had underwent a surplus of cash.

Proof on the cash management practices of 123 small firms across a various industries in the Canadian provinces of Ontario and Quebec was given by Anvari and Gopal (2014). In general, 53 percent of the sampled firms showed that they used cash forecasts, substantially more than the 30 percent figure revealed by Grablowsky (1980). Respondents were also questioned on the methods of establishing the level of their cash balances. Only 26 percent of respondents revealed they employed formal methods, utilizing a fixed percentage of expenses or sales, for establishing the level of their cash balances. 55 percent of respondents argued to have experienced a short-term cash surpluses and 26 percent of firms had built what they considered to be long-term funds surpluses in the previous years.

Mathuva (2019) analyzed the effect of WCM elements on firms financial performance by utilizing a sample of 30 companies listed on the Nairobi Stock Exchange (NSE) for the time periods of between 1993 and 2019. He employed Spearman's correlations and Pearson, the fixed effects regression and pooled ordinary least square (OLS) models to undertake analysis of data. The major results of his research study were that: first, there was high significant inverse correlation between the time period it takes for companies to collect cash from their customers, i.e. the accounts collection period and financial performance. Secondly, there was a high significant positive correlation between the time taken to transform stocks into sales, i.e. the inventory turnover in days and financial performance. Lastly, there was a high significant positive association between the period it takes the company to pay its creditors i.e. the average payment period and financial performance. Rowell (2018) undertook a survey on management of cash of 66 small firms from several industries domiciled in and around Norfolk, Virginia. The findings revealed that 67 percent of respondents revealed that they did not undertake cash flows forecasting. When they were questioned on how they established the level of cash to be held/kept by the firm, less than 10 percent of firms revealed that they employed any type of quantitative technique.

The technique that was mostly used was to hold cash as a fixed ratio of predicted expenses, anticipated purchases and the forecasted sales. Non-quantitative methods employed comprises of meeting the requirements for compensating balance, managing the level accepted to be safe by management or attaining a level proposed by outside stakeholders/ advisers. In addition, 71 percent of firms in the Virginia survey revealed that they did not have a short-term cash surpluses in their recent past/history. Only 23 percent showed that they had a long-term surplus. Close to 30 percent of respondents revealed that they had invested excess cash in accounts and earnings in securities.

According to Mathura (2019), management of cash was taken as the process of controlling planning of cash flows. It comprises of the three key elements, namely cash surplus investment practices, cash-control practices and cash forecasting practices. Solano (2019) investigated cash management practices of 124 small firms in marketing of petroleum and revealed that 73 percent of respondents had undergone a cash surplus experience.

Teruel *et al.,* (2016) defined the term cash management to refer to the concentration, disbursement and collection of cash. It incorporates a firm's management of cash balance, short term strategies and level of liquidity. Pindado (2015) similarly defined cash management as consist of WC that makes up the optimal level required by the firm. Bort (2015) affirmed that, cash management is fundamental for both growing and new businesses. Firms may suffer from cash flow challenges due to lack of margin of safety in case of predicted expenses such that they undergo challenges in sourcing of finance for expansion or innovation. Further Bort (2015), affirmed that effective cash management is the crucial beginning point to make sure that the firm's funds are in stable position.

In reverence to Bort (2015) cash is the lifeblood of the firm. The major and fundamental concept to successful cash management is based on establishing effective billing and collection measures, tabulating realistic prediction/projections, monitoring collections and disbursements and adhering to budgetary parameters because cash flow can be a challenge to the corporate firms. Gitman (2019) provided a theoretical stand drawn from consulting and observations experience on the fact that a company can boost its efficiency in cash

management by collecting accounts receivable as soon as possible. The most obvious method of carrying forward inflows cash, would be to convince the debtors to make early payment even though this principle will give rise to goodwill and challenges with the customers.

Gitman (2019) dictates for cash budget as another tool and technique for cash management. It is employed by the companies to determine its short term needs with a specific focus being paid to planning and organizing for cash shortages or surplus cash. Kirkman (2017) concluded the same logic by pointing out that as a elements of developing an effective cash management program, a cash flow statement referred to as a cash budget may be developed. Chastain (2019) insisted that budgets are the financial blue print/road map firms' employ, when planning and organizing company expenses and tracking the cash flow throughout the financial year.

2.5.5 Relationship between Moderating Effect of Ownership Structure and Financial Performance

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 (Jensen & Meckling, 1976).

Rina *et al.,* (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 & Tam, 2019).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, 2017). 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.

Concerning domestic banks' verses foreign banks', the association between ownership identity and bank performance, different scholars came up with varying results. For instance according to Claessens *et al.*, (2018) domestic banks' performance is superior compared to their foreign counterparts in developed countries. According to the same scholars the opposite is true in developing countries. Micco *et al.*, (2019) also support the above argument in that in developing countries the performances of foreign banks is better compared with the other types of ownership in developing countries. However, Detragiache (2018) presented a different view about the foreign bank performance in relation to financial sector development, financial deepening, and credit creation in developing countries. He found that the performances of foreign banks compared to their domestic owned banks are inferior in developing countries. Ownership is one of the variables that affect the performance of banks.

For small firms' verses larger firms, Ballantine *et al.*, (2020) investigated the association between ownership structure and the financial performance for small companies. By using data from the firm's audited financial statements, they showed that there is a lower reported profit for small companies that employ higher debt. In addition, Gakure *et al.*, (2018) argue that the financial performance of small companies in the United Kingdom

(UK) is lower because of their heavy debt reliance. Several studies stresses that small firms in particular tend to have challenge in accessing the markets for finance. Therefore, small firms are normally compelled to finance themselves through debt (loans from commercial bank) and retained earnings. The shortage of capital of small firms may occasion lower financial performance. The study of Jordan *et al.*, (2020) in England on small companies showed that small companies tend to first, utilize retained earnings, secondly resort to debt when retained earnings is exhausted, and finally to external equity when borrowing limits are attained. Consistently, Chittend *et al.,* (2017) in his research on 3,482 small companies in the UK, found that small companies rely heavily on internal funds.

Regarding family-owned business verses non-family-owned business, literature studies on family business reveal that independence, family control, business ownership factors influence owners' WCM (Neubauer & Lank, 2019; Dreux, 2018). Hutchinson (2017) showed that business entrepreneurs who prefer a strong preference for independence tend to use retained earnings or equity as sources of finance. In addition, Storrey (2019) suggest that owners of small business are most likely to utilize short-term accounts payables in that; they oppose strongly the sharing of ownership. Similarly, Hutchins, 2017) also indicates that owner-managers who have a strong preference to retain control of the company may actively place threshold on the utilization and equity growth. Numerous researchers (Berge & Udel, 2018; Harve & Evanss, 2019) are in support this perspective, having established that issues regarding risk aversion and control do affect WCM and capital structure.

Pertaining owner-controlled firms' verses non-owner controlled firms; empirical researches on entrepreneurship studies are still not clear as to whether non-owner controlled firms or owner-controlled firms are better in terms of the financial performance. Holls (2018) analyses that on average, firms with outsider-controlled will reveal lower profit rates and higher growth rate than firms that are owner-controlled. Modern studies show that non-owner managers are interested in performance in terms of growth more than financial performance (Kotey & Slade, 2016; Xayphone, 2018).

McEachern (2017) emphasizes that outsider directors/managers choose profit maximization in comparison with owner-managers who may prefer non-pecuniary benefits. Similarly, he also revealed that owner-managed companies tend to keep more earnings and prefer more stock market risk as compared to outsider-managed companies. Further, Daltonn (2018) revealed no difference in performance between professional management firms (outsider-managed firms) and owner controlled. In addition, Dailyn and Thomsonn (2017) find no significant association between growth and ownership types in their research on a limited sample.

Previous studies on small and medium size enterprises, especially family-owned and small enterprises have mostly ignored to examine the management styles on performance and moderating effect of ownership structure. To the researcher's knowledge, managers/owners are a fundamental factor in the WCM of the firm as managers/owners shall decide if the utilization of debt and equity/retained earnings for their investment is sufficient in terms of financial performance. The magnitude of the effect ownership structure can be influenced by the decisions of the management, WCM included. The management decision, in turn, is affected by the interests of the owners which are determined by their WCM, investment preferences and risk appetite, hence affect financial performance (Nyale, 2019). This implies the there are few current literature dealing with the impact of corporate WCM on performance, and the corporate WCM-making process especially the influence of management styles/or ownership types on the process. Similarly, the influence of management styles and/ or ownership types on financial performance has not been comprehensively explored, especially in Kenya and the tea industry. This study attempts to examine whether or not, ownership structure significantly moderate the association between WCM and financial performance of tea firms in Kenya.

2.5.6 Related Studies in the Global Environment

Ani *et al.* (2017) studied on the influence of WCM on financial performance: evidence from the 5 leading beer brewery companies in the world. They concentrated on WCM as measured by the cash turnover in days (CTD), and how the individual elements of the

CTD impact the financial performance of world largest beer brewery companies. Multiple regression equations were employed to a cross sectional time series data. The research study revealed that WCM as measured by the sales growth, cash turnover in days and lesser debtors' collection period had significant impact on beer Brewery Company's financial performance. His research study only concentrated on the receivables turnover, payables, and inventory ratios and not on their proportion or levels to the total assets and liabilities. Similarly, the research study only focused on only leading 5 bear firms in the world and hence this may not be represent all the manufacturing companies. Further, this research study is not a representative of manufacturing companies in African.

Melita *et al*., (2017) empirically examined the influence of WCM on company's profitability in an emerging market economy. Their set of data comprised of companies listed in the Cyprus Securities Exchange for the period between 1998 and 2018. Employing a multivariate regression analysis, our findings showed that WCM leads in improving profitability. Specifically, the findings revealed that the cash turnover in days and all its main elements; including, day's sales outstanding, creditors' payment period and days in inventory, are related with the company's profitability. This research study incorporated all companies and not particularly on manufacturing companies. Different industries possess their own unique features and hence, what fits one industry may not fit the other industry. For example, manufacturing companies have to take into account manufacturing plants that transform raw materials to finished products while commercial industries do not have plants because they deal only with finished products. Similarly, as opposed to manufacturing industry, raw materials are do not form part of the inventories for the commercial industry. In this case, assuming that the influence of WC on financial performance is the same for each is untrue and misleading.

Gamze *et al.,* (2017) examined the correlation between WCM and the company' financial performance for a sample of 76 manufacturing companies in Turkey, that were listed on Istanbul Securities Exchange (ISE) market for the time period of 8 years from 2011 to 2019. The field of focused was the association between WCM elements and financial performance of the companies by employing dynamic panel data analysis. The results

were that companies can boost their financial performance estimated by gross operating profit by lowering the cash turnover in days and accounts receivable collection period. Further, the research study revealed that leverage has a significant negative correlation with company's value and financial performance, which means that increase in the level of leverage give rise to decrease in the financial performance of the company as well as the value company's value. Leverage is measured by the ratio of total liabilities to total assets. In this case, by focusing at the influence of leverage on company's financial performance fails to capture the exclusive influence of liabilities and current assets on company's financial performance. Similarly, the research study took into account the cash turnover in days and accounts receivable collection period whose influence on financial performance may not necessarily be similar as the impact of the level of liabilities and current assets on financial performance.

Abbasali and Milad (2017) performed an empirical research study on the effect of WCM on profitability and Market analysis of firms that were listed in Tehran Stock Exchange. They analyzed a sample of firms listed in Tehran Stock Exchange during the time period of between 2013 and 2016. Their research study utilized variables of return on invested capital ratio and return on assets ratio in order to assess the profitability of firms, variable of Tobin Q ratio to assess the market value of firms. In addition, they employed variables of total debt to total assets ratio, current ratio, cash turnover in days, current liabilities to total assets ratio and the current assets to total assets ratio, as WCM criteria. The results of the research study revealed a significant correlation between the WCM and the firm's profitability. Further, they established that there is no significant correlation with the firm's criterion of market value. In addition, they revealed that management can boost the profitability of a firm by lowering of total debts to total assets ratio and cash turnover in days. By taking into account the influence of current assets and liabilities to the total/overall assets and liability, their empirical research study was almost the same to this research study. However, they did not breakdown/separate the assessment per industry. As indicated earlier, different industries have their own unique features and hence, what benefit one industry may not necessarily benefit the other industry in similar way.

Kulkanya (2017) research study found the influence of WCM on the Profitability of Thai Listed companies. The regression analysis was employed on a panel sample of 256 firms that were listed on the Thailand Securities Exchange from 2013 through 2018. The findings established a negative correlation between the gross operating profits and receivables collection period and inventory turnover in days. The research study revealed that firm's executives/managers can boost the financial performance of their companies by lowering the inventory turnover in days, receivables collection period and cash turnover in days, however cannot boost the financial performance by increasing the deferral period of the accounts payables.

Akoto *et al.,* (2018) investigated the correlation between WCM practices and financial performance manufacturing companies that were listed in Ghana. The research study employed secondary data sourced from the total of the 14 manufacturing companies listed in Ghana covering the years from 2013 to 2019, and revealed a significant negative correlation between accounts receivable days and financial performance. In addition, they established that the company's size, current asset ratio, current asset turnover and cash turnover in days positively influenced the financial performance. The gap in this research study was in the failure to find out the manner in which the level of WC influence the financial performance on the company, because they only concentrated on the cash turnover in days and accounts receivable days.

Ponsian *et al.,* (2019) undertook a research study with aim of establishing the influence of WCM on the firm's financial performance. The research study aimed at analyzing the statistical significance between firm's WCM and financial performance. In line with this objective the research study employed a quantitative techniques in order to test several research hypotheses. A sample of 3 manufacturing firms listed on the Dar es Salaam Securities Exchange (DSE) was adopted for a time period of 10 years of 2007 to 2017 with the overall of 30 observations. The data was assessed on the basis quantitative adopting a Regression analysis and Pearson's correlation. The results showed that there exists a positive correlation between cash turnover in days and financial performance of the company. Similarly, they revealed a negative correlation between liquidity and

financial performance depicting that as liquidity decreases, the financial performance also increase. The third results was that there exists a high and significant negative correlation between average collection period and financial performance. In addition, it established that there was a high significant positive correlation between average payment period and financial performance. The research gap in this study was that the critical attention was on the payment period. Similarly, the sample was of only 3 manufacturing companies and it may not likely to be a representation of the whole industry in Tanzania, let alone Kenya.

Binti & Saad (2019) 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 WC as it affects firm's market value and financial performance. They also suggested that WCM should be part of the company's strategic and operational processes in order to be effective.

Wajahat *et al.,* (2019) found no significant association between financial performance and WCM decisions and ownership structure when grouped as aggressive, defensive or conservative based on CCP 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 WCM, but the data failed the tests of normality. Because of this limitation, dummy variables were used instead to capture the effect of WCM decisions and ownership structure on financial performance.

Gul *et al.,* (2019) investigated the influence of WCM on financial performance of Pakistan's tea industry in. The time period of the research was 7years from 2018-2018. The data that was employed in this research was selected from Karachi securities exchange, tax offices, SMEDA and the company itself. The outcome variable of the research was returns on assets which was applied as financial performance's proxy, while the predictor variables were number of days account payable, number of day's inventory, CCP and number of days account receivable. Further, other variables that were employed included Growth (GROWTH), Debit Ratio (DR) and Firm Size (SIZE). For evaluation, regression analysis was employed to explore the association between WCM and financial

performance of Pakistan's Tea industry. The outcome revealed that SIZE, GROWTH and PAD have a high positive association with financial performance whereas RAD, INV, CCP and DR have inverse relation with financial performance.

Oladipupo & Okafor (2019) examined the implications of a firm's WCM decisions and ownership structure on its financial performance and the ratio of dividend payout. The research focused on the degree of the influence of WCM on the financial performance and the ratio of dividend payout. The data were sourced from 13 companies engaged manufacturing listed on the Nigeria's securities exchange for a time period 5 years from 2019-2018. Using both the ordinary least square (OLS) and pearson product moment correlation technique regression technique, they revealed that short debt ratio and net trade cycle enhances significant financial performance of corporate firms. Whereas the leverage level has positive significant influence on corporate financial performance, the impacts of WCM on corporate financial performance appeared to be statistically insignificant at 5% confidence level.

Almazari (2019) investigated the association between the WCM and the firms' financial performance for the companies engaged in manufacturing of cement in Saudi. They sampled up 8 cement manufacturing companies in Saudi that were listed in the Saudi securities exchange for the time period of 5 years from 2013 to 2018. Regression analysis and Pearson Bivariate correlation were employed. The outcome of this research revealed that cement industry in Saudi had current ratio that was the most fundamental liquidity metric which influence financial performance, hence, the cement companies should set a trade-off between these duo objectives so that, neither the financial performance nor liquidity suffers. Similarly, it was revealed that, as the size of a company increases, financial performance increased. Besides, when accounts payable increases, the financial performance diminishes as well. The tests of linear regression revealed a significant high degree of association between the WCM and financial performance.

Akoto *et al.,* (2019) analyzed the association between WCM decisions and ownership structure and financial performance of Ghana's listed firms engaged in manufacturing.

The research utilized data collected from yearly audited accounts of the entire 14 Ghana's listed firms engaged in manufacturing, for the time period of 2016 to 2018. Using regression analysis and panel data methodology, the research reported a highly significant negative association between financial performance and receivable accounts in days. But, the cash conversion period of firms, size, current asset turnover and current asset ratio significantly and positively impact financial performance. The research proposes that directors and managers can create value for their shareholders by building incentives to minimize their accounts receivable collection period to 30 days. Further, it is recommended that, legislation of local laws that shield local companies and curtail the importer's activities are fundamental to facilitate increased demand for goods locally manufactured for both in short runs and long runs in Ghana.

Maradi *et al.,* (2018) compared WCM of two groups of listed corporate firms in Tehran securities exchange, which composed of medicine industry and chemical industry. For chemical industry, 35 firms and medicine industry, 30 firms were chosen and data regarding to these firms were sampled for a time period of 15 years (2002 -2017) and were evacuated using multiple regression of OLS. The outcome revealed that, in medicine industry in comparison with chemical industry, the ratio of debt made significant impact on reducing net liquidity. However, examination of impact of LEV over WCR indicates that, in chemical industry, debt ratio makes more impact on reduction of WC requirements, compared to medicine industry.

Sharma & Kumar (2017) examined the effect of WC on financial performance of Indian firms. They sampled data of 264 BSE 500 non-financial firms listed at the Bombay securities exchange from 2016 to 2018 and analyzed the data using multiple regressions of OLS. The outcome showed that WCM and firm's financial performance is positively related for companies India. Further, the study reported that inventory turnover in days and accounts payable payment period are strongly negatively related with financial performance of a firm, whereas receivable accounts in days and cash conversion period showed a strong positive association with firm's financial performance.

Chatreji (2019) studied the impact of WCM on financial performance in companies listed in London stock exchange throughout the years 2012-2017. The researcher used the Pierson correlation coefficient to evaluate the impact of cash transformation cycle, the period of collection of receivables, inventory retention period, liability settlement period, the current to quick ratio, to net operational profit. Results indicated a weak negative association existed between WCM and financial performance. This means that an increase in cash transformation cycle would result in a reduction in financial performance. Moreover results have also reported a strong negative association existed between liquidity and financial performance as well.

Raheman *et al.,* (2019) analyzed the impact of WCM on firm's performance for the time period 1999 to 2018 in Pakistan. For analysis, manufacturing firms' balanced panel data of 205 was utilized which were listed on Karachi securities exchange. The outcome revealed that the net trade cycle, inventory turnover in days and cash conversion period are significantly influencing the financial performance of the corporate firms. They made conclusion that firms engaged manufacturing were generally facing challenges with their payment and collection policies. In addition, firm size, sales growth and financial leverage similarly had high significant effect on the firm's performance. Their research recommended that effective policies must be formulated and properly implemented for the individual variables of WC.

Gill *et al.,* (2019) analyzed the association between WCM and financial performance of 90 companies listed in New York USA's securities exchange for the time period from 2011 to 2018 was chosen. The data was analyzed by employing weighted least squares regression technique and pearson bivariate correlation analysis. They reported strong significant association between the CCP and firm's financial performance as measured by net operating profit. Further, it proved that corporate managers can generate profits for their firms by handling correctly the CCP and by keeping receivable accountsat an optimal level.

Although studies on WCM have been carried out by various scholars such as Binti *et al.*,(2019); Wajahat & Syed (2019); Gul *et al.*,(2019); Oladipupo & Okafor (2019); Ahmad (2019); Akoto, Awunyo & Angmor (2019); Maradi *et al.,* (2018); Sharma & Kumar (2017); Gill *et al.,* (2019); Wajahat & Syedr (2019) and Rahemann *et al*., (2019), 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 WCM. These researches do not give distinct/definite direction of the association between WC and firm's financial performance. Further analysis of these researches showed that there is minimal empirical proof on the WCM 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 WCM decisions and ownership structure (RAD, ITD, and PAD) on financial performance of tea firms in Kenya.

2.5.7 Related Studies in the Kenyan Environment

Kirwa (2017) undertook a research study on the influence of WCM on the financial performance of manufacturing companies that were listed on the Nairobi Securities Exchange. The data was sourced from the analysis of document regarding consolidated financial statements of years 2015 to 2019. Correlation and multiple regression analysis were employed and performed on the data to establish the correlation between the elements of WCM and the gross operating profit of the companies. The research study reported that gross operating profit was positively related with average payment period and average collection period, however negatively related with Cash turnover in days. Further, it established a significant correlation between gross operating profit and inventory Turnover in Days. Therefore, the gap in this research study was that it only concentrated on cash turnover in days, average payment period, average collection period and left out the influence of levels of WC on company's financial performance.

Similarly, Waithaka (2017) undertook her research study on the correlation between WCM practices and financial performance of agricultural firms listed at the Nairobi securities exchange. The research study utilized a prospective or correlational research

design which aimed at investigating the association between WCM and financial performance to make projections with the adoption of two or more variables for each. The results of this research study were that, financial performance was positively correlated to cash management efficiency, efficiency of inventory management (EIM) and efficiency of receivables management (ERM). The gap in her research study is that she concentrated on agricultural companies. In addition, similar to Mwangi (2018), her research study concentrated on debt ratio, average payables period, inventory collection period, average collection period and not on the levels of current assets and liabilities.

Makori and Jagongo (2018) revealed the correlation of WCM and financial performance of firms, empirical evidence from construction and manufacturing firms that were listed on Nairobi Securities Exchange, for the time period of the years 2011 to 2018. Ordinary Least Squares regression and Pearson's correlation models were adopted to investigate the correlation between WCM and company's financial performance. The results showed that there was a negative correlation between financial performance and cash turnover in days and number of day's accounts receivable, however, a positive correlation between financial performance and number of day's payable and number of days of inventory. In addition, the research study revealed that the current ratio, firm size, sales growth, financial leverage, similarly had a significant influence on the company's financial performance. On contrary, the research study concentrated only on number of day's payables, number of days of inventory, number of day's accounts receivable, current ratio and cash turnover in days. It fails to establish the manner in which the levels of liabilities and current assets influenced the company financial performance.

Mwangi (2018) undertook a research study on the correlation between WCM and financial performance of manufacturing firms that were listed at the NSE for the period of 5 years from the years 2010-2018. The research study revealed that inventory turnover in days had a negative association with return on equity. Similarly, it established that net payment period and cash conversion period revealed a significant negative correlation with return on equities. This research study focused on the current ratio and debt ratio, cash conversion period, inventory turnover period, average collection period demands and the

average payment period. Nevertheless, it failed to analyze whether independently, current liabilities/total liabilities ratio, decrease or increase in current assets-to-total assets ratio, current liabilities, as well as current assets had s any influence on firm's financial performance.

Wamugo *et al.,* (2019) investigated the influence of WCM on performance of non-financial firms. A total/census of 42 non-financial firms listed in the Nairobi Securities Exchange, Kenya was adopted. The data were sourced from the Nairobi Securities Exchange hand books for the period of 2012 to 2017. Feasible Generalized Least Square (FGLS) regression findings showed that an aggressive financing policy had a significant positive influence on return on equity and return on assets, whereas a conservative investing policy was established to have a positive influence on performance. The gap in this research study is in its failure to separate their results on the influence of WCM on performance per industry. What benefits manufacturing firms may not necessarily benefit the trading firms due to the reason of the unique nature of their concern/business. Manufacturing firms have their raw materials in their stock/inventory, as opposed to the trading firms which don't have. Trading firms for instance, retail shops sell to their individual customers whose buying behaviors cannot be predicted. Moreover, selling to individual customers may not benefit credit sales. This is different particularly in the case of manufacturing companies whose customers are trading companies that purchases in huge quantities, may not default on debt and therefore possess a buying behavior that predictable.

Nyarige and Olweny (2019) sought to establish the influence of WCM on performance of companies listed at the Nairobi Securities Exchange in Kenya. A sample of 27 listed companies was adopted for the years 2011-2017. The findings showed that cash turnover in days and days of receivable accountshave an indirect impact on performance as assessed by gross operating profit. Days in inventory and days of accounts payables have a significant and direct influence on performance. Further, the findings revealed that different sectors have somewhat similar and varying averages of WC. However, their research study concentrated only on cash turnover in days, receivables and days of

accounts receivables. Nevertheless, it failed to explore how their levels influence company's financial performance.

Arthemon (2019) established the association between liquidity and profitability in manufacturing cement companies. They applied purposive sample design in their research study which suited/march with the selected samples of top/leading cement firms of Kenyan cement industry including; Bamburi Cement, East African Portland Cement and Athi River Mining. Secondary data sourced from the statement of financial position and income statements beginning from the years 2008-2017 and was assessed by adopting of descriptive statistics and correlation drawn by employing multiple regression analysis. The results of this research study showed that the mean/average values of current ratio was 1.71 which is below the recommended/standard conventional principle/rule of 2:1. The analysis employing both regression and correlation analysis showed that liquidity ratios as assessed by quick ratio, cash turnover in days and current ratio, had a correlation with financial performance as assessed by return on capital employed. Further, the results showed that cash turnover in days was negatively related with return on capital employed while quick ratio and current ratio were positively related with return on capital employed. The gap in this research study was such that it only concentrated on the quick ratios and current, which do not guide on the manner in which the level of current liabilities and current assets can be assessed in relation to the level of current liabilities and total assets respectively influence the company's financial performance.

Ofunya (2017) undertook a census research study that examined the correlation between WCM and financial performance of 5 cement firms in Kenya. The selection of the sample was purposive in that respondents for the research study were different heads of the department of finance. The results of the research study revealed that the efficient WCM boost financial performance, and therefore a negative correlation exists between the metrics of WCM, that is; credit ratio, debt ratio, sales growth and cash turnover in days and financial performance variable, function from each of the cement firms.

Mutungi (2019) sought to find out the association between WCM 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 WCM decisions and ownership structure 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 WC which is very important for the growth and sustainability of a company.

Wainaina (2019) sought to establish the association between financial performance and WC 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 CCP 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.

Apuoyo (2019) sought to establish the association between WCM policies and financial performance for companies quoted at the Nairobi Securities Exchange. The study focused on the five main investment segments at the NSE represented. A sample of nineteen listed companies was taken. Studies conducted revealed that the WC needs of a company change over time as does its internal cash generation rate. He further observed that listed firms at the NSE should ensure a good synchronization of both assets and liabilities. The study illuminated that the financial and investment sector has been able to achieve more scores on the various components of WC and also noted that a positive association existed between the various components and financial performance.

Omesa *et al.,* (2019) examined the association s between WCM and firm's financial performance of manufacturing companies listed on the NSE. For analysis, this study sampled 21 corporate firms whose data for a time period of 5 years from 2014 to 2019 was selected. For analysis, principal components analysis was employed because of its useful characteristics of applicability, simplicity and capacity of extracting fundamental information from confusing data sets. From the results using multiple regression and principal components analysis , WC proxies CCP, RAD and net WC turnover ratio, fixed financial ratio and control variables current liabilities were significant at 95% confidence (p values are < 0.05) to financial performance as measured by return on assets.

Nyabwanga *et al.,* (2018) analyzed the effect of WCM decisions and ownership structure on the financial performance of SSEs in Kisii County. A sample of 114 SSEs consisting of 41 manufacturing and 73 trading enterprises was utilized. Multiple regression analysis and Pearson's correlation coefficients techniques were employed to analyze data. As a result, the outcome of the research study revealed that, WCM decisions and ownership structure was low amongst SSEs as many had not embraced formal routines of WCM and reported that their financial performance was on average very low. The research study also reported that SSE financial performance had significant positively relationship to cash management efficiency, receivables management efficiency and inventory turnover in days efficiency.

Gakure *et al.,* (2018) analyzed the association between WCM and financial performance of 16 firms engaged in manufacturing listed at the Kenya's Nairobi securities exchange from 2014 to 2018 and for an aggregate of 76 firm's year observations. They utilized secondary data from a sample of 17 firms listed at the NSE. The model of regression was employed to explore the association between the outcome variable and the predictor variables. Pearson's correlation and regression analysis was employed for the analysis. The results indicated that there is a strong negative association between firm's performance and liquidity of the firm. The study found that there is a negative coefficient association between receivable accounts in days, accounts payables payment period, inventory turnover in days and financial performance while the CCP was found to be

highly positively related with financial performance. However, the effects of the independent variables except the PAD were no statistically significant though the overall model was statistically significant.

Mathuva (2019) in his research on the influence of WCM on corporate financial performance showed that there exists a strong and significant negative association between the period of time it take for companies to collect cash from their customers and financial performance. He expound that the companies that are highly profitable take the minimal time period to collect cash from the customers. Further, the study revealed that there exist a highly and strong significant positive association between the ITD and financial performance. It was explained that companies, which keep inventory levels that is considered sufficient reduces interruption costs as possible in their process of production and business loss due to products and scarcity. Finally, the study established a significant positive association between the PAD and financial performance. He held that the when accompany takes long to pay its suppliers, then the more profitable it becomes is. In this study, a sample of 31 companies listed on Kenya's securities exchange for the period of time 1992 to 2018 was used. Both the fixed effects regression models and ported OLS and were employed.

While a number of studies on WCM have been carried out by various scholars such as Mutungi (2019); Wainaina (2019); Apuoyo (2019); Omesa *et al.,* (2019); Maradi *et al.,* (2018); Nyabwanga *et al.,* (2018); Gakure *et al.,* (2018) and Mathuva (2019), 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 and ownership structure (RAD, ITD & PAD) on financial performance of tea firms in Kenya.

2.6 Critique of the Related Literature

From reviewed relevant literature, it has come out strongly from several writers like; Dew (2017), Lerner (2018), Iftekhar *et al.,* (2018), Nadia *et al.,* (2019), Nofie (2017), Hirtle and Stiroh (2017), Agboola (2018), Malhotra & Singh, (2018), Hernando and Nieto (2018), DeYoung (2016), and Acharya & Kagan (2018) 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, 2018; Sharma & Kumar, 2017; Pratheepkant, 2017; Rehman, 2019; Onoja & Ovayioza, 2017; Abdul, 2018; Berger & Patti 2018; Chebii *et al.,* 2017; Campello, 2018) found out that WCM have negative effects on financial performance indicators. In addition some studies like (Memon *et al.,* 2019; Mbatha, 2018; Liow, 2019; Maina & Kondongo 2019) disputed that moderating effect of ownership structure is insignificant in enhancing the association between WCM and financial performance. Other studies (Mollik, 2017; Burja, 2017; Beattie & Thomson, 2018; Luther, 2018; Memon *et al*., 2019) accepted the role of moderating effect of ownership structure and others rejected (Momanyi & Naibei, 2018; Nazir & Afza, 2018; Njanja & Pelissier *et al*., 2019).

The research studies performed in Kenya by Nyabwanga *et al.,* 2018; Nyabwanga *et al.,* 2017; and Muchina and Kiano, 2018 targeted the SME's and failed to include large business firms. The findings can only be evaluated in association with small and medium business firms. Ikram *et al.,* (2018) undertook a research study on WCM on financial performance in the cement industry. The findings of the research study were confined only on one sub-sector within the manufacturing sector. Hence, the findings of this research study should be applied with care/caution and should only be generalized particularly to the cement industry and not whole or entire manufacturing sector.

Mathuva (2017) focused on the companies listed in Nairobi securities exchange. The firms listed in the securities exchanges are large/big firms. Small firms were not incorporated in this research study. Hence, the findings of this research study can only be generalized on

listed and large firms. The research studies on WCM utilized the secondary data (Mousavi & Jari, 2017)

Gakure *et al.,* (2017) and Kaddumi *et al.,* (2017) adopted record survey sheet to source for the secondary data. On contrary, Nyabwanga *et al.,* (2017) studied the influence of WCM practices on financial performance of small business firms in Kisii County in Kenya. They employed a questionnaire to source for the primary data. Secondary data from financial records and statements provides values and data at a specific/particular time and hence needs to be supplemented/substituted by primary data that were sourced from the opinions of finance executive/ managers.

Similarly from the literature, it is evident that studies carried out in Kenya (Mutungi (2019; Wainaina (2019); Apuoyo (2019); Omesa *et al*., (2019); Maradi *et al*., (2018); Nyabwanga *et al*., (2018); Gakure *et al*., (2018) and Mathuva (2019), 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.

2.6 Research Gaps

From the foregoing review of relevant literature, it is evident that research in the area of WCM decisions and ownership structure 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 receivable accounts in days decisions and financial performance and others on Payable accounts in daysdecisions, inventory turnover in daysfocusing 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 WCM decisions and ownership structure on the financial performance of tea firms in Kenya.

Irrespective of the fact that WCM is a common and familiar field of research in accounting and finance, it is evident that there is very minimal research studies that has been undertaken on tea companies. Many of the research studies undertaken failed to incorporate the reason for the correlation between the research studies and the associated models and theories. In addition, research studies on the WCM were mostly undertaken in the east. On contrary, Gill *et al.,* (2017) undertook their research study on American manufacturing firms. They explained that the findings of their research could only be generalized to manufacturing companies same to those that they incorporated in their research study. The size of the sample that they adopted was at the same time small. Further, they suggested that future research studies should examined generalization of the results over and above the American manufacturing business firms.

Above all, the literature review indicates that WCM decisions and ownership structure have impacts on financial performance, liquidity and performance of a firm. The company's efficiency on WCM decisions and ownership structure has lasting impact on company performance. Cash Conversion Efficiency Days Operating Cycle and Days WC in the overall WC 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 turnover in days decisions, debtors' management and creditors' management play an important role in its financial performance.

Even if, the literature review indicated that WCM decisions and ownership structure 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 WCM 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 WC 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 WC 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 WCM 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. 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 WCM 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 WCM 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 (2018) in UK has been followed up by Brigham & Ehrhardt (2016) of Ohio, USA and Hsueh (2019) of South East Asia all with conflicting results from the foreign markets.

In line with the literature, this research study sought to give an overall view of the results of the correlation between WCM decisions and financial performance of tea firms in Kenya. On contrary, there still exist research gaps in the literature on WCM decisions of

tea sector, which requires to be investigated. Smith (2017) explain that approximately 60 percent of a typical financial executive/manager's time is spent on WCM. Kenyan tea industry are demanded to manage the liquidity for daily business operation to make sure that there is a smooth firm operations and at the same time meet their financial obligation as and when they fall due (McMahon, 2018). WCM has been fundamental concept particularly in developing economies/countries.

Wanjoi (2019) argued that approximately 70 percent of owner and managers don't have formal education/training in the skills of management, particularly on WCM. Presently, the function of WCM of Kenyan tea industry is one of the fundamental concepts emerging in developing economies/countries which requires to be examined (Zikmund, 2019). It seems that the function of WCM of tea industry on financial performance in developing countries/economies for instance Kenya have not been examined. Therefore, absence of empirical evidence from the emerging countries/economies and the lack of investigation of the function of the WCM on financial performance of Kenya tea industry, are the research gaps that this review/study established from the literature.

The existing studies relating WCM variables to financial performance have not considered the interactive effect of the different WCM components on financial performance. The studies, instead, focus on the effect of individual WCM variable on performance. Some of the studies, for instance, have considered the receivable accountsalone on financial performance (Abdul, 2018; Javed & Akhtar, 2018; Abdulahi, 2017; Pratheepkanth, 2017; Salehi & Biglar, 2018). Others were on accounts payables alone on financial performance (Campello 2018, Dube 2019, Zender, 2019). Other studies have considered effect of inventory turnover in days only on financial performance (Ogundipe *et al*., 2018; Bhunia & Das 2018; Mathuva, 2018). The present study will contribute to the knowledge gap by adding a new dimension in the examination of the association between WCM and financial performance. This involved analyzing the moderating effect of ownership structure (multinationals and KTDA managed) in one model on financial performance of tea firms in Kenya. This study, therefore, will attempt to fill these gaps in the literature.

In conclusion, whereas empirical studies on WCM decisions and ownership structure in Kenyan produced mixed results (Gathogo & Ragui, 2020; Gesimba *et al*., 2020; Gweyi & Karanja, 2020.; Kibet *et al*., 2017), 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 WCM decisions and ownership structure on financial performance among the tea firms in Kenya will be carried out.

2.7 Summary of the Literature

Evident from the literature, there is lack of consensus as to whether and how WCM decisions and ownership structure influence financial performance. Some of the studies faults data collection methods and others data analysis techniques (Azam & Haider, 2017 and Butt *et al*., 2019). Memba and Nyanumba (2019) disputed this argument and were supported by Mule and Mukras (2017). 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, 2017 and Xayphone, Tatsuo, 2018), while others accepted that ownership structure actually moderate the association between WCM decisions and ownership structure and financial performance (Abdulhadi & Jean 2020, Ibrahim & Sangiru 2017). Odhiambo (2020) for instance cited that WCM do not influence financial performance, with ownership structure being a moderator.

The research literature pertaining WCM decisions points out efficiency of inventory management, efficiency of receivables management and efficiency of cash management as the major determining factors of financial performance model. Therefore, financial performance could be enhanced if the levels of efficiency of inventory management, receivables and cash decisions are enhanced. Further, the review of literature established that WCM decisions influence on the financial performance of the company However, there is still some ambiguities pertaining the relevant variables that may be employed as proxies for WCM.

Similarly, WCM decisions have for a long time attracted the focus of previous scholars/researchers. The fundamental areas of research associated with these decisions comprises of inventory management, cash management and cash receivable. On contrary, correlation between WCM decisions and Kenyan tea industry's financial performance have not been examined. Currently, there are no tests of relationship between WCM decisions and Kenyan tea industry financial performance. Therefore, this research study will examine the correlation between these families of variables and the financial performance of a census Kenyan tea industry.

In theory, Deloof and Jegers, (1996) has stressed that a generous trade credit policy and large amount of inventory may give rise to high profitability. Similarly, Zariyawati *et al.*, (2019) indicated that investment having a higher risk may earn a higher return, therefore a company having a high level liquidity in WC will have a low chance/probability of being unable to meet its financial obligations, and at the same time low financial performance, and current asset to total assets ratio rule/principle. Further, Sathamoorthi (2017) explained that the increase in current asset to total assets ratio has a negative influence on company's financial performance, while at the same time, increase in current liabilities to total liabilities ratios has a positive impact on financial performance of the companies. The gap that has been seen is that there is a contradiction between all these explanations, in that, some supports high levels of currents assets while at the same time, others are of contrary opinion. Therefore, there is need for research study to investigate which argument is more relevant and applicable to tea firms in Kenya.

Based on the empirical evidence, approximately all the reviewed research studies seem to concentrate on the influence of payables period, inventory collection period, debt ratio, debt collection period on firm's financial performance. None has explored whether or not and the manner in which the level of current liabilities and current assets influence company's financial performance. In addition, others have focused only on the influence of WCM on financial performance for all companies combined together, without focusing on industry per industry. Therefore, such results are misleading/incorrect based on the fact that, industries are not similar, and this may interfere with the manner in which their

financial performance is influenced by the WC. Further, other research studies adopted very small samples which may not be representative on the whole/entire manufacturing industry. For example, Ani *et al.,* (2017) research study, only focused only on leading 5 beer firms in the world and hence this may not be representative for the entire manufacturing companies. Similarly, this research study is not a representation of the whole African firms engaged Manufacturing business.

In reference to the above, while examining the influence of WC on financial performance of tea firms in Kenya, this research study will majorly concentrate on the influence of the levels of currents liabilities and current assets as assessed in comparison with total liabilities and total assets respectively influence financial performance of the tea firms in Kenya. Therefore, this will shed light as to who among the Jegers and Deloof (1996) Current asset to total assets ratio theory, argument on inventory and trade credit policy and Zariyawat *et al.* (2019) argument on risk and return better explains the influence of WC in manufacturing firms, especially Kenyan tea industry.

Despite numerous studies, the association between WCM decisions and ownership structure and financial performance is not clearly understood, A· number of studies support a negative association between the variables (Fama & French, 2019, Booth *et al*., 2016) while some studies have found a positive association (Javed & Akhtar, 2018; Berger & Bonaccorsi, 2018; Hadlock & James, 2019). Further, Ebaid (2018) indicate that WCM has a weak-to-no impact on firm's performance. In addition, the studies relating to financial leverage have focused more on long-term WCM. The present study will consider both long-term and short-term WCM and their effect on financial performance of tea firms in Kenya.

Studies relating WCM as measured by CCP have also yielded contradictory results. Whereas Sharma and Kumar (2017) indicate that financial performance increases with increase in CCP, other studies (Ogundipe *et al*., 2018; Dong & Su, 2019; Mathuva, 2018) reveal a negative association between CCP and financial performance. The current study,

therefore, seeks to establish the effect of CCP and financial performance of tea firms in Kenya.

Many of the reported studies on the association between WCM decisions and ownership structure and financial performance have been conducted in developed countries where capital markets are well-developed (Pratheepkanth, 2017; Salazar & Soto, 2018). 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 WCM decisions and ownership structure on financial performance, and further, examined the moderating effect of ownership structure (multinationals and KTDA managed tea firms) on the association between WCM decisions and ownership structure 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 WCM decisions and ownership structure 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 WCM decisions and ownership structure and financial performance. In addition, there is complete silence in the literature on how financial performance of tea sector in Kenya is influence by WCM. In a nut shell, the availability or lack of it, of the moderating effect of ownership structure of WCM decisions and ownership structure components on the relationship between WCM and financial performance of tea firms in Kenya has never been established, hence the need for this study.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter explains the methodology that was used to achieve the research objectives. The chapter covers the research design adopted by the study, data collection procedures, operationalization of variables and the data analysis policy taken.

3.2 Research Design

Research design refers to a set of decisions that make up the master plan specifying the methods and procedures for collecting and analyzing the needed information (Kothari, 2018). The study employed correlational research design. This is a type of research design in which the researcher attempts to identify relationships to make predictions (Kasomo, 2018). The main objective of a correlational research design is the discovery of relationships among different variables (Cooper & Schindler, 2018). This research design was used to identify, describe, show relationships and analyze variables of WCM that affect financial performance among the tea firms in Kenya. Correlational research design has been used in similar past studies including Mousavi and Jari (2017); Kaddumi and Ramadan (2017) and Jari (2017), among others, to investigate the relationship between WCM and corporate performance among different firm.

3.3 Target Population

Lavrakas (2017) defines a population as any finite or infinite collection of individual elements to be studied. Based on this definition, the target population for this study was a census of all the 23 multinationals and 72 KTDA managed tea firms in Kenya for the period for the period 2014 to 2019. The period was selected because it represented the time when the tea firms registered low returns and fluctuating tea production (TBK, 2019; KNBS, 2018). The target population for this study in shown in appendix 13.

3.4 Sample and Sampling Techniques

This study adopted a census approach where all the 23 tea factories under the multinationals tea companies and 72 tea factories under KTDA in Kenya were taken. Census approach is appropriate in this study because based on the statistics in appendix 10*;* West of Rift was the most affected with its tea output dropping by 5.5% from 246.1 Million Kilograms recorded in 2019 to 232.6 Million Kilograms recorded in 2017, and therefore comprise of all tea firms in West of Rift that are required in order to analyze the problem. According to Lewis *et al.,* (2018), a census approach enhances validity of the collected data by including certain information-rich for the study.

3.5 Data Collection

To realize the objectives of the study, this research study adopted secondary data. Secondary data was obtained from statistics published by KTDA, TBK and TRFK for the tea factories in Kenya. This data was also collected from the websites of the various tea companies, journals and relevant texts. This data was used to compare the various financial performance measures of Multinational and KTDA managed tea firms of Kenya.

3.6 Data Collection Procedure

The study utilized secondary data which basically means collecting data from documents, records and reports of others. However whichever procedure you use, certain guidelines regarding ethics in data collection, management of data collection and designing of data collection instruments will have to be kept in mind (Kothari, 2018). The researcher obtained a research permit from National commission for science, technology and innovation to allow utilization of data from published financial statements.

The data is panel data which consisted of time series and cross-sections. The cross sectional data consisted of all the 23 multinationals and 72 KTDA managed tea firms in Kenya, while the time series were the years 2014-2019. A combination of time series with cross-sections enhances the quality and quantity of data to levels that would otherwise be

impossible to achieve with only one of the two dimensions (Gujarati, 2019). The data for all the variables in the study were extracted from annual audited reports and financial statements of the tea firms in Kenya which covered the years 2019 to 2019. The specific financial statements from which data were extracted included the income statement, statement of financial position, and notes to the accounts. The researcher used a document review guides and data abstraction tool to extract and compile the required data for analysis from the financial statements.

3.7 Data Processing and Analysis

A panel regression model was used in this study. According to Raheman *et al.,* (2019), panel data comprise of pooling of observations across section of units over several periods of time. This approach of panel data is more helpful than either time series data or cross-section alone. One advantage of using the panel data set is that, because of the several data points, degrees of freedom are increased and collinearity among the explanatory variables is reduced, thus the efficiency of economic estimates is improved. The Model Panel data can also control for individual heterogeneity because of hidden factors, which, if ignored in cross-section or time-series estimations amounts to biased results (Baltagi, 2019). The panel regression equation differs from a regular time-series or cross-section regression by the double subscript attached to each variable.

The regression model employed for this study is also in line with what was used in previous studies, with some modifications for the analysis (Hussain *et al*., 2018; Raheman *et al.,* 2019; Niresh, 2018). To investigate the effect of WCM decisions and ownership structure on financial performance, the study modified the model used by Saeedi *et al.*, (2017) as shown in equation 3 .1. Given that the data had both time series and cross-sectional dimensions, the study estimated a linear panel regression as proposed by Greene (2017).

3.7.1 Model Specification

3.7.1.1 General Empirical Model

Consistent with previous studies (Nazir & Afza, 2018; Zariyawati *et al.*, 2017; Samiloglu *et al.*, 2017; and Garcia *et al.*, 2017) the financial performance is modeled as a function of the four core WCM measures in addition to other firm characteristics. For this purpose, we develop an empirical framework first used by Deloof (2019) and subsequent work of Padachi (2018). The effect of WCM decisions and ownership structure on the firm's financial performance was modeled using OLS regression equations to obtain the estimates. The general empirical model to be used in this study was defined as follows:

$$\mathbf{Y_{it} = \alpha + X'_{it}\,\beta_1 + \varepsilon_{it}} \quad \textbf{..... (Eq. 3.1)}$$

Where $\mathbf{Y_{it}}$ is the dependent variable denoting financial performance of company **i** at time **t. i** denotes the observation (company), **i** = **1** , ...,**95** while **t** is the time period **t** = **2014,** ... ,**2019**; $\mathbf{X_{it}}$ denotes a vector of independent variables **β** are coefficients to be estimated, **α** is a constant term, and $\boldsymbol{\varepsilon_{it}}$ is a composite error term.

The general regression model is given by the following equation:

$$\mathbf{ROA_{it} = \alpha + \beta_1(RAD)_{it} + \beta_2(PAD)_{it} + \beta_3(ITD)_{it} + \beta 4(SIZ)_{it} + \beta 5(SG)_{it} + \varepsilon_{it}} \quad \textbf{..... (Eq. 3.2)}$$

3.7.1.2 Model with Moderating Effect

To investigate the moderating effect of ownership structure on the relationship between the WCM decisions and ownership structure and financial performance, the study operationalized ownership structure using the following codes:

1 = the company is a Multinational tea firm in Kenya;

0 = the company is a KTDA managed tea firm in Kenya.

The empirical model 3.3 was formulated as under:

$$ROA_{it} = \alpha + \beta_1(RAD)_{it} + \beta_2(PAD)_{it} + \beta_3(ITD)_{it} + \beta_4(SIZ)_{it} + \beta_5(SG)_{it} + \beta_6(RAD * MODV) + \beta_7(PAD * MODV)_{it} + \beta_8(ITD * MODV)_{it} + \beta_9(SIZ * MODV)_{it} + B_{10}(SG * MODV)_{it} + \varepsilon_{it} \quad \text{.....(Eq. 3.3)}$$

Where:

ROA $_{it}$ =Return on Assets of Company ***i*** at time ***t***

RAD $_{it}$ = Receivable accounts in days of firm ***i*** at time ***t***

PAD $_{it}$= Payable accounts in days of Company ***i*** at time ***t.***

ITD $_{it}$= Inventory Turnover in Days of Company ***i*** at time ***t.***

SIZ $_{it}$ = Firm Size of Company ***i*** at time ***t.***

SG $_{it}$ = Sales Growth of Company ***i*** at time ***t.***

α = Constant term, β_1 to β_3 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…95 and **t** = 2014…2019

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

3.7.1.3 Mediation Effect Model

In order to establish the mediating effect of operating cash flow on the association between the WCM decisions and ownership structure (receivable accounts in days, payable accounts in days and inventory turnover in days) and financial performance, the study specified equations 3.4 and 3.5 as follows:

$$ROA_{it} = \alpha + \beta_1(RAD)_{it} + \beta_2(PAD)_{it} + \beta_3(ITD)_{it} + \beta 4(SIZ)_{it} + \beta 5(SG)_{it} + \beta_6(MEDV)_{it} + \varepsilon_{it} \quad \text{.....(Eq. 3.2)}$$

$$MEDV_{it} = \alpha + \beta_1(RAD)_{it} + \beta_2(PAD)_{it} + \beta_3(ITD)_{it} + \beta_4(SIZ)_{it} + \beta 5(SG)_{it} + \varepsilon_{it} \text{.....(Eq. 3.3)}$$

Where: **MEDV** = Mediating Variable = Operating Cash Flow

3.7.2 Operationalization and Measurement of Variables

Table 3.1 contains a list of the various study variables, their operational definitions, and the measurements that were used to estimate these variables. The measures adopted have been used and validated by other researchers.

Table 3.1: Operationalization and Measurement of Study Variables

Variable Name	Category	Variable	Measurement
Dependent Variables	Financial Performance	Returns on Assets	EBIT/Total Assets
Independent Variables	Receivable accounts	Receivable Accounts in	Accounts Receivable/Net Sales*365 days
	Accounts Payables Management	Payable Accounts in Days	Accounts Payable/Cost of Sales*365 days
	Inventory Management	Inventory Turnover in Days	Inventory/Cost of Sales*365 days
	Mediating Variable	Operating Cash Flow	Cash and Cash Equivalent/Current Liabilities
	Ownership Structure	Ownership Structure	(1 = Multinational & 0 = KTDA Managed)
	Control Variables	Size of Tea Firm	Logarithm of Total Assets of each Tea Firm
	Control Variables	Sales Growth	(Current year Net sales-Last year Net Sales)/Last year's Net Sales

Source: Study Data (2022)

3.7.3 Model Diagnostic Tests

Being interval in nature, the data was analyzed using, descriptive statistics, correlation analysis, and panel multiple regression analysis. The panel methodology was aided by EVIEW software. After extracting data from the financial statements, an Excel program was used to compute the relevant ratios for each of the companies across time. The data was then formatted in EVIEWS long before being imported to EVIEW from Excel.

Descriptive statistics was used to summarize and profile the status of RAD, PAD and ITD as the WCM decisions and ownership structure of tea firms in Kenya. Feasible Generalized Least Square estimation was performed after accounting for various violations of classical linear regression assumptions. To confirm parametric nature of the data, multicollinearity, heteroskedasticity, autocorrelation and normality of residuals were tested.

It was necessary during the study to ensure non-violation of the assumptions of the classical linear regression model (CLRM) before attempting to estimate formulated empirical models for the study. Various statistical tests and procedures are used in the study. To allow for the use of multiple linear regression models 3.3, and 3.4 respectively, preliminary checks to ensure the data presents the best linear unbiased estimators is used. Estimating the equations when the assumptions of the classical linear regression model are violated, runs the risk of obtaining biased, inefficient and inconsistent parameter estimates. To ensure proper specification of equations for the study, the following diagnostic tests were conducted: multicollinearity, autocorrelation, heteroskedasticity and test for Normality of residuals, Panel Unit Root Test and Test for Fixed or Random Effects.

3.7.3.1 Testing for Multicollinearity

Bickel (2017) posits that, multicollinearity occurs in statistics where two or more predictor variables in a multiple regression are highly correlated. Multicollinearity, results in the

estimate of one variable impacting on the dependent variable while controlling for other variables that tends to be less precise than if predictors were uncorrelated.

The Gauss-Markov assumption only requires that there be no perfect multicollinearity and so long as there isn't perfect multicollinearity, the model is identified, that is it can estimate all the coefficients and that the coefficients will remain best linear unbiased estimates (BLUE) and that the standard errors will be correct and efficient (Golder & Golder, 2019). The existence of strong correlation between the independent variables was tested using Variance Inflation Factor (VIF) and coefficients of the Pearson correlation, (Bickel, 2017; Gujarati, 2019). Using VIF method, a tolerance of less than 0.20 and a VIF of more than 5 indicates a presence of multicollinearity. Similarly, using coefficients of the Pearson correlation scores exceeding 0.8 show the existence of multicollinearity, (Gujarati, 2019; Cooper & Schindler, 2017).

3.7.3.2 Testing for Autocorrelation

This is a mathematical representation of the degree of similarity between a given time series and a lagged version of itself over successive time intervals (Escudero, 2018). Wood ridge test was used to check for the presence of autocorrelation between variables. A P- value more than 0.05 indicates that there is no serial correlation.

3.7.3.3 Testing for Heteroskedasticity

The Breusch-Pagan and the Koenker tests were used to test and control for heteroscedasticity. This involves using the Lagrange Multipliers (LM) derived from the test and comparing their computed level of significance with the standard level of statistical significance at the chosen confidence interval. In this study, the t-tests were evaluated at 95% confidence interval. Accordingly, the tests involve comparing the LM values with 0.05, the standard level of significance. The data is assumed to have a homoscedastic random error term if the LM values are higher than the level of significance at the specified confidence interval, in this case 0.05.

3.7.3.4 Testing for Normality of Residuals

The researcher will seek to assess the normality of data of the sample taken in respect of the various variables in the study. The purpose of normality test is to assess whether the sample is obtained from a normally distributed population. To measure normality of data, the skewness and kurtosis tests were used. If the skewness and Kurtosis tests are used, normal distribution is attained when the skewness and kurtosis values are less than twice the value of their respective standard errors. Condition for normality is required for one to fit a linear regression model (Sekaran, 2019). Consequently, such data does not qualify for linear regression analysis (Sekaran, 2019).The study tested the null hypothesis that the disturbances are not normally distributed. If the p-value is more than 0.05, the null of normality at the 5% level is rejected.

3.7.3.5 Panel Unit Root Test

Since panel data have both cross-sections and time series, there was need to test for the stationarity of the time series because the estimation of time series data is based on the assumption that the variables are stationary. Estimating models without taking into account the non-stationary nature of the data would lead to spurious results (Gujarati, 2018). The unit root tests were conducted using Levi lechun (LLC) test to establish whether the variables are stationary or non-stationary. The null hypothesis of this test was that all panels had unit roots. . The alternative hypothesis was that at least one panel did not have unit roots or some panels did not have unit root (Choi, 2016). If any of the variables had unit root, the researcher would difference it and run equations 3.3 and 3.4 using the differenced variable.

3.7.3.6 Test for Fixed or Random Effects

When using panel data analysis, one has to determine whether to run a fixed effects model or a random effects model. The decision on the type of model to run is based on the Hausman specification test. This test is mainly based on the consistency and efficiency of

the random and fixed effects estimators depending on the correlation between the individual effects and the regressors. The Hausman specification test seeks to determine whether there is significant correlation between the unobserved firm-specific random effects and the regressors. If no such correlation exists, then the random effects model may be more powerful. In the presence of such a correlation, however, then the random effects model would be inconsistently estimated and the fixed effects model would be the model of choice (Greene, 2017)

Thus, if the Hausman test identifies the fixed effects model as appropriate, then the researcher would test for inclusion of time-fixed effects in the study estimation. The time fixed effects tests if the dummies for all years are equal to zero and if they are, then there is no need for time fixed effects in the specification of the model to be estimated. To test whether the dummies for all years were equal to zero the study used the F-test in accordance with Greene (2017). On the other hand, if the Hausman test chooses the random effects model as the more suitable one then there would be need to test whether the data have panel effects so as to determine whether to run a simple Ordinary Least Square (OLS) regression or the random effects model. This study applied the Breusch-Pagan Lagrange multiplier test proposed by Breusch and Pagan (1980) to choose between the random effects model and the simple OLS model. The null hypothesis of this test was that variance across the entities was equal to zero; that is, there are no panel effects.

3.7.3.7 Test for Mediating Effect

The mediating effect of operating cash flow on the association between receivable accounts in days, Payable accounts in days, inventory turnover in days and financial performance 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). The step-wise regression process involves:

- The first step comprises of regression of the dependent variable on the independent variables. Conduct a simple regression analysis with **X** predicting **Y** to test for path

c alone, $\mathbf{Y = B_0 + B_1X + e.}$ In this case, regression of financial performance on receivable accounts in days, Payable accounts in days, inventory turnover in days and the control variables of firm size and sales growth.

- In the second step, conduct a simple regression analysis with **X** predicting **M** to test for path **a**, $\mathbf{M = B_0 + B_1X + e.}$ This incorporates the regressing the operating cash flow (the mediating variable) on receivable accounts in days, Payable accounts in days, inventory turnover in days and the control variables of firm size and sales growth.
- In the third step, conduct a simple regression analysis with **M** predicting **Y** to test the significance of path b alone, $\mathbf{Y = B_0 + B_1M + e.}$
- In the fourth step, conduct a multiple regression analysis with **X** and **M** predicting Y,

  $\mathbf{Y = B_0 + B_1X + B_2M + e.}$ This involves regressing the financial performance on the independent variables, this time around incorporating the mediating variable.

- The final step involves establishing whether or not operating cash flow fully mediates the association between WCM decisions and financial performance.

If the relationship between receivable accounts in days, Payable accounts in days, inventory turnover in days on one hand and financial performance on the other was completely mediated, then it is expected that the path between the two groups of variables would be zero. However, if the path was significantly different from zero, then it follows that a partial mediation condition would exist. The diagram depicting the mediation path is as shown below in Figure 3.1.

Mediating Variable (Operating Cash Flow)

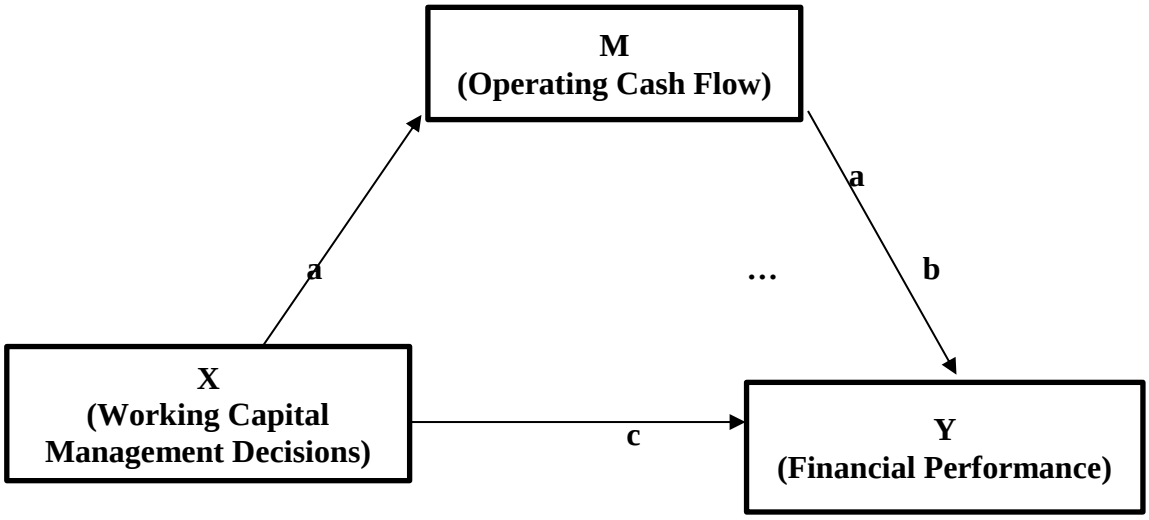


Figure 3.1: Mediating Effect Model Analysis

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

This research study performed the test for mediation effects by undertaking four main procedures. The step one was to find out whether paths a, b and c shown in figure 3.1 were statistically significant. In the second step, the research study investigated whether the independent variable (X) statistically predicts the mediating variable (M), while controlling the rest of the independent variables. The third step involves establishing whether the mediating variable (M) statistically predicts the dependent variable (Y), while controlling the rest of the independent variables. In the fourth and the final step, the research study investigated whether the independent variable (X) statistically predicts the dependent variable (Y) while incorporating the rest of the independent variables. In concluding, in case the paths a, b and c was not statistically significant, then the study

would assert that there was absence of mediating effect. This research study applied the z-test to establish the statistical significance of the three critical paths (Denis, 2017).

Table 3.2: Summary of Data Analysis Techniques

Specific Objective	Methodology
1. To determine the effect of receivable accounts in days on financial performance of tea firms in Kenya.	Panel Regression
2. To establish the effect of payable accounts in days on financial performance of tea firms in Kenya.	Panel Regression
3. To examine the effect of inventory turnover in days on financial performance of tea firms in Kenya.	Panel Regression
4. To determine the mediating effect of 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.	Step-Wise Regression
5. To investigate the moderating effect of ownership structure on the relationship between receivable accounts in days, Payable accounts in days, inventory turnover in days and financial performance of tea firms in Kenya.	Panel Regression

Source: Study Data (2022)

3.7.4 Test of Hypothesis

3.7.4.1 Testing Hypothesis 1

In order to test the first hypothesis that receivable accounts in days does not have any effect on financial performance of tea firms in Kenya, the following regression was used;

$$ROA = \alpha_1 + \beta_i(RAD_1) + \varepsilon$$

Where β_1 was the regression coefficient of receivable accounts in days, RAD_1 was receivable accounts in days. The other independent variables; Payable accounts in days, inventory turnover in days, firm size and sales growth were held constant.

3.7.4.2 Testing Hypothesis 2

In order to test the second hypothesis that payable accounts in days does not have any effect on financial performance of tea firms in Kenya, the following regression was used;

$$ROA = \alpha_2 + \beta_2(PAD_1) + \varepsilon$$

Where β_2 was the regression coefficient of accounts payable management, PAD_2 was the payable accounts in days. The other independent variables receivable accounts in days, inventory turnover in days, firm size and sales growth were held constant.

3.7.4.3 Testing Hypothesis 3

In order to test the third hypothesis that inventory turnover in days does not have any effect on financial performance of tea firms in Kenya, the following regression was used;

$$Y = \alpha_3 + \beta_3(ITD_3) + \varepsilon$$

Where β_3 is the regression coefficient of inventory turnover in days, ITD_3 was inventory turnover in days. The other independent variables receivable accounts in days, Payable accounts in days, firm size and sales growth were held constant.

3.7.4.4 Testing Hypothesis 4

In order to test the fourth hypothesis that operating cash flow does not have any mediating effect on the relationship between WCM decisions and financial performance of tea firms in Kenya, a fourth regression was used;

$$ROA = \alpha_4 + \beta_4(IV \text{ and } CV) + \varepsilon$$

$$MEDV = \alpha_4 + \beta_4(IV \text{ and } CV) + \varepsilon$$

Where β4 was the regression coefficient of mediating variable, IV is independent variable, CV is control variable, MEDV is the mediating variable.

3.7.4.5 Testing Hypothesis 5

In order to test the fifth hypothesis that ownership structure does not have any moderating effect on the relationship between WCM decisions and financial performance of tea firms in Kenya, a fifth regression was used;

$$ROA = \alpha_4 + \beta_5(IV \text{ and } CV) + \varepsilon$$

$$MODV = \alpha_4 + \beta_5(IV \text{ and } CV) + \beta_4(MODV * IV * CV) + \varepsilon$$

Where β5 was the regression coefficient of moderating variable, IV is independent variable, CV is control variable, MODV is the moderating variable and * is the product sign.

3.7.4.6 Overall Model

The test for significance of coefficient of multiple regression was determined by the use of F- test. This test was to check the significance of the whole regression model with the prediction that all independent variables i.e. receivable accounts in days, Payable accounts in days, inventory turnover in days, firm size and sales growth had no effect on dependent variable that is $\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = 0$ and the alternative prediction that at least one of the independent variable was not equal to zero that is $\beta j \neq 0$; j = 1, 2, 3, 4, 5. The hypothesis to test is here below stated;

H_0: $\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = 0$

H_1: At least one of ($\beta_1, \beta_2, \beta_3, \beta_4, \beta_5 \neq 0$)

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

The presentation in this section concerns the results and the analysis of the findings of this research study. In details, this part incorporates the descriptive statistics, correlation analysis, diagnostics tests, regression analysis and hypotheses testing.

4.2 Descriptive Statistics

The presentation in this section entails the descriptive statistics of returns on assets, receivable accounts in days, Payable accounts in days, inventory turnover in days and ownership structure. Precisely, this part incorporates the mean value, minimum, maximum and standard deviation. The results are as shown in Table 4.1.

Table 4.1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Returns on Assets	570	0.081	0.028	0.008	0.179
Receivable Accounts in Days	570	182.8	47.7	41.1	472.4
Payable Accounts in Days	570	79.9	31.6	19.2	230.4
Inventory Turnover in Days	570	78.1	108.3	14.9	773.7
Operating Cash Flow	570	180.6	116.7	16.8	862.9
Sales Growth	570	3.67	1.685	1.692	6.848
Total Assets	570	12.7bn	33.9bn	0	387bn
Ownership Structure	570	0.5750	0.4954	0.0000	1.0000

Source: Study Data (2022)

The results shown in Table 4.1 depict that the minimum return on assets of the multinationals and KTDA managed tea firms in Kenya for the period between 2014 and 2019 was 0.0085 with a maximum of 0.1798. The mean score of the return on assets was 0.0810. This means that several multinationals and KTDA managed tea firms had ROA

of 0.0810 between 2014 and 2019. The research study revealed that tea firms in Kenya between the years 2014 and 2019 had the minimum receivable accounts in days of 41.0259 days and at the same time having a maximum of 472.4709 days. The receivable accounts in days on average was 182.4715 days in the similar time period of 2014 to 2019. This depicts that several tea firms in Kenya between the years 2014 and 2019 had182 days in terms of receivable accounts in days.

The research study revealed a minimum of 19.2 days with a maximum of 230.4 days of payable accounts in days for the tea firms in Kenya between 2014 and 2019. The Payable accounts in days, on average was 79.9924 days. This signifies that between 2014 and 2019, many of the firms in Kenya had 79.9924 days in regard to Payable accounts in days. The research study revealed that between the years of 2014 and 2019, the minimum of 14.9669 days was reported as inventory turnover in daysof the tea firms in Kenya, and a maximum of 773.7 days in the similar period. On average, 78.1 days was reported as inventory turnover in days. This signifies that many tea firms in Kenya between the years 2014 and 2019 reported 78.1386 days as their inventory turnover in days.

Table 4.1 depicts a mean of 1.045432 that was reported regarding the operating cash flow with 7.610569 as a standard deviation. The values -4.364599 and 122.6961 respectively are the minimum and maximum values. The negative that was observed signifies that some tea firms in Kenya was operating with negative cash holdings which shows that during the years 2014 and 2019 tea firms in Kenya were operating on overdraft. During the period 2014 and 2019 covered by the research study, there was growth on average by 4.580205 in the economy of Kenya, having 1.528 and 6.99329 respectively as the minimum and maximum growth rates. Lastly, Kshs 18.4 billion was reported as the mean for the total assets for the tea firms in Kenya under consideration, with Kshs 39.3bn million as standard deviation. The Kshs 307 billion was reported as maximum value of the asset for the period 2014 and 2019 covered by the research study, whereas there was a minimum value zero for the similar period.

4.3 Correlation Analysis

The association between variables of the research study is illustrated by correlation analysis. The association between receivable accounts in days, Payable accounts in days, inventory turnover in days, firm size, sales growth and returns on assets (ROA) is shown in Table 4.2

Table 4.2: Correlation Matrix

Variable	Returns on Assets	Receivable Accounts in Days	Payable Accounts in Days	Inventory Turnover in Days	Firm Size	Sales Growth
Returns on Assets	1.0000					
Receivable Accounts in Days	-0.0617	1.0000				
Payable Accounts in Days	-0.0753	0.1277	1.0000			
Inventory Turnover in Days	-0.0826	0.0428	0.3674	1.0000		
Firm Size	-0.0712	0.304	-0.1742	0.5567	1.0000	
Sales Growth	0.2872	0.1245	0.1293	-0.0147	0.0075	1.0000

Source: Study Data (2022)

The receivable accounts in days results presented in Table 4.2 found that it is negatively correlated with return on asset (r = -0.0617). Similarly, the research study revealed that there is a negative correlation between the payable accounts in days and the return on assets (r = -0.0753). In addition, results of the research study showed that there is a negative association between the inventory turnover in days and the return on assets (r = 0.0826). The research study revealed a negative association between the cash conversion period and the return on assets (r = -0.0712).

There is concurrence of results of this research study with the findings of Muscettola (2020), who found out that, there was a significant negative relationship between the average receivables period and financial performance. On contrary, Ksenija (2019)

established that the receivable accountshad a negative relationship with the return on asset. Eneje *et al.,* (2018) showed that there was negative correlation between the inventory turnover in days and the financial performance. Further, Mathuva (2019), Mathur (2018) and Gill, Biger, illustrated that inventory turnover had a negative association with firm's financial performance. Mekonnen (2017) established that there was a significant negative correlation between cash turnover in days and tea firms in Kenya's financial performance. Moreover, Eljelly (2017) showed a significant negative association with the level of liquidity and the firm's financial performance.

4.4 Diagnostics Tests

This segment comprise of the diagnostics tests. In particular, the diagnostics that were tested incorporates Multicollinearity, Autocorrelation, Heteroskedasticity, Normality, stationarity (Panel Unit Root Test) and Hausman test (Test for Fixed or Random Effects).

4.4.1 Multicollinearity Test

In this research study multicollinearity was measured by employing the variance inflation factors (VIF). Table 4.3 illustrates the results on multicollinearity.

Table 4.3: Multicollinearity Test

Variable	VIF	1/VIF
Receivable Accounts in Days	3.6200	0.2762
Payable Accounts in Days	1.4200	0.7064
Inventory Turnover in Days	6.2700	0.1596
Firm Size	6.2800	0.1592
Sales Growth	1.2900	0.7756
Ownership Structure	1.2200	0.8164

Source: Study Data (2022)

Table 4.3 presents the results and it shows that VIF of all the variables were less than 10, which therefore means that there is absence of multicollinearity. VIF values above 10 as

per Katrutsa and Strijov (2019), depicts the presence of multicollinearity. Multicollinearity leads to unstable estimates of the coefficients for individual predictors, since it inflates the confidence intervals and standard errors.

4.4.2 Autocorrelation Test

The Wooldridge test for autocorrelation was adopted by this research study in order to detect in the data, the presence of autocorrelation. In particular, the test sought to investigate whether or not the residuals are serially correlated overtime. The results are depictes in Table 4.4

Table 4.4 Autocorrelation Test

Wooldridge test for autocorrelation in panel data
H0: no first-order autocorrelation
F (1, 5) = 0.406
Prob> F = 0.5519

Source: Study Data (2022)

For this test, the null hypothesis was that in the data, there is no presence of first-order serial/autocorrelation. The P-value was 0.5519, as presented in the in Table 4.4, illustrates that the F-test is not statistically significant at the 5% level. The research study made conclusion that residuals are not autocorrelated, because the null hypothesis of no autocorrelation was supported.

4.4.3 Heteroskedasticity Test

The test for heteroskedasticity was undertaken by employing Breusch-Pagan test. The test that the error terms have constant variance (i.e., should be Homoskedastic) was constructed as a null hypothesis. The null hypothesis is rejected if the p-value is less than 0.05. Table 4.5 below shows the results of the test of heteroskedasticity.

Table 4.5: Heteroskedasticity Test

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of Return on Assets
chi2(1) = 55.83
Prob> chi2 = 0.000

Source: Study Data (2022)

In line with Table 4.6 showing the presented results, the P-value was 0.000, which means it is less than 0.05. In this case, there was a justification of heteroskedasticity in the data, since there was a rejection of the null hypothesis of constant variance. The correction of the presence of heteroskedasticity in the data was undertaken by running the model using robust standards. The challenge of errors that are not identically distributed and independent are addressed by applying robust standards. There is no in change in the coefficient estimates provided by panel model when robust standard errors are used, however, it removes biasness by changing the standard errors and significance tests.

4.4.4 Normality Test

The Skewness and Kurtosis test was applied to test the normality of the variables. The research study tested that the disturbances are not normally distributed, as the null hypothesis. The null hypothesis of normality at the 5% level is rejected, if the p-value is less than 0.05. The test of normality in Table 4.5 is shown as under.

Table 4.6: Normality Test

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	Prob>chi2
Return on Assets	240	0.0005	0.0097	15.9000	0.0101
Receivable Accounts in Days	240	0.0005	0.0000	39.1400	0.0360
Payable Accounts in Days	240	0.0361	0.0006	13.8900	0.0261
Inventory Turnover in Days	240	0.0000	0.0000	60.0000	0.007
Firm Size	240	0.0634	0.0000	28.3900	0.0490
Sales Growth	240	0.0000	0.0000	57.1500	0.0160

Source: Study Data (2022)

From the Table 4.5, the respective p values for all variables were less than 0.05, which therefore means that, from the results, the data was normally distributed.

4.4.5 Panel Unit Root Test

This research study sought to investigate whether or not the variables are stationary. To find out whether the variables are stationary or non-stationary, the unit root tests were undertaken by employing the Levi lechun (LLC) test. The test that all panels had unit roots was established as the null hypothesis. The objective of this was to eliminate results of spurious regression, which are obtained by applying a non-stationary series. Therefore, findings for the tests for the panel unit root are analyzed in Table 4.7

Table 4.7: Panel Unit Root Test

Variable Name	Statistic(adjusted)	P-value	Comment
Return on Assets	8.6959	0.000	Stationary
Receivable Accounts in Days	7.9244	0.000	Stationary
Payable Accounts in Days	4.7732	0.000	Stationary
Inventory Turnover in Days	8.3414	0.000	Stationary
Firm Size	7.0689	0.000	Stationary
Sales Growth	5.6221	0.000	Stationary
Ownership Structure	5.3408	0.000	Stationary

Source: Study Data (2022)

The p-value of all the variables were less than 0.05, based on the results analyzed in Table 4.7. In this case, there is absence of unit roots at a 5% level of significance, because, all the variables are stationary. The research study made conclusions that all the variables that were under investigation do not have a unit root. This signifies that the obtained results are not spurious.

4.4.6 Hausman Test for Random and Fixed Effects

It is a requirement that, one has to establish whether to run a fixed-effects model or a random-effects model, when panel data analysis performed. Both fixed and random effects estimate coefficients are examined when deciding on the most appropriate and suitable model to apply. To choose between fixed and random effects, the research study employed Hausman's specification test. The Hausman's fixed and random effects specification test is illustrated in Table 4.8

Table 4.8: Hausman Test for Random and Fixed Effects

Column	**(b)** Fixed	**(B)** Random
Receivable Accounts in Days	0.0648	0.0632
Payable Accounts in Days	-0.0661	-0.0645
Inventory Turnover in Days	0.0329	0.0323
Firm Size	-0.0565	-0.0551
Sales Growth	0.1430	0.1420
Ownership structure	0.0178	0.0179

chi2(7) = (b-B)'[(V_b-V_B)^(-1)](b-B) = 0.52
Prob>chi2 = 0.994

Source: Study Data (2022)

The random-effects model was suitable/appropriate compared to fixed, was established as the null hypothesis of the Hausman test and the P-value was employed to test the hypothesis. The P-value was 0.994, basing on the results presented in Table 4.8, was greater than 0.05. Hence, null hypothesis of the research study not was rejected. In this case, the random effect model was the most suitable to be adopted by in the study.

4.5 Model Regression Analysis

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

4.6 Testing for Mediating Effect of Operating Cash Flow

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 4.9.

Table 4.9: 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 4.9 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 4.10, Table 4.11 and Table 4.12 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 4.10: 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 4.10 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 4.10 regarding regression of independent variables with returns on assets reveal that independent variables is negatively and significantly related to and financial performance.

Table 4.11: Regressing Independent Variables on Mediator (Path a)

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 presented results contained in Table 4.10 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 4.9 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 Table 4.9 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 4.12: 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 4.12 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 .0074917and the associated p-value of 0.731, which is greater than 0.1 critical value. Further, the results contained in Table 4.12 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 0.551which is higher than 0.1. In addition, the results in Table 4.12 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.

4.7 Testing for Moderating Effect

4.7.1 Panel Regression Analysis without Moderation

The study sought to carry out panel regression analysis to establish the relationship between receivable accounts in days in days, Payable accounts in days, inventory turnover in days, firm size, sales growth and financial performance of tea firms in Kenya. The results of panel regression analysis are illustrated in Table 4.9

Table 4.13: Panel Regression Analysis without Moderation

Return on Assets	**Coef.**	**Robust Std. Err.**	**z**	**P>z**
Receivable Accounts in Days	-0.1299	0.0541	2.4000	0.0160
Payable Accounts in Days	-0.0843	0.0315	2.6800	0.0070
Inventory Turnover in Days	-0.0623	0.0264	2.3600	0.0180
Firm Size	-0.1107	0.0276	4.0109	0.0030
Sales Growth	0.1589	0.0295	5.3800	0.0000
_cons	0.0457	0.0408	1.1200	0.2630
R squared = 0.6529				

Source: Study Data (2022)

The model 1, without moderation;

ROA= 0.0457 - 0.1299RAD - 0.0843PAD - 0.0623ITD - 0.1107 CCP

The results presented in Table 4.9 shows that receivable accounts in days, payable accounts in days, and inventory turnover in days, explain 65.29% of the variations in the financial performance (return on assets) of the tea firms in Kenya.

To establish the relationship between receivable accounts in days and financial performance of tea firms in Kenya, this research study sought to carry out panel regression analysis. The study illustrated that the receivable accounts in days is negatively and significantly related to return on assets ($\beta = -0.1299$, $p = 0.0160$). This was supported by a calculated t-statistic of 2.4000 that is larger than the critical t-statistic of 1.96. This implied a decrease in the receivable accounts in days by one unit would lead to a rise in the return on assets by 0.1299 units, while other factors are held constant. The results concur with the findings of Muscettola (2020), who established that the average receivables period had a significantly negative relationship with financial performance. Besides, Ksenija (2019) revealed that there is a negative relationship between receivable accounts and return on asset.

The study sought to carry out panel regression analysis to establish the relationship between payable accounts in days and financial performance of tea firms in Kenya. The study found that the payable accounts in days is negatively and significantly related to return on assets ($\beta = -0.0843$, $p = 0.0070$). This was supported by a calculated t-statistic of 2.6800 that is larger than the critical t-statistic of 1.96. This implied an increase in the accounts payable period by one unit would lead to a decrease in the return on assets by 0.0843 units, while other factors are held unchanged. The results are in agreement with the findings of Agyemang and Asiedu (2019), who established there is a negative relationship between accounts payable days and financial performance. In addition, more research by (Ray, 2018; Mekonnen, 2017; Deloof, 2019; Reheman & Nasr, 2017; Vural, Sökmen and Çetenak, 2018; Saghir, Hashmi and Hussain, 2017; Reheman *et al.*, 2019) suggested a negative relationship between PAD and the firm financial performance.

The study sought to carry out panel regression analysis to establish the relationship between inventory turnover in days and financial performance of tea firms in Kenya. The

study noted that the inventory turnover in days is negatively and significantly related to return on assets (β = -0.0623, p = 0.0180). This was supported by a calculated t-statistic of 2.3600 that is larger than the critical t-statistic of 1.96. This signified a decrease in an inventory turnover in days by one unit would lead to a rise in the return on assets by 0.0623units, while other factors are held constant. The results agree with the findings of Eneje *et al.*, (2018), who found that the inventory turnover in days is negatively related to financial performance. Moreover, Gill, Biger and Mathur (2018) and Mathuva (2019) revealed a negative relationship between inventory turnover and financial performance.

4.7.2 Panel Regression Analysis with Moderating Effect

The study sought to examine the moderating effect of ownership structure on the relationship between receivable accounts in days, account payment period, inventory turnover in days and financial performance of tea firms in Kenya.

Table 4.14: Panel Regression Analysis with Moderation Effect

Returns on Assets	**Coef.**	**Robust Std. Err.**	**z**	**P>z**
Receivable Accounts in Days	-0.2034	0.0273	2.5000	0.0070
Payable Accounts in Days	-0.1957	0.0831	2.4900	0.0030
Inventory Turnover in Days	-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
RAD*Ownership Structure	-0.1994	0.0588	3.3900	0.0010
PAD*Ownership Structure	-0.1494	0.0363	4.1100	0.0000
ITD*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)

The results in the Table 4.10 show the interaction variables between the moderating variable and the independent variables when they are included in the model. First, the study sought to examine the moderating effect of ownership structure on the relationship

between receivable accounts in days and financial performance of tea firms in Kenya. The results also indicate the interaction between receivable accounts in days and ownership structure is negatively and significantly related to return on assets (β = -0.1994, p = 0.0010). This was supported by a calculated t-statistic of 3.3900 that is larger than the critical t-statistic of 1.96.

Similarly, the study sought to examine the moderating effect of ownership structure on the relationship between payable accounts in days and financial performance of tea firms in Kenya. The interaction between payable accounts in days and ownership structure is negatively and significantly related to return on assets (β = -0.1494, p = 0.0000). This was supported by a calculated t-statistic of 4.1100 that is larger than the critical t-statistic of 1.96.

In addition, the study sought to examine the moderating effect of ownership structure on the relationship between inventory turnover in days and financial performance of tea firms in Kenya. The interaction between inventory turnover in days and ownership structure is negatively and significantly related to return on assets (β = -0.0838, p=0.0070). This was supported by a calculated t-statistic of 2.7000 that is larger than the critical t-statistic of 1.96.

When the interaction variables between the moderating variable and the independent variables are included in the model, the resulting equation becomes (model 2):

ROA_{it} = 0.0714 - 0.2034 (RAD) - 0.1957 (PAD) - 0.2192 (ITD) - 0.1994 (RAD * M)

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)

Results from Table 4.11 shows that R^2 for model 1 stands for the percentage of variance that exist in the dependent variable and that it is explained by the model 1 which is similar or equivalent to the multiple regression model. It revealed that the model without moderation explains 65.69% of the variation in the independent variable. The R^2 for model 2 which stands for the percentage of variance in the dependent variable that is explained by the model in relation to the degree of variance to explain. The R^2 for model 2 is 0.7808 which means that the model including the moderating variable explains 78.08% of the variation in the dependent variable. This is in excess or higher than the R^2 for model 1. This significant increase in percentage change in statistics revealed to us that incorporating the interaction term in model 2 improved significantly the model fit. The F change has a p-value of 0.003 which is less than 0.05, which means that there has been a significant improvement in the model fit by incorporating the interaction of the independent variables with the moderating variable. This therefore implies that, more variance in the dependent variable has been explained by model 2 which has the interaction terms than model 1 without incorporating moderating variable.

In conclusion, the coefficients of RAD, PAD, ITD, , RAD * M, PAD * M, ITD * M in Model 2 are all significant as they have T statistics with p-values of 0.0070, 0.0030, 0.0100, 0.0010, 0.0000, 0.0070 and 0.0050 which are all less than 0.05. Since the coefficients of M is all significant joint interaction with RAD, PAD and ITD, this implies that the variable ownership structure has moderating effect on the joint association between independent variables, that is; receivable accounts in days, Payable accounts in days, inventory turnover in days, firm size, sales growth and the dependent variable, the financial performance of tea firms in Kenya.

4.6 Hypotheses Testing

The study tested the following hypotheses.

The first hypothesis to be tested was;

H_{01}: There is no statistically significant effect of receivable accounts in days on financial performance of tea firms in Kenya.

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

The second hypothesis to be tested was;

H_{02}: There is no statistically significant effect of payable accounts in days on financial performance of tea firms in Kenya.

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

The third hypothesis to be tested was;

H_{03}: There is no statistically significant effect of inventory turnover in days on financial performance of tea firms in Kenya.

The hypothesis was tested by using panel regression and determined using the p-value. The acceptance/rejection criterion was that if the p-value is less than 0.05, we reject the null hypothesis (Ho), but if it is more than 0.05, the Ho is not rejected. Based on the results presented in Table 4.9 the p-value was 0.0180. The null hypothesis is rejected. Thus, there

is a statistically significant effect of inventory turnover in days on financial performance of tea firms in Kenya.

The fourth hypothesis to be tested was;

H_{04}: 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 receivable accounts in days, payable accounts in days, inventory turnover in days and financial performance of tea firms in Kenya.

The fifth hypothesis to be tested was;

H_{05}: There is no statistically significant moderating effect of ownership structure 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 using panel regression and determined using the p-value and R-squared (R_2). The acceptance/rejection criterion was that if the p-value is less than 0.05, we reject the null hypothesis (Ho), but if it is more than 0.05, the Ho is not rejected. Based on the results presented in Table 4.10, the p values after interaction of all variables

(receivable accounts in days, payable accounts in days, inventory turnover in days, firm size, sales growth) remained less than 0.05. Moreover, the coefficient of determination (R_2) increased from was 65.69% to 78.08% after the ownership structure interacted with receivable accounts in days, payable accounts in days, inventory turnover in days, firm size, sales growth. The null hypothesis was thus rejected and therefore, there is a statistically significant moderating effect of ownership structure on the relationship between receivable accounts in days, payable accounts in days, inventory turnover in days, firm size, sales growth and financial performance of tea firms in Kenya.

4.8 Discussion of the Findings

4.8.1 Receivable Accounts in Days

Based on the descriptive statistics, the average receivable accounts in days of the firms between 2014 and 2019 was 182.4715 days. The correlation results showed that the receivable accounts in days is negatively associated with return on asset (r = -0.0617). The study illustrated that the receivable accounts in days is negatively and significantly related to return on assets (β = -0.1299, p = 0.0160). This was supported by a calculated t-statistic of 2.4000 that is larger than the critical t-statistic of 1.96. The results concur with the findings of Muscettola (2020), who established that the average receivables period had a significantly negative relationship with financial performance. Besides, Ksenija (2019) revealed a negative relationship between receivable accountsperiod and return on asset.

4.8.2 Payable Accounts in Days

The descriptive statistics illustrated that the average payable accounts in days between 2014 and 2019 was 79.9924 days. The correlation results showed that the payable accounts in days is negatively correlated with return on assets (r = -0.0753). The study found that the payable accounts in days is negatively and significantly related to return on assets (β = -0.0843, p = 0.0070). This was supported by a calculated t-statistic of 2.6800 that is larger than the critical t-statistic of 1.96. The results are in agreement with the

findings of Agyemang and Asiedu (2019), who established there is a negative relationship between accounts payable days and financial performance. In addition, more research by (Ray, 2018; Mekonnen, 2017; Deloof, 2019; Reheman & Nasr, 2017; Vural, Sökmen and Çetenak, 2018; Saghir, Hashmi and Hussain, 2017; Reheman *et al.*, 2019) suggested a negative relationship between PAD and the firm financial performance.

4.8.3 Inventory Turnover in Days

The descriptive statistics showed that the average inventory turnover in daysof the firms between 2014 and 2019 was 78.1386 days. The correlation results illustrated that the inventory turnover in days is positively associated with return on assets (r = -0.0826). The study noted that the inventory turnover in days is negatively and significantly related to return on assets (β = -0.0623, p = 0.0180). This was supported by a calculated t-statistic of 2.3600 that is larger than the critical t-statistic of 1.96. The results agree with the findings of Eneje *et al.*, (2018), who found that the inventory turnover in days is negatively related to financial performance. Moreover, Gill, Biger and Mathur (2018) and Mathuva (2019) revealed a negative relationship between inventory turnover and financial performance.

4.8.4 Moderating Effect of Ownership Structure

The study showed that the coefficient of determination (R^2) before moderation was 65.69%, but after moderation, the R^2 increased significantly to 78.08%. The results implied that receivable accounts in days, payable accounts in days, inventory turnover in days, firm size, and sales growth works better within the multinational tea firm compared to KTDA managed tea firms. The results concur with the findings of Claessens *et al.*, (2018), who reported that domestic banks' performance is superior compared to their foreign counterparts in developed countries. Micco *et al.*, (2019) also support the above argument in that in developing countries, the performances of foreign banks are better compared with the other types of ownership in developing countries.

Table 4.16: Summary of Hypotheses Tests (ROA as Dependent Variable)

Causal Relationship	Reject H_0/fail to reject H_0
1. There is no statistically significant effect of receivable accounts in days on financial performance of tea firms in Kenya.	Reject H_0
2. There is no statistically significant effect of payable accounts in days on financial performance of tea firms in Kenya.	Reject H_0
3. There is no statistically significant effect of inventory turnover in days on financial performance of tea firms in Kenya.	Reject H_0
4. 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.	Fail to reject H_0
5. There is no statistically significant moderating effect of ownership structure on the relationship between receivable accounts in days, payable accounts in days, inventory turnover in days and financial performance of tea firms in Kenya.	Reject H_0

Source: Study Data (2022)

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the findings, conclusions, recommendations and suggestions for further studies

5.2 Summary of Findings

The summary of the findings includes those of receivable accounts in days, payable accounts in days, inventory turnover in days, firm size, sales growth and ownership structure.

5.2.1 Receivable Accounts in Days

The first objective of the study was to determine the effect of the receivable accounts in days on the financial performance of tea firms in Kenya. Based on the descriptive statistics, the average receivable accounts in days of the firms between 2014 and 2019 was 182.4715 days. The correlation results showed that the receivable accounts in days is negatively associated with return on asset ($r = -0.0617$). The regression results found that the receivable accounts in days is negatively and significantly related to return on assets ($\beta = -0.1299$, $p = 0.0160$). This implied a decrease in the receivable accounts in days by one unit would lead to a rise in the financial performance (return on assets) by 0.1299 units, while other factors are held constant.

5.2.2 Payable Accounts in Days

The second objective of the study was to establish the effect of the payable accounts in days on the financial performance of tea firms in Kenya. The descriptive statistics illustrated that the average payable accounts in days between 2014 and 2019 was 79.9924 days. The correlation results showed that the payable accounts in days is negatively

correlated with return on assets (r = -0.0753). The regression results indicated that the payable accounts in days is negatively and significantly related to return on assets (β = -0.0843, p = 0.0070). This indicated a decrease in the accounts payable period by one unit would lead to a increase in the financial performance (return on assets) by 0.0843 units, while other factors are held unchanged.

5.2.3 Inventory Turnover in Days

The third objective of the study was to examine the effect of the inventory turnover in days on the financial performance of tea firms in Kenya. From the descriptive statistics, it was found that average inventory turnover in days of the firms between 2014 and 2019 was 78.1386 days. The correlation results illustrated that the inventory turnover in days is positively associated with return on assets (r = -0.0826). The study noted that the inventory turnover in days is negatively and significantly related to return on assets (β = -0.0623, p = 0.0180). This signified a decrease in an inventory turnover in days by one unit would lead to a rise in the financial performance (return on assets) by 0.0623units, while other factors are held constant.

5.2.4 Operating Cash Flow

The fourth objective of this research study was to investigate whether operating cash flows mediate the relationship between receivable accounts in days, payable accounts in days and inventory turnover in days 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.

5.2.5 Ownership Structure

The fifth objective of the study was to investigate the moderating effect of ownership structure on the relationship between receivable accounts in days, payable accounts in days, inventory turnover in days, firm size, sales growth and financial performance of tea firms in Kenya. The study showed that the coefficient of determination (R^2) before moderation was 65.69%, but after moderation, the R^2 increased significantly to 78.08%. Thus, ownership structure moderates the relationship between receivable accounts in days, payable accounts in days, inventory turnover in days and financial performance of tea firms in Kenya.

5.3 Conclusions

The study concludes that the receivable accounts in days is negatively and significantly related to financial performance (return on assets). The study showed that a unit decrease in the receivable accounts in days by one unit would lead to a rise in the return on assets by 0.1299 units. The receivable accounts in days is the time taken to collect cash from customers, therefore, the shorter the receivable accounts in days and the higher the financial performance. Account receivables are part of the assets of the company and they are considered to be fundamental in improving the financial performance of the company. Companies use assets to generate revenue and account receivables are part of the assets of the company. Therefore, having a shorter receivable accounts in days implies that more money is expected to be generated within the shortest time possible by the companies after debtors honor their obligations.

The study concludes that the payable accounts in days is negatively and significantly related to financial performance (return on assets). The study indicated that a unit increase in the accounts payable period would lead to a decrease in the return on assets by 0.0843 units. The account's payment period is the time taken to pay the firm's suppliers. A firm with a long account payment period frustrates the supplier from supplying any more goods or services to the firms. In situations where the payment to the suppliers has been withheld

for a long time, suppliers become frustrated after numerous calls or visits. Besides, a business that does not pay invoices on time will eventually find it difficult to report its financial standings accurately. The study concludes the low the accounts payable (creditors), the low will be the accounts payable period and thus high performance.

The study concludes that the inventory turnover in days is negatively and significantly related to financial performance (return on assets). The study indicated a unit decrease in the inventory turnover in days would lead to a rise in the return on assets by 0.0623 units. Reducing the inventory turnover in days implies that more raw materials are converted to finished goods within a short time, hence increase the availability of stock for sale and make the companies gain their good credit customers, thus boosting financial performance.

The study concludes that ownership structure moderates the relationship between receivable accounts in days, payable accounts in days, inventory turnover in days, firm size, sales growth and financial performance of tea firms in Kenya. The coefficient of determination (R^2) before moderation was 65.69%, but after moderation, the R^2 increased significantly to 78.08%. The ownership structure includes whether the company is Multinational or is managed by KTDA.

5.4 Recommendations

The study recommends the tea firms should significantly reduce the account receivables collection period by using incentives to encourage the debtors to pay on time. This will automatically increase the account receivables collection because more debtors are expected to honour their obligations on time to the business. Account receivables are part and parcel of the company's assets and are considered crucial in improving financial performance. The firms should not fear giving their products or services in credit since they will be paid promptly on time, which will boost financial performance. The shorter the receivable accounts in days implies that debtors are motivated to meet their obligations

on time; hence more money is expected to be generated by the companies after debtors honor their debts.

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

The firms need to decrease the inventory turnover in days. The study's findings found that the inventory turnover in days is negatively and significantly related to financial performance (return on assets). Reducing the inventory turnover in days shows high efficiency of the part of the company, hence increase the availability of finished goods for sale and therefore make the companies gain their good credit customers, thus increasing financial performance.

It is recommended that Kenya Tea Development Agency Holdings (KTDA) need to be more innovative and look at the strategies utilized by the multinational firms to enhance their performance. The organizational structure moderates the relationship between receivable accounts in days, payable accounts in days, inventory turnover in days, firm size, sales growth and financial performance of tea firms in Kenya. Those multinational firms were more productive than KTDA firms because the coding was that 1 denotes a multinational firm; 0 otherwise.

On the policy recommendation, this research study recommends that Kenyan government and the concerned authorities managing the tea sub-sector should enact policies and regulations in order for the country to optimize its earnings by overcoming the bottlenecks that have dogged the tea industry for decades. These policy recommendations will help close loopholes that have over time expose the Kenyan tea industry to exploitation by

cartels, to the costly loss to tea farmers. This research study proposes the following policy recommendations:

- **Sale of tea through electronic auction:** Sale of tea to the export market should be done through an electronic auction process and all tea buyers shall pay in full for all teas they win at the auction before they take custody. This will curb escalating bad debts experienced by the tea sector, hence boosting accounts receivables.
- **Stabilization fund:** Delayed payments have caused tea farmers losing billions of shillings, therefore, this study proposes a policy enactment that seeks to create stabilization fund to cushion tea farmers from price volatility. This will stabilize tea prices, hence enhancing smooth cash flows within the tea industry and therefore accounts payables/suppliers shall be paid on time without undue delay.
- **Value addition:** Kenyan government is advised to support tea sector to find more ways to improve the value addition of Kenyan tea, overhaul marketing structures, open up new export markets and boost local consumption of Kenyan tea. This will improve the process of inventory conversion, hence boosting the quality of tea produced.
- **Tea prices:** Policy should be enacted to curb collusion between brokers and directors, which lead to market monopolization and thus forcing famers' tea to fetch lower prices at the action. This will boost cash flows, hence improved financing and enhanced investments to the tea firms.
- **Appointment of KTDA directors:** Policy should be in place to ensure that appointment of directors must meet certain threshold, which includes having requisite qualifications, training and experiences for them to understand market dynamics and variables that influence and govern the tea sector. Further, tea farmers must have a stake in directors' appointments. This will make KTDA more productive and competitive as compared to the multinational tea firms.

5.5 Suggestions for Further Studies

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

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APPENDICES

Appendix I: Document Review Guide; Data Entry Sheet

Name of the

Company……

	Financial Item	**2014 Ksh.**	**2015 Ksh.**	**2016 Ksh.**	**2017 Ksh.**	**2018 Ksh.**	**2019 Ksh.**
1	Annual Sales						
2	Cost of Sales						
3	Gross Profit						
4	Profit before Tax & Interest.						
5	Current Assets						
6	Current Liabilities						
7	Non-Current Assets						
8	Total Assets						
9	Accounts Payable						
10	Accounts Receivable						
11	Inventories						
12	Cash and Bank Balances						
13	Return on Assets = Profit BIT/Total Assets						
14	Receivable Accounts in Days						
15	Payables Accounts in Days						
16	Inventory Turnover in Days						
17	Current Assets to Total Assets Ratio						
18	Current Liabilities to Total Assets Ratio						
19	Cash Conversion Period						

Source: Researcher (2021)

Appendix II: Document Review Guide; Data Abstraction Tool

Variable	**Measurement**	**Data Source:** Financial Statements 2014-2019
Receivable Accounts in Days	Accounts Receivable/Net Sales*365	Statement of financial position
Payable Accounts in Days	Accounts Payable/Cost of Sales*365	Statement of financial position
Inventory Turnover in Days	Inventory/Cost of Sales*365	Statement of financial position

Source: Researcher (2022)

Appendix III: Work Plan

Activity	Responsibility	Period
Problem identification, Project development and Proposal write-up	Researcher and the supervisors	Jan-March 2020
Selection of the study location & Preparation of data collection Tools	Researcher and the supervisors	April-Dec 2020
Data collection	Researcher (student)	March-Aug 2020
Seminar 1 Data Presentation	Researcher (student)	11.3.2021
Data analysis and interpretation	Researcher and the supervisors	April-May 2021
First Thesis draft to supervisors	Researcher (student)	June 2021
Final thesis draft	Researcher (student)	August 2021
Thesis write-up and forwarding For publication	Researcher and the supervisors	September 2021

Source: Study Data (2022)

Appendix IV: Budget

Items	**Amount in Ksh**
Proposal writing	40,000
Data collection and survey	60,000
Data analysis	50,000
Thesis writing	15,000
Printing paper	10,000
Toner	15,000
Travelling cost	10,000
Employment of field assistant	30,000
Grand Total	**Ksh. 230, 000**

Source: Researcher (2021)

Appendix V: Production Across Major Tea Producing Countries (2019 Vis-à-vis 2018)

Country	Month	2019 (Million Kgs)	2018 (Million Kgs)	+/-	+/-%
Kenya	**November**	**377.9**	**399.0**	**-21**	**-5.6%**
Sri Lanka	November	302.1	304.1	-2	-0.7%
North India	November	714.8	682.7	32.1	4.5%
South India	November	222.7	224.9	-2.2	-1.0%
Total India	November	937.5	907.6	29.9	3.2%
Bangladesh	November	55.36	54.52	0.84	1.5%
Malawi	November	42.6	45.9	-3.3	-7.7%
Indonesia	November	56.3	67	-11	-19.0%

Appendix VI: World Tea Production and Income Trend (2017-2020)

Tea Production and Income (2017-2020)

Country	**2020**		**2019**		**2018**		**2017**	
	Vol.	% Prod	Vol.	% Prod	Vol.	% Prod	Vol.	% Prod
China	1,028	29.0	934	27.2	835	25.2	768	24.0
India	956	27.1	927	27.0	892	26.9	878	27.4
Sri Lanka	311	8.8	317	9.2	308	9.3	303	9.5
Kenya	**310**	**8.8**	**328**	**9.5**	**324**	**9.8**	**293**	**9.2**
Indonesia	139	3.9	165	4.8	164	4.9	169	5.3
Others	742	22.4	764	22.2	791	23.9	790	24.7
Total	**3,487**	**100.0**	**3,435**	**100.0**	**3,314**	**100.0**	**3,201**	**100.0**

Source: International Tea Committee, (2019)

Appendix VII: Kenya's Total Exports of Tea and Total Revenue at Current Prices

Year	Total Export (Ksh.)	Total Revenue (Ksh. Millions)
2019	270,151,810	38,564.5
2017	272,458,768	33,414.7
2018	269,961,799	34,631.1
2019	333,802,071	41,212.2
2020	349,738,362	38,829.9
2019	313,720,495	37,162.0

Source: TBK, (2019) & KNBS, (2019)

Appendix VIII: Kenya's Tea Export Statistics for the First Quarter in Million KGs

Months	**Years**				
	2014	**2015**	**2016**	**2017**	**2018**
January	22.7	23.19	27.26	21.04	18.4
February	21.82	23.68	25.34	25.12	21.4
March	27.18	29.02	27.03	24.05	30.12
Total	**70.97**	**75.89**	**79.63**	**70.21**	**69.93**

Source: TBK and KNBS, (2020)

Appendix IX: Sectoral Performance in Kenya

Key Crops Production

Commodity	2017	2018	% change
Tea ('000' Tonnes)	**377.9**	**369.4**	**-2.2**
Coffee ('000' Tonnes)	36.3	49.0	35.0
Horticultural ('000' Tonnes)	216.2	205.7	-4.9
Maize (Million bags)	34.4	40.0	16.3
Wheat ('000' Tonnes)	105.9	162.7	53.6
Rice ('000' Tonnes)	80.2	83.6	4.2

Source: Ministry of Devolution and Planning & KNBS, (2019)

Appendix X: Production by Sub-sector and Region in Million Kgs (2017 and 2019)

		Production (Kilograms)			
Region	**Jan-Dec 2017**	**Jan-Dec 2019**		**Var. +/-**	**Var. (%)**
Plantation	West of Rift	143.4	155.5	- 12.1	-7.77%
East of Rift	16.0	18.6	- 2.6		-13.9%
Total	**159.4**	**174.1**	**- 14.7**		**-8.4%**
Smallholder	West of Rift	89.2	90.7	-1.5	-1.64%
East of Rift	129.3	134.2	- 4.9		-3.68%
Total	218.5	224.9	- 6.4		-2.8%
Plantation &	West of Rift 232.6		246.2	- 13.6	-5.5%
Smallholder	East of Rift	145.3	152.8	- 7.5	-4.9%
Total	**377.9**	**399.0**		**- 21.1**	**-5.3%**

Source: TBK, 2018 & KTDA, 2018

Appendix XI: Target Population

Licensed Tea Factories in Kenya

	TEA FACTORY	TEA COMPANY
1.	Mara Mara Tea Factory Ltd	Finlays (K) Ltd
2.	Chomogonday Tea Factory Ltd	Finlays (K) Ltd
3.	Changana Tea Factory Ltd	Finlays (K) Ltd
4.	Saosa Tea Factory Ltd	Finlays (K) Ltd
5.	Kymulot Tea Factory Ltd	Finlays (K) Ltd
6.	Kitumbe Tea Factory Ltd	Finlays (K) Ltd
7.	Kimugu Tea Factory Ltd	Unilever (K) Ltd
8.	Kimari Tea Factory Ltd	Unilever (K) Ltd
9.	Chagaik Tea Factory Ltd	Unilever (K) Ltd
10.	Kericho Tea Factory Ltd	Unilever (K) Ltd
11.	Jamji Tea Factory Ltd	Unilever (K) Ltd
12.	Mabroukie Tea Factory Ltd	Unilever (K) Ltd
13.	Koruma Tea Factory Ltd	Unilever (K) Ltd
14.	Tagabi Tea Factory Ltd	Unilever (K) Ltd
15.	Changoi Tea Factory Ltd	George Williamson Tea Co. Ltd
16.	Kaimosi Tea Factory Ltd	George Williamson Tea Co. Ltd
17.	Kapchorua Tea Factory Ltd	George Williamson Tea Co. Ltd
18.	Tinderet Tea Factory Ltd	George Williamson Tea Co. Ltd
19.	Chemomi Tea Factory Ltd	Eastern Produce Kenya Ltd.
20.	Kapsumbeiwa Tea Factory Ltd	Eastern Produce Kenya Ltd
21.	Savani Tea Factory Ltd	Eastern Produce Kenya Ltd
22.	Kipkoimet Tea Factory Ltd	Eastern Produce Kenya Ltd
23.	Kepchomo Tea Factory Ltd	Eastern Produce Kenya Ltd
24.	Gacharage tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
25.	Eberege Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd

26. Chelal Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
27. Chebut Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
28. Boito tea factory Co Ltd	Kenya Tea Development Agency Ltd
29. Theta Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
30. Tegat Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
31. Tebesonik Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
32. Sombogo Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
33. Sanganyi Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
34. Rukuriri Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
35. Rorok Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
36. Rianyamwamu Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
37. Ragati Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
38. Olunguruone Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
39. Ogembo Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
40. Nyansiongo Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
41. Nyankoba Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
42. Nyamache Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
43. Njunu Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
44. Ngere Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
45. Nduti tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
46. Ndima Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
47. Mununga tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
48. Mungania Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
49. Mudete Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
50. Motigo Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
51. Momul Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
52. Mogogosiek Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
53. Michimikuru Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
54. Matunwa Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
55. Mataara Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd

56. Makomboki Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
57. Litein Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
58. Kuri/ Ndarugu Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
59. Konoin tea factory Co Ltd	Kenya Tea Development Agency Ltd
60. Kobel Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
61. Kiru Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
62. Kionyo Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
63. Kinoro Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
64. Kimunye Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
65. Kiegoi Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
66. Kiamokama Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
67. Kenyekea Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
68. Kebirigo Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
69. Kathangariri Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
70. Kaptumo Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
71. Kapset Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
72. Kapsara Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
73. Kapkoros Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
74. Kapkatet Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
75. Kanyenyaini Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
76. Kangaita Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
77. Kambaa Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
78. Kagwe Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
79. Itumbe tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
80. Iriaini Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
81. Imenti Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
82. Ikumbi Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
83. Igembe Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
84. Gitugi Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
85. Githongo Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd

86. Githambo Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
87. Gianchore Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
88. Gatunguru Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
89. Gathuthi Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
90. Gachege Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
91. Weru Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
92. Toror Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
93. Tombe Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
94. Tirgaga Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd
95. Thumaita Tea Factory Co. Ltd	Kenya Tea Development Agency Ltd

Source: TBK & KTDA Website (2022)