EFFECT OF SHORT-TERM FINANCING DECISIONS ON FIRM VALUE OF NON-FINANCIAL FIRMS LISTED ON THE NAIROBI SECURITIES EXCHANGE, KENYA

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DECLARATION

I declare that this dissertation is my original work and has not been previously published or submitted elsewhere for award of a degree. I also declare that this dissertation contains n material written of published by other people except where due reference is made and author duly acknowledged.

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ABSTRACT

Firm value and its creation are some of the main goals of corporate entities. Firm value, unlike profitability firm value is more holistic and views at sustainable institutions. A host of non-non-financial listed firms have in the recent times faced financial turbulence and this has impacted on their value. The firms include Mumias Sugar, ARM Mining, Nairobi Business Ventures, among others. Resulting to decline in performance of this firms is drop in their share prices and this have affected their value. In this in mind, this study sought to determine the effect of short-term financing decisions on firm value of non-financial firms listed on the Nairobi Securities Exchange, Kenya. Specifically, the study sought to: examine the effects of cash management on firm value of non-financial firms listed on the Nairobi Securities Exchange, Kenya; determine the effects of receivables management on firm value of non-financial firms listed on the Nairobi Securities Exchange, Kenya; examine the effects of payables management on firm value of non-financial firms listed on the Nairobi Securities Exchange, Kenya and establish the effects of inventory management on firm value of non-financial firms listed on the Nairobi Securities Exchange, Kenya. Based on the specific objectives, four corresponding hypotheses were formulated and tested. Four theories, the pecking order theory, the trade-off theory, the financing theory and liquidity theory anchored the study. The study adopted quantitative research design and employedpanel data regression methodology. The study targeted all the non-financial firms listed and trading at the Nairobi securities exchange over for the period 2010 to 2019. The study adopted census and targeted all 44 non-financial firms that were listed as of December 2020. However, due to data concerns, only 28 firms were studied. The study used secondary panel data obtained from published financial statements of each firm. Hausman specification tests determined that Random effects generalized least square method was appropriate. Prior to data analysis, diagnostic tests were carried out to ensure non violation of the classical linear assumptions. Amongst the diagnostic tests undertaken were the multicollinearity tests; normality tests; homoscedasticity test and autocorrelation tests. Descriptive statics inform of mean, standard deviation, minimum and maximum values was presented. Results of the study indicated that inventory management had a positive and statistically significant association with firm value both individually and jointly with other variables. Payable management, independently and also with other variables was also found to have a positive and statistically significant effect on firm value. On its own, receivables management was found to have a positive and statistically significant association with firm value. Jointly with other variables, receivables management was found to have an insignificant effect on firm value. Cash management, according to the findings of the study, had a positive but statistically not significant effect on firm value both individually and jointly with other variables. The study makes recommendations to policy makers to legislate on firm value reporting. Further, it recommends to management of the listed firms to ensure a clear understanding on how different short term financing decisions impacts on firm value.

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DEDICATION

Special dedication to my friend Charles for the provision of support throughout my research. I dedicate this thesis to my family for encouragement and motivation with the progress and to my Church members for their prayer support.

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ACRONYMS AND ABBREVIATIONS

CMA:	Capital Markets Authority
FEM:	Fixed Effect Model
NSE:	Nairobi Securities Exchange
OLS:	Ordinary Least Squares
PLC:	Public Limited Company
REM:	Random Effect Model
VIF:	Variance Inflation Factor

OPERATIONAL DEFINITION OF TERMS

Cash Management: A proxy for short term financing measured as cash conversion cycle and is the ratio of cash and cash equivalent to total assets (Soukhakian& Khodakarami, 2019).

Firm Value: The worth of an entity from the point of view of its shareholders, both current and potential and represents the amount that would change hands if the firm was to be acquired (Laghari &Chengang, 2019).

Inventory Management: The value of closing inventories expressed as a ratio of total assets (Laghari &Chengang, 2019).

Payables Management: The spontaneous financing affiliation amongst firms as a result of credit period extend to a firm by its suppliers (Bussoli & Conte, 2020).

Receivables Management: Financial instrument offered by firms to its clients to finance their sales and arises out of the time lag between sales on credit and the settlement of such receivables (Altaf & Shah, 2018).

Short-Term Financing Decisions: The simultaneous financing and management of working capital items including management of inventory, payables, receivables and cash to ensure

survival of the firm not only in short run but also in the long run (Amponsah-Kwatiah & Asiamah, 2020).

CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

The aftermath of the global financial crisis, now exacerbated by the Corona virus disease pandemic, and the liquidity crises that followed, invigorated the need for firms to pay more attention to short term financing decisions (Akbar, Jiang, & Akbar, 2020). Thus, besides capital budgeting and capital structure decisions, short term financing is now a critical facet in corporate finance literature.Short term financing decisions also termed as working capital management is the controlling and managing the components of current assets and current liabilities (Seth, Chadha, & Sharma, 2020). This requires proper management of firms' short-term financial items, and more so those whose maturity is within one year. Though synonymous, some literature denotes short-term financial decisions to refer to management of working capital items with working capital referring to individual firms' liquidity (Amponsah-Kwatiah & Asiamah, 2020).

Short term financing decisions are crucial because they affect not only firms' profitability and risk but also firms' value. In addition, the investment in working capital items represents an important share of items in a firm's statement of financial position (Altaf & Shah, 2018).Short-term financing constitutes the working capital of the company and is directlyconnected to trade-off between liquidity and performance (Akomeah & Frimpong, 2019). It is therefore perfectly reasonable for firms to strive for optimal level of working capital which in turn will maximize firm value. Short-term financing decisions arguments the free cash flow of the firm,which in turn enhances the firms' strengthening the prospects and value to shareholders(Cumbie & Donnellan, 2017). Thus, working capital management

reflects how a firm operateson a daily basis and relates to the investment of the company in short-term assets (Kilonzo, Memba, & Njeru, 2016).

Firm value of quoted companies in any state is a critical cog to the performance of the securities market as well as the entire economy (Arachchi, Perera, & Vijayakumaran, 2017). However, a significant number of the non-financial firms listed on Nairobi Securities Exchange have been experiencing declining value which deter investors from investing in such firms (Shikumo, Oluoch, & Wepukhulu, 2020). The lenders are also not willing to lend to such firms. As such, the firms struggle to raise funds for their operations.This makes short term financing decisions an anchor to the investment and financing decisions of the firms. These decisions play a vital role in the risk assessment, profitability and value of the firms(Soukhakian & Khodakarami, 2019). There has been a notable trend in the recent past where by the country has witnessed corporate failures arise out of inefficiencies in management of short-term financing items. This has made it imperative for firms to manage their working capital prudently if they have to survive the onslaught (Baker & Kumar, 2017). This is buttressed by the fact that short-term financing is considered a key component when it comes to firms' value generation (Kabuye, Kato, Akugizibwe, & Bugambiro, 2019). It is for this reason, among others, that short-term financing decisions must be properly managed to avert adverse economic situations, firm failure, securities price fluctuations and loss in firm value (Fiador, 2016).

1.1.1 Short-Term Financing Decisions

Decisions on short-term financing majorly revolve around the analysis and management of working capital items consisting of short-term liabilities and short-term assets (Sianipar & Prijadi, 2018). Alternatively referred as working capital management, short-term financing decisions involves multiple crucial decisions, among them inventory management,

management of cash, receivables management and payables management (Amponsah-Kwatiah & Asiamah, 2020). Thus, short term financing decisions involves fundamentals of working capital management that a finance manager takes to enable the firm to meet its operational related expenses and to continue to meet short-term maturing obligations as and when they fall due (Sawarni, Narayanasamy, & Ayyalusamy, 2021). According to Aminu and Zainudin (2016), improper management of short-term financing decisions jeopardizes the operational ability of a firm and its value.

Most empirical studies on the relation of short-term financing and firm value have adopted cash management as one of the variables. For instance, Laghari and Chengang (2019) adopted cash managegement and measured it as cash conversion cycle. Soukhakian and Khodakarami (2019) termed the time lag between raw material purchase to time when cash is received as the cash-conversion period.However, other studies used the quotient of the sum of cash and cash equivalent with total assets lagged to a period of one year (Asante-Darko, Bonsu, Famiyeh, Kwarteng, & Goka, 2018). This study adopts cash management as one of the proxies of short term financing decisions and measures it using the measure suggested by Asante-Darko et. al (2018).

Receivables arise out of the time lag between a credit sale and receipt of money in settlement of the sale, sometime going into months (Altaf & Shah, 2018). Account receivables are financing instruments offered by suppliers to their customers. Literature on short time financing decisions suggests that receivables management has an impact on firm value. However, the nature of relationship between receivable management and firm value depends on the type of receivable management strategy are adopted by the firm. Although granting of trade credit, hence receivables, increase firms' sales and often improves on its value, it nonetheless increases financing cost and exposes organisations' to risks of delayed

payment and default which may erode its value (Paul, Guermat, & Devi, 2018). The efficiency of accounts receivables management is essential in finance and industry due to its impact on risk and firm value.Empirical literature exploring the vital role of trade receivables on firm value have used different proxies for receivables. For instance, Osinubi, (2020) used the ratio of accounts receivables to lag of total assets and the ratio of accounts receivables to sales. On their part, (Onchangwa, Memba, & Nasieku, 2018) used the average receiveablec collection period as the indicator for receivables management. Similaly, Altaf and Shah (2018) adopted accounts receivable period, computed as the quaotient of average receivables and sales multiplied by number of days in a year. This study, however adopts the measure employed by Osinubi (2020), ratio of receivables to lag of total assets as it is a better measure of trade receivables as a source of an organisations assets.

Trade account payables refer to the financing relationship between firms arising from extending credit period granted by the supplier to the buyer. Therefore, account payables should only be considered as market transactions but also as an alternative and valuable source of external financing (Bussoli & Conte, 2020). Accordingly, account payables result to a reduction in bank loan supply and investments during periods of monetary tightening (Nam & Uchida, 2019). Further, suppliers may insure their account payables against liquidity shocks to prevent jeopardizing their long-term relationship. This thus implies that accounts payables create value to borrowing companies (Nam & Uchida, 2019). Despite its economic significance, accounts payables involve higher implicit costs as result of lost cash discounts if cash payments were made (Osinubi, 2020).While examining the effects of accounts payable on firm value, Nam and Uchida (2019) adopted accounts payables scaled by one year lag of total asset as a measure of payable management. Similarly, Osinubi (2020) used the ratio of accounts payables to one year lag of total assets, However, Akbar, Jiang and Akbar (2020)

adopted inventory turnover period. Consistent with Nam and Uchida (2019) and (Osinubi, 2020), this study uses the ratio total accounts payables to one year lag of total assets as a measure for payables management. This study chooses these measures rather than payables turnover period, because they are a better measure of trade payables as a source of finance for firms assets. The measure also captures the substitability effects of trade payables, that is whether the firm uses accounts payables as a substitute for external finance.

Inventory management involves determining the best amounts to order and hold at a particular time because of the associated costs (Orobia, Nakibuuka, Bananuka, & Akisimire, 2020). According to Bagh, Nazir, Khan and Razzaq (2016), inventory management relates to activities involved in planning, implementing, monotoring and controling inventory. Existing literature suggests that efficient management of an efficient management of inventory can and actually do have a significant effect on firm value (Bagh, Nazir, Khan, & Razzaq, 2016; Orobia, Nakibuuka, Bananuka, & Akisimire, 2020; Sawarni, Narayanasamy, & Ayyalusamy, 2021). The key goal of inventory is to ensure neither too much nor too little amount of inventory is held and to ensure smooth operations of a business. Thus, inventory management can be used to improve profitability, liquidity position and firm value (Orobia, Nakibuuka, Bananuka, & Akisimire, 2020). In line with existing empirical literature, three inventory management measures exist: absolute measures such as inventory levels; relative measures, such as inventory to assets ratio; and standardized measures that refer to inventory holding period (Bagh, Nazir, Khan, & Razzaq, 2016). As absolute measures are more subjective, this study shall adopt the relative measure of inventory to assets ratio computes as the quotient of inventory to total assets as suggested by Bagh, Nazir, Khan and Razzaq (2016).

1.1.2 Firm Value

The value of the firm, posits Sianipar and Prijadi (2018) is the price paid by prospective buyers of an organisation. Laghari and Chengang (2019) describes firm's value as the view of the shareholders and potential shareholders of the worth of a firm in a process that is linked to securities. Theoretically, it is an amount that one would have to pay in order to take over or buy an entity. Cumbie and Donnellan (2017) conceptualises firm's value as basically the obligations it owns to its owners, the shareholders and third parties. Orobia, Nakibuuka, Bananuka and Akisimire (2020) posit that firm value is an economic concept reflecting the value of a business and defines it as the value of the entity at a particular time. Notwithstanding the multiplicity of firm value definitions, the core corporate goal of any entity is to maximise value.Firm value reporting is slowly becoming a global yard stick for assessing firm performance.Kabuye, Kato, Akugizibwe and Bugambiro, (2019) argue firm value is considered a core goal as it includes incentive for efficiency, long term growth and value creation.

There are several parameters in which firm's value have been determined or measured in extant literature. For instance, Asante-Darko, et. al (2018), Sianipar and Prijadi (2018) and Laghari and Chengang (2019) used Tobin's Q as a measure of firm value. Whereas Soukhakian and Khodakarami (2019) used economic value added to proxy for firm value. Market-to-book value have also been used in some studies. As a measure of firm, value, Tobin's Q is computed as the sum of total market capitalization of ordinary shares, preference share and value of total debt dividend by total assets. Market-to-book value is computed as the ratio the product of the number of ordinary shares and market price per share at year end divided by total equity. Despite market to book value beibg a more direct measure to shareholders objective, it failure to consider debt makes it inferior to Tobin's Q. In

addition, Tobin's Q reflects not only on past performance, but also considers the company's future development expectations. More over, Arachchi, Perera and Vijayakumaran (2017) argue that Tobin's Q is effective in analysing a firms value from a long term market pespective thus reflecting the present value of expected future cashflows based on not only current but future information. Thus, this study adopts Tobins Q as a proxy for firm value.

Firm value of quoted companies is critical to the performance of not only the secirity markets, but also to the countries economic growth (Onchangwa et.al. 2018). Despite the important role of quoted companies' firm value, non-financial firms listed on the Nairobi Securities Exchange (NSE) has been plagued by poor performance in the recent financial periods (Kilonzo et.al 2016). Out of sixty-six companies whose stock are quoted at the NSE, a number have their financial health wanting. Not only has the financial performance of some declined, but others have either been suspended or delisted altogether by the regulator, Capital markets Authority (CMA). Though the tribulations facing the companies are largely to do with insufficient short-term financingthe spotlight has always been on long-term financing decisions such as capital structure (Onchangwa et. al. 2018). Rarely is the short-term financial decisions considered. This should not be the case considering current assets, a major component of short-term financing, constitutes at least forty 40 percent of total assets in an average firm, while the day to day management of short-term financial resources eats up 80 per cent of the managers time.

1.1.3 Short-Term Financing Decisions and Firm Value

The short-term financing decisions of a firm are important as they help determine the sustainable continuity, going concern status, firm performance and firm value (Arachchi, Perera, & Vijayakumaran, 2017). Short-term financing decisions are mainly linked to simultaneous financing the working capital of any firm, a precursor for firm value. According

to Amponsah-Kwatiah and Asiamah (2020), firns can reduce over reliance on long –term debt financing if they managed working capital items effectively. This rotates freeing up cash thath might tied up in idle current assets and current liabilities consequently adding to firm value.

The global financial crises of the past decade and the current Covid-19 pandemic has resulted to liquidity crises and increased consciousness among firms to improve on the management of their working capital items (Shikumo, Oluoch, & Wepukhulu, 2020). As a result, short term financing decisions are critical to firms as they not only influence financial stability of a firm, but also ensure that an entity has ample cash flow to meet both operating expenses and short-term maturing obligations (Altaf & Shah, 2018). The working capital components carry with them both benefits and costs. For instance, maintaining unsustainable levels of current assets either in form of inventories or receivables, which are idle assets occasionally results to a firm defaulting on its maturing short-term obligations when they eventually fall due. This increases the chances of the firm becoming distressed (Kabuye, Kato, Akugizibwe, & Bugambiro, 2019). It is imperative therefore that the business maintains optimum amounts of short-term finances that could be useful in supporting growth opportunities (Altaf & Shah, 2018). Baker and Kumar (2017) provides evidence that a majority of the distressed firms have had incidences where they improperly managed and planned their working capital items.

Besides short-term finance being heralded as key to firm value, it breaths life to the financial health of any business enterprise and confirms that working capital items are manageged efficiently(Khan, Rasheed, Ahmed, & Rizwan, 2016). As a result, short-term finance is a prerequisite to enhanced firm value(Kabuye, Kato, Akugizibwe, & Bugambiro, 2019). Extant literature show that part of working capital management includes safe-guarding

of cash and cash equivalents, inventories as well as trade credit assessment (Kabuye, Kato, Akugizibwe, & Bugambiro, 2019; Fiador, 2016; Orobia, Padachi, & Munene, 2016; Pais &Gama, 2015). Kabuye et al (2019) provides additional evidence that firms that hold optimum amounts of inventories, shorter receivables collection periods as well as propmpt payment of obligations is positively associated with firm value.Lyngstadaas and Berg, (2016) indicates that a reduced cash conversion period also improves firm value. Summarily, short term financing decisionsare essential for a firms' value(Baker & Kumar, 2017; Lyngstadaas & Berg, 2016). This means that efficient and effective working capital management allows a firms to continue as a going concern and is able to hold enough liquid resources to meet maturing debts as well as meet its current and future operational expenses (Altaf & Shah, 2018).

1.1.4 Non-Financial Firms Listed on the Nairobi Securities Exchange

The Nairobi Securities Exchange (NSE) was established in 1954 and is the main securities exchange in Kenya. In addition, the NSE is among the top ten securities markets in Africa. The NSE is a body and is regulated by the Capital Markets Authority. As the principal bourse in Kenya, The NSE offers an automated listing and trading platform for debt and equity securities. Equity securities however constitutes the major business to the NSE. As of August 2021, there were 66 firms that were listed in the NSE across different sectors.

There are 44 non-financial firms listed under the NSE in the following sectors: Agricultural; Automobiles and Accessories; Commercial and Services; Construction and Allied; Energy and Petroleum; Investment; Investment Services; Manufacturing and Allied and Telecommunication and Technology. Listed non-financial firms in the NSE are keen in optimizing expansion opportunities as this would benefit them through long-term growth opportunities. This can be achieved by adopting short-term financial policies that would

support firm growth and eventually firm value. This supplements the long terms financing such as additional shareholders equity and debt. Despite the opportunities, a number of non-financial firms have been delisted or suspended from the NSE as a result of financial distress problems while other have been placed in receivership and therefore the need for this study.

1.2 Statement of the Problem

Firms are incorporated to benefit their stakeholders by providing them with maximum returns and maximum capital appreciation (Soukhakian & Khodakarami, 2019). Firms' value maximization is a function of short-financing decisions made by its management (Kabuye, Kato, Akugizibwe, & Bugambiro, 2019). As a result, the various stakeholders of quoted firms are expectant the firms will improve on their performance heralding to superior firm value. However, in a value driven economy such as Kenya, some firms create value, while others destroy it (Onchangwa et. al. 2018). Whereas shareholders expect firms to gain value, loss of value will lead to drop in market prices', threats of hostile takeover, and perhaps receivership. Such threats lead to unwelcomed negative impact on shareholders' value (Shikumo, Oluoch, & Wepukhulu, 2020).

A significant large number of non-financial companies quoted at the Nairobi Securities Exchange has been experiencing decline in value deterring investors from investing in such firms (Shikumo, Oluoch, & Wepukhulu, 2020). Overall, the Nairobi securities exchange 20- share index dropped from 2,654 points as at December 2019 to 2,834 points as at December 2018. At the same time, market capitalization declined from Kenya Shillings 2,540 billion recorded in 2019 to Kenya Shillings 2,337 billion in 2020 (CMA, 2021), reflecting the decline in value. Further, as of first quarter of 2021, six non-financial firms remained delisted and/or suspended from trading in the Nairobi securities exchange. Among the six were, Deacons East Africa Public Limited Company (PLC), ARM Cement

PLC, Mumias Sugar PLC (CMA, 2021).Inability to meet short-term maturing obligations have been cited as one of the reasons the firms are distressed. This has not only led to loss of firm value but also the investors' confidence in firms listed on the Nairobi Securities Exchange (NSE) in Kenya (Shikumo, Oluoch, & Wepukhulu, 2020).

There are a number of studies supporting the evidence that short term financing decisions have an influence on firm value (Amponsah-Kwatiah & Asiamah, 2020; Soukhakian & Khodakarami, 2019; Onchangwa, Memba, & Nasieku, 2018). However, there exists some conceptual, contextual and methodological research gaps that this study seeks to address. Conceptually, though the relationship between short term financing decisions and firm value have been studies. However, the findings have been inconclusive. First, while some researchers reported that short term financing decisions positively influences firm value (Asante-Darko, Bonsu, Famiyeh, Kwarteng, & Goka, 2018; Laghari & Chengang, 2019; Amponsah-Kwatiah & Asiamah, 2020), others found that short term financing is negatively related to firm value (Onchangwa, Memba, & Nasieku, 2018; Soukhakian & Khodakarami, 2019; Akbar, Jiang, & Akbar, 2020). Yet other studies found no association or statistically insignificant association among the variables (Sianipar & Prijadi, 2018; Akomeah & Frimpong, 2019).Moreover, a number of existing empirical studies have investigated the influence of short-term financing decisions on financial performance(Bagh, Nazir, Khan, & Razzaq, 2016; Altaf & Shah, 2018), ignoring firm value. There is therefore need to establish if short term financing decisions positively influences firm value or otherwise.

Methodologically, some of the studies for instance, (Orobia, Padachi, & Munene, 2016) have adopted cross sectional research design yet the effect of financing decisions can only be apparent after some time lag. This study attempts to fill the gap adopting a longitudinal design to evaluate the effects of short-term financing decisions on firm value

using longitudinal data spread over a ten-year period, 2011 to 2020. Contextually, most studies have been undertaken in developing and developed jurisdictions such as United States (Cumbie & Donnellan, 2017), China (Laghari & Chengang, 2019), Pakistan (Akbar, Jiang, & Akbar, 2020) and India (Sawarni, Narayanasamy, & Ayyalusamy, 2021). These findings may not apply to firms in the Kenyan context. Against this background, an empirical examination into short-term financing decisions is timely and could explain variations in firm value of non-financial corporates listed in the NSE in Kenya.

1.3 Objectives of the Study

This study had goals that it sought to attain. The goals were disaggregated into to: one general objective and four specific objectives.

1.3.1 General Objective

The broad objective of this study was to examine the effect of short-term financing decisions on firm value of non-financial companies listed on the NSE in Kenya.

1.3.2 Specific Objectives

i. To establish the effect of cash management on firm value of non-financial companies listed on the NSE in Kenya
ii. To investigate the effect of receivables management on firm value of non-financial firms listed on the NSE in Kenya
iii. To examine the effect of payables management on firm value of non-financial firms listed on the NSE in Kenya
iv. To establish the effect of inventory management on firm value of non-financial firms listed on the NSE in Kenya

1.4 Research Hypotheses

Based on the specific objectives, four corresponding research hypotheses were formulated and tested at 95 percent level of confidence.

H_{01}: Cash management has no significant influence of firm value of non-financial companies quoted at the NSE in Kenya.

H_{02}: Receivables management has no significant influence on firm value of non-financial companies quoted at the NSE in Kenya.

H_{03}: Payables management has no significant effect on firm value of non-financial companies quoted at the NSE in Kenya.

H_{04}: Inventory management has no significant influence on firm value of non-financial companies quoted at the NSE in Kenya.

1.5 Justification of the Study

Empirical evidence supports the business case for proactive practices by establishing a positive linkage between short-term financing decisions and firm value. However, most studies have focused on firms in a specific sector such as manufacturing sector. Literature on non-financial firms listed ononthe NSE are rare. Due to the contribution these firms make to a country's economic growth, it is important that the relationship between short-term financing decisions and firm value on listed non-financial firms is investigated.

1.6 Significance of the Study

The main aim of this research was to investigate the influence of short-term financing decisions on firm value of listed non-financial companies that are quoted at the NSE in Kenya. The study is expected to make several contributions to theory, managerial practice and policy.

1.6.1 Significance to the Management of Listed Firms

Managerial practice of Kenyan listed non-financial firms will also benefit from the findings of this study. Managers needs to strive to enhance firm value and the findings of this study will identify which short-term financing decisions have a higher influence on firm value. Thus, the findings of this study will no doubt add value to managerial practice by establishing the manner in which short-term financing affect firm value. This will aid managers of the corporations in determining the optimum level of working capital.

1.6.2 Significance to Policy Makers in Government

The findings of the present study will hopefully add to existing policy tools that will guide the process of improving the value of non-financial firms listed ononthe NSE in Kenya. Findings from the study will add to the existing data in offering guidance towards effective linking of short-term financing decisions of individual firms to corporate value. Further, the findings of the studyshall inform policies laid down by the government to provide timely interventions as well as improve business growth in the country.

1.7 Scope of the Study

This study focussed on investigating the influence of short-term financing decisions on the value of non-financial companies listed ononthe Nairobi Securities Exchange. The study covered a ten-year period, 2011-2020, and targeted all the non-financial companies whose shares trade on the NSE in Kenya. The study further confined itself to a period of 10 years ranging from 2010 to 2019. The study did not include banks and insurance companies, on grounds that the financial firms were subject to tight regulatory controls regarding liquidity requirements; which would distort the conclusions of the study. Moreover, according to Khan et al. (2016),financial firms have a tendency to apply off-balance sheet

policy in disclosing their financial assets and liabilities; with the effect that not all the reported assets and liabilities actually belong to the firm.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a comprehensive review of literature. It starts by reviewing the theories underpinning the study. This provides a summary of the theories that provides anchorage to the study. A review of related extant literature follows. This is carried out in line with the hypothesised relationship. In doing so, knowledge gaps are unearthed and summarised. The chapter also presents the conceptual framework depicting the relationship between independent variables and dependent variables. Finally, the study details how the variables are operationalised.

2.2 Theoretical Review

This section presents theories that anchor the study. Though several theories on working capital management exist, this study was anchored on the pecking order theory, the trade-off theory of liquidity and financing theory.

2.2.1 The Pecking Order Theory

The proponents of the Pecking Order Theory (POT) Myers and Majluf (1984) posit that firms ranks its sources of finance inaccordance to preference. According to the theory, first preference in firms sources of capital are internal sources followed by debt finance and eventually equity, but only as a last resort. Myers and Majful (1984) posit that the firm first uttilizes internal sources of finance and only after all internal sources are depleted that a firm issues debt securities. In following hierarchal financing, it isnt until it is no longer feasible to raise additional debt financing that the firm results to equity financing. Justisfying firms preference of internal source of finance over debt and equity, Myers and Malful (1984) holds

that asymetric information where mnagement of the company possesses more information compared, for instance, to potential investors.

Alternatively referred to as the hierarchy theory of financiang, the framework elucidates behind lower leverage ratios amongst profitable firms (Kalantonis, Kallandranis, & Sotiropoulos, 2020). According to Kalantonis et. al. (2020), the more profitable companies ultimately have higher retained earnings and less motivation to seek for eexternal financing. On the other hand, firms which are less profitable will have less retianed earnings and they hence have to borrow externally. The findings in Kalontonis et. al. (2020) study thus provided evidence of pecking order theory that necessieted firms to prefers internal financing, which short term financing is part of, over external financing. Similarly, the POT was found to hold for companies holding cash sulpluses in India (Chaklade & Padmapriya, 2021). Chaklade and Padmapriya (2021) tested the pecking order theory using 171 firms that were listed on the National Stock Excange of India. The quantitative analysis through panel data regression indicated that pecking order theory prevailed in firms that were earning surplus cash as a proporation of total assets. In Nigeria, firms were found to adjust their capital structure decisions using short term financing compared to long term debt instruments valididting the superiority of pecking order theory (Bolarinwa & Adegboye, 2021).

There is evidence however that POT is counter intittuitive. Despite small firms relying more on debt than bigger companies, the pecking order theory fits better to bigger firms compared to smaller ones. Inspite of the critic, the ability of the POT to explain the inverse association and leverage and profitability is an added advantage. Further, the pecking order theory has an impact on firm value (Xhaferi & Xhaferi, 2015). Arising from the foregoing, it is clear that pecking order theory is relevant to working capital management. It is against this background that the theory is adopted to explain the relationship between short-

term financing decisions and firm value. Accordingly, the theory informs both the dependent and independent variables.

2.2.2 Trade-Off Theory of Liquidity

The trade-off theory of liquidity an offshoot of the trade-off theory of capital structure has been popularised by among others (Xhaferi & Xhaferi, 2015). The theory postulates that firms have a targeted levelof working capital, read liquidity, which they try to balance with profitability. The theory opines that this is attained by equating the marginal cost and marginal benefit of holding working capital items, in particular, cash and inventory. On their own, the two items are non-productive and, but without them, firms risk illiquidity and loss of business. This necessitates the need to trade-off between liquidity and profitability. According to Chen, (2004), the benefits, and also the costs revolve around three motives. First, transactional purpose which relates to holding a stated level of both inventory and cash for daily transactions such as meeting the maturing obligations or ensuring firms smooth production operations and availability of sufficient supplies to meet market demand. However, there are costs associated with transactional motive, cost of holding the inventory and the interest foregone had cash been invested.Second, firms hold cash and inventory for precautionary purpose, which is to take advantage of unpredictable events, whereas the third motive is speculative, knowing better than the market (Alnori, 2020).

A number of studies have adopted the trade-off theory in an attempt to elaborate on the liquidity-firm value trade-off. For instance, Xhaferi and Xhaferi (2015) provided evidence of how trade-off theory was applicable in practice and suggested that the theory linked liquidity to firm value. By the same token, it has argued that should the benefits of holding cash or inventory outweighs cost, then the firm's ability to take advantage of investing opprotunities in future would be greatly improve more so inthose periods external

financing would be harder to come by (Dimitropoulos, Koronios, Thrassou, & Vrontis, 2019). According to Guizani and Ajmi (2021) the theory of trade-off of liquidity suggests that companies are able to maximize firm value by holding cash and inventory as long as the additional cost of holding extra amounts of cash and stock equates to the marginal cost of raising it. By keeping sufficient amounts of working capital, firms are able to save on conversion and stock out costs. Nontheless, this is not without a cost, which is the opportunity cost of holding low returns assets as well as managerial discretion (Guizani & Ajmi, 2021). Companies ultimately requires to balance between liquidity, profitability and firm theory as they strive to maintain ideal levels of short-term financing. Accodingly, this theory informs cash managememement and inventory management variables.

2.2.3 Financing Theory

The theory holds that trade credit is a substitute of financial institutions financing (Emery, 1987). According to Emery (1987), the proponent of the theory, trade credit is a form of financing availed by the seller to its customers, thus giving rise to receivables financing. The financing may be formalized with contract documents not dissimilar to a loan agreement or informally arranged but evidenced by invoices showing credit sales as well as terms of sales. The theory holds that, in offering trade credit to their clients, suppliers have an edge over banking institutions. First, suppliers have the advantage of being able to appraise the buyer's credit standing and alsothe ability to monitor the client on day-to-day basis due to their close contact. Such privilege is not available to the banking institution. Second, suppliers are able to liquidate the assets of the defaulting supplier more effectively and quickly than would a banking institution. Furthermore, providers of trade credit are able to sell repossessed stock without having to undertake additional processing. To buttress this merit, goods have more value as a security to the supplier compared to a bank. This is viewed

as credit risk reduction which allows suppliers to even offer supplier credit terms in comparison to banks (Ng, Smith, & Smith, 1999). Besides, unlike banks, suppliers can threaten and even stop suppliers in the event there are delays in payments, the theory holds.

Though financing theory explains why supplies avail trade credit, it suffers from a major defect. It does not explain why buyers would take credit vis-à-vis bank finance. There exists however, empirical literature supporting the theory. For instance, due to information asymmetry, not all firms have equal access to bank financing. This makes perceived risk exceed the limits of risk tolerance of the institutions. For this reason, some firms, and in particular small firms, opt for trade credit with its associated higher costs(Wilner, 2000). Further, firms that have cheaper access to institutional finance sometimes acts as intermediaries to those firms that don't. They do so by offering attractive trade credit terms to those firms that would otherwise not get credit from banks. This however, does not explain why big corporates with access to finance provided by banking institution opt for trade credit which sometimes is expensive (Emery, 1987). As pointed out, the theory explains why firms grant trade credit, hence receivable, to suppliers. The theory therefore explains the receivables management variable.

2.2.4 Liquidity Theory of Trade Credit

The liquidity theory of trade credit, an extension of financing theory,holds that firms faced with credit crunch are more propsective of acquiring more trade credit as compared to those firms that can access institutional finance (Petersen & Rajan, 1995). According to the theory, larger more liquid firms and those with lower liquidity holding costs are more inclined to be providers of trade credit as opposed to using trade credit. There is empirical evidence that in times of credit rationing, firms demand more trade credit from their suppliers to fill the financing gap occassioned by credit restrictions (Nielson, 2002). Firms with better bargaining power are able to raise more trade credit in those sessions that they experience

reduced sales and negative or lowered cash flows(Ferris, 1981).This could be due to inability of firms to collect their debtors on time.

Extant literature suggests that firms holding higher levels of inventory are likely to hold lower levels of trade credit as well. This was explained to be as a result of longer inventory turnover period. According to Nielson (2002), adjusting for turnover periods of receivables and payables would alleviate such problems. That is to say proper management of working capital items. Just like financing theory, liquidity theory does not provide any explanation as to why larger firms and without financing restrictions, use trade credit. The theory however does explain why firms that are constrained credit wise and those with higher inventory levels or those with negative cash flows, use trade credit. Accordingly, this study adopts the liquidity theory to explain payables management.

2.3 Empirical Review

This section reviews extant literature on short-term financing decisions and firm value. Short-term financing decisions is disaggregated into cash management, receivable management, payable management and inventory management.

2.3.1 Cash Management and Firm Value

Arachchi, Perera, and Vijayakumaran (2017) investigated the value effect of working capital management, using a sample of 44 listed companies on the Colombo Stock Exchange over the period 2011-2015. The study adopted cash conversion cycle as the measure of efficiency of working capital management while firm value was measured by the Tobin Q ratio. The study adopted growth in sales, debt ratio and firm size as moderating variables. The study employed secondary data obtained from audited financial statements of each firm. The study employed panel data regression methodology and adopted both the pooled ordinary least squares method as well as the fixed effect model to establish regression coefficients.

The study findings revealed that cash conversion cycle had an inverse relationship with Tobin's Q. This implied that short term financing decisions as measured by cash conversion cycle had a significant but a negative influence on firm value. Further, the study argued that by agents managing working capital efficiently, they would be able to influence firm value (Arachchi, Perera, & Vijayakumaran, 2017).

Anokye and Quansah (2017) emprically examined the impact of working capital management on firm value using six Ghanian manufacturing firms publicly listed on the Ghana Stock Exchange for the period between 2000 and 2013 with a total of 78 firm-year observations. The study employed pooled data and the ordinary least squares regression model with panel data methodology. Economic value added was adopted as the proxy for the dependent variable, firm value whereas cash management, measured as cash ratio, was adopted as the independent variable (Anokye & Quansah, 2017). Data on manufacturing firms value and cash ratio was obtained from annual audited financial statemements of each of the six firms. The findings of the study indicated that working capital management as measured by the firms cash ratio had a negative and a sgnificant influence on the perfromance of the manufacturing entities.

Asante-Darko et al (2018) investigated the association among cash holding and firm value of corporations quoted in the securities market in Ghana during the period between 2010 and 2014. The study used te agency and the free cashflow theory to expound on the relationship amongst the variables. The dependent variable, firm value was proxied using the Tobin's Q ratio while the independent variable was proxied by cash researves operationalised as the log of year-end cash balances. The study also introduced a control variable, firm size and operationalised it as the natural logarithim of year-end total assets. The study used 5-year panel data extracted from the financial statements of the targeted companies. To solve the

problem of multicollineality, the study deployed the seemingly unrelated regression model togethor with pooled ordinaly least square method. The results from the study indicated that cash holdings had a statistically significant negative association with firm value.

Soukhakian and Khodakarami (2019) investigated the extent to which firm performance was influenced by management of working capital items in the context of manufacturing firms in Iran and focussed on cash conversion cycle as the independent variable. The dependent variable firm performance was indicated by return on assets computed as net income divided by total assets.To measure economics-based performance, the study introduced refined economic value added as the indicator of firm value. The target population of the study was the 111 manufacturing entities listed on the Iran's Tehran securities market with a total of 777 observations covering the period 2010 to 2016(Soukhakian & Khodakarami, 2019). The study used theordinary least squares to analyse panel data. The results of the study indicated that cash management had a negative influence on firm value.

Akomeah and Frimpong (2019) investigated the extent to which management of working capital influenced profitability of quoted manufacturing firms in Ghana and covered a ten-year period 5005 to 2014. The study adopted cash conversion cycle, accounts receivables period, accounts payables period and inventory conversion period as proxies for the independent variable, working capital management. The dependent variable, profitability, was measured as gross operating profit. The study used quantitative approach and employed longitudinal data that was regressed using the fixed effect model in analysingsecondary data collected from seven manufacturing firms listed on the Ghana Stock Exchange.The study found out that cash conversion cycle had a significant positive impact on the profitability. The results of the study revealed that cash management and payables management had

insignificant association with profitability. However, account receivables period and inventory conversion period days had a statistically significant negative impact on the profitability (Akomeah & Frimpong, 2019).

Dimitropoulos et al (2019) sought to analyse the influence of cash management of the financial performance. The focus of the study was small and medium enterprise in Greek between the periods 2003 and 2016 with 16,076 firm-year observations. The dependent variable, cash management was proxied by cash ratio computed as proportion of cash and cash equivalents to total assets. Return on assets computed as the ratio of earnings before tax to total assets was adopted as the proxy for financial performance the dependent variable. The research was conducted using panel regression analysis and employed the panel fixed effect regression model (Dimitropoulos, et al., 2019). The study revealed a significant and positive relationship between cash management and financial performance of small and medium enterprises in Greek.

2.3.2 Receivable Management and Firm Value

Kilonzo etal. (2016) examined the impact of accounts receivables management and performance of state-owned corporations in Kenya. In addition, the study examined the moderating role of political environment on the relationship between receivable management and performance. Kilonzo etal. (2016) targeted 24 state entities. The cross-sectional study used both primary and secondary data. A questionnairre assisted in collection of primary data whereas the study used data collection sheet to obtain secondary data. In testing the specified relationship, the study used analysis of variance and linear regression. Findings of the study revealed that accounts receivables had a positive and statistically significant assoicated with financial performance of state owned entities in Kenya. However, the independent variable only accounted for a quarter of variations in the independent variable with the other three-

quarters of variations in financial performance due to other factors not considered by the study.

Sianipar and Prijadi (2018) investigated the effect of working capital on firm value of 167 non-financial companies listed on the Indonesia Stock Exchange in the period 2007 to 2016. The study adopted account receivable turnover period, days of inventory, and days of account payable as measures of working capital management the independent variable. Firm value was adopted as the dependent variable and operationalised as Tobin Q's corporate performance measured as the sum of market value of equity and book value of debt divide by book value of total assets. Secondary panel data used in the study was obtained from the financial reports of 167 non-financial companies listed on the Indonesia Stock Exchange over the study period. The panel data was analysed using linear model regression. Findings of the study indicated that there was an insignificant positive relationship with working capital component, consisting of days of account receivable, days of inventory, and days of account payable to firm value.

Onchangwa etal. (2018)investigated the effect of receivables management on financial distress of listed non-financial firms in Kenya as of 2016. Receivable management was adopted as the independent variable and measured as the average collection period. Financial distress was operationalized by the Altman's Z-Score. The study employed longitudinal research design and targeted all the 41 non-financial firms whose shares were listed ononthe Nairobi Securities Exchange. Secondary panel data relating to the period 2007 to 2016 was obtained from published financial statements of the targeted firms. In modelling the relationship, the study used the fixed effects model. Results from the study indicated receivables management had a negative, though statistically significant effect on financial distress of quoted non-financial firms in Kenya.

Altaf and Shah (2018) empirically examined the association between working capital management of firm profitability using a sample of 437 non-financial companies domilied in India over a ten year period 2007 to 2016 with 4,370 firm-year observations.Working capital management was indicated by accounts receivables management, inventory management and payables management. The dependent variable firm perfromance had two measures return on assets and gross operating margin. The study utlised secondary financial data that was obtained from the capitaline data base. The study adopted panel data methodology and employed the generalised methods of moments in examining the hypothesised relationship. The analysis was undertaken using the STATA 13 software. Empirical findings indicated that working capital management as indicated by receivables management, payables management and inventory management were all positively and significantly related to financial performance.

Vijayakumaran (2019) examined the relationship between working capital management and corporate performance of publicily listed non-financial firms in both Shenzhen and Shanghai securities exchange in China over the period 2004-2013. The study sampled 1,651 firms with unbalanced panel of 9,981 firm-year obeservations. working capital management was adopted as the dependent variable and was proxied by receivable management measured as the ratio of accoutnt receivables to sales. Corporate performance was the dependent variable and was indicated by return on assets. The study used secondary panel data that were obtained from financal reports of each of the firms. The study adopted panel data regression methodology and employed the fixed effect model to estimate the coefficients of the model. The results of the study revealed that receivables management had a significant but negative effect on corportae perfromance of publicly listed firms in China (Vijayakumaran, 2019).

Bussoli and Conte (2020) examined the influence of firm's trade credit on profitability of Italian companies over the period 2008 to 2016. The study sought to verify if receivables management, measured as the ratio of total total receivables to total assets impacted on two profitability measures, returns on assets and returns on sales. The study targeted 1,155 private limited non-financial Italian companies with a total 0f 10,395 observations. Data for the study waere obtained from the Italian financial database. The study employed panel analysis with fixed effects and random effects models, as well as the generalized method of moment. Findings of the study revealed that trade credit positively and in a significant way was contributed to the performance of Italian companies (Bussoli & Conte, 2020).

2.3.3 Payables Management and Firm Value

Khanetal. (2016) investigated the influence working capital management had on performance of thirty-eight companies that were quoted on the non-financial sector of the Pakistan stock market. The study focused on the period 2011 to 2015. Specifically, the study adopted components of working capital average payment period and average age of inventory as the proxies for the independent variable. Financial performance, the dependent variable was indicated as returns on equity and return on assets. The adopted pooled ordinary least squares regression model. Based on the study findings, payables management positively influenced return on assets but insignificant effect was observed when regressed against return on equity (Khan etal., 2016).

Cumbie and Donnellan (2017) examined the effect of payables management on firm value of firms listed in the United States. In addition, the study examined the effect of receivables management and inventory management on the firms' value. The study's target population was 140 randomly sampled companies that were listed between 2003 and 2012.

The study used quarterly financial data that were longitudinal in nature and obtained from the financial statements of each of the firms. Firm value was taken as the economic value added. Results of the study revealed that payables management, inventory management and receivables management positively influenced firm value (Cumbie & Donnellan, 2017).

Hoang, Xiao and Akbar (2019) investigated the association between trade credit and profitability of 1,509 non-financial small and medium enterprises in nine countries in the East Asia Pacific region. The study focused on listed small and medium enterprises in China, Hong Kong, Japan, Malaysia, Singapore, South Korea, Taiwan, Thailand and Vietnam over the period 2010 to 2016. Trade credit proxied by accounts payables at the end of the year was adopted as the independent variable, while the dependent variable, profitability, was indicated as returns on assets. Data on small and medium firms performance as well as those of trade credits were collected from annula audited financial statements of each firm. The study employed pooled data and the ordinary least squares estimation with panel data methodology. The finding of the study indicated that trade credit had statistically negative effect on financial perfromance enterprises located in nine countries of East Asian Pacific region.

Nam and Uchida (2019) investigated the effect of accounts payables and firm value using a sample of 21,765 firms spread across 40 countries with 136,783 firm-year observations during the period 2004 to 2014. The countries were spread accros Europe, Asia, America with Egypt being the only African country. The dependent variable, account payables was proxied by the scale of total accounts payables to total assets. Tobin's Q was employed as the indicator of firm performance. However, to control for the size effects on Tobin's Q, the study adopted the natural logarithim of assets. One-year lagged data were used for all the variables. Data for the variables were obtained from the OSIRIS database provided

by Bureau van Dijk. Findings of the study revealed that accounts payables had a siginificant association with firm value.

Akbar, Jiang and Akbar (2020) investigated the effect of working capital management practices on firm value of listed non-financial companies in Pakistan over a 10-year period 2005 to 2014. Specifically, the study examined the influence of accounts payables, inventory days, receivables management and cash holdings on firm value of non-financial firms listed on the Karachi stock exchange in Pakistan. The study employed the two-step generalized method of moment regression on secondary panel data obtained from all the 354 non-financial firms that were listed in Pakistan. Empirical findings suggested that a positive and statistically significant association between days of accounts payables and firm value revealing that firms that took a longer time to pay creditors allocated large resources to non-current assets and hence a higher value. Similarly, the study findings indicated that cash holding was positively linked to firm value. This association was found to be statistically significant. However, inventory management and receivables management were found to have a negative and statistically significant association with firm value (Akbar, Jiang, & Akbar, 2020).

Shikumo, Oluoch and Wepukhulu (2020) examined the impact of short-term debt on financial performance using 36 companies listed onon the Nairobi Securitires Exchange for the period 2008 to 2017 with a total of 360 firm-year observations. Accounts payables was adopted as the proxy for the independent variable while the dependent variable was indicated by earnings per share and market capitalisation. Data for the variables was extracted from published financial statements of each firm. The study employed panel data methodology and adopted the random effects model to estimate the study's coeeficient. The study revealed a

significant positive relationship between accounts payable and financial performance uisng both earnings per share and market capitalisation.

2.3.4 Inventory Management and Firm Value

Lin, Liang and Zhu (2018) examined the influence of inventory mnagement on financial performance of Chinese manufacturing firms during the period between 2001 and 2013. Inventory management was adopted as the independent variable and was measured as the ratio of the natural logarithim of average inventoroes regressed on the natural logarithim of sales for each industry. The indpendent variable was financial performance and was measured as the ratio of earnings before tax to sales. The study target population was 1,187 firms covering 30 industries in China. In estimating the direct effects of inventory management on firme performance, the study adopted the panel data methodology and employed the ordinary least squares method. The finding of the study revealed that inventory management influenced firms financial performance.

Laghari and Chengang (2019) examined the influence of working capital management on corporate performance of Chinese non-financial firms listed on the Shanghai Stock Exchange and Shenzhen Stock Exchange.The study adopted the Tobin's Q and return on assets as proxies for the dependent variable, for corporate performance. On the other hand, the independent variable, working capital management was proxied by net trade cycle which was measured as the sum off the ratios of inventories to sales and receivables to sales, all multiplied by number of days in a year less the ratio of payables to sales multiplied by number of days in a year. The study employed the generalized method of moments and used the dynamic panel data methodology. The data was obtained from the China Stock Market and Accounting Research database. The study employed a sample panel of 1,528 listed companies with a total 16,802 firm-year observations relating to the periods 2005 to 2015

(Laghari & Chengang, 2019). The findings of the study indicated that aggressive working capital management had a positive and statistically significant association with corporate performance.

Amponsah-Kwatiah and Asiamah (2020) investigated the effect of working capital management on financial performance of manufacturing firms that were listed in the Ghana stock exchange over the period 2015 to 2019. The study's objective was to assess the relationship between selected working capital management items (inventory management, account receivable management, accounts payables and cash conversion cycle) and profitability which was proxied as return on assets and return on equity. Amponsah-Kwatiah and Asiamah (2020) employed an explanatory research design within a deductive approach on a population of 20 manufacturing listed firms in Ghana. The study used secondary balanced panel data that was obtained from the individual firms' financial statements. To decide appropriateness of the random effect model orfixed effect model, the study used the Hausman specifications test with the results favouring fixed effects model over random effects model. The study adopted E-views 9.0 software package to process and analyse the data. Least squares dummy variable and generalized least squares estimator were used to estimate the fixed effect model and random effect model respectively (Amponsah-Kwatiah & Asiamah, 2020). Findings of the study revealed a positive and statistically significant relationship between inventory management, account receivables management, payables management, cash conversion cycle size and financial performance.

Orobia, Nakibuuka, Bananuka and Akisimire (2020) sought to establish the linkage between inventorymanagement, managerial competence and financial performance of small businesses that were licenced to operate in Mbarara district in Uganda. Further, the study investigated the mediating role of inventorymanagement on the relationship between

managerial competence and financial performance of small businesses in Uganda.Inventory management was operationalised as activities undertaken in planning, implementing, monitoring and controlling items of inventory. On the other hand, financial performance was operationalised as the growth rate in sales and profits over the immediate past three-year period. The study theoretical anchorage was on the resource-based view and the dynamic capabilities theory. The study employed correlational cross-sectional research design. Simple random sampling method was adopted in obtaining a sample of 304 from a population of 354 small businesses operating in Ugandaas of September 2016. Primary data was obtained usinga semi structured questionnaire. Findings of the study indicated a positive and statistically significant effect of inventory management on financial performance. Further, inventory management was found to have a partial mediating role in the relationship between managerial competence and financial performance.

Sawarni, Narayanasamy and Ayyalusamy (2021)examined the influence of efficiency of working capital management on firm performance of 414 firms listed on the Bombay stock exchange, India over the period 2012 to 2018. The study employed efficiency or working capital management as the independent variable which was disaggregated into inventory management, receivables management, cash management and payables management. The dependent variable, firm performance was indicated by the Tobin's Q ratio and return on equity. Panel data that was employed by the study was collected from the financial statements of individual firms. To select the appropriate model between fixed and random effect models, the study adopted the Hausman specification test with the results favouring the fixed effect model. The findings of the study indicated that all components of working capital management such as stock management, creditors management, cash management and

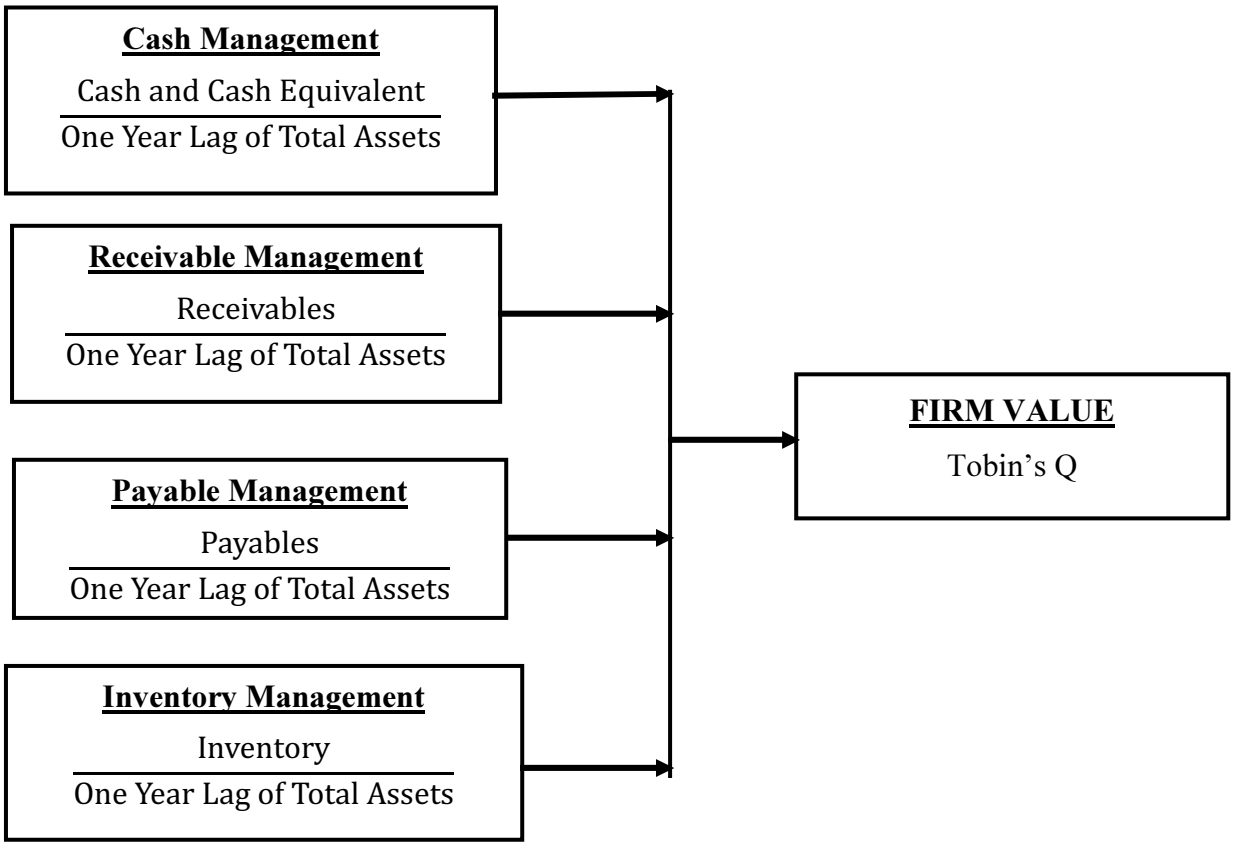
debtors' management had a statistically significance association with firm performance as measured by return on equity and the Tobin's Q ratio.

2.4 Conceptual Framework

To help in schematizing the relationship amongst the study variables, a conceptual framework was developed. The conceptual model provides ideas and helps in answering the research questions (Saunders & Tossey, 2015).In the present study, the conceptual model helps in expounding on the association amongst the independent variable short-term financing decisions and the dependent variable, firm value. Figure 2.1 presents the conceptual framework.

FIGURE 2.1

Conceptual Framework



2.5 Operationalisation of the Variables of the Study

The operationalization of the study variables is based on extant literature. In this study, the dependent variable, firm value is operationalised as the Tobin's Q ratio computed as the sum of total market capitalization of ordinary shares, preference share and value of total debt divided by total assets.On the other hand, the independent variable has been operationalised as cash management, receivable management, payable management and inventory management. All the indicators of the independent variable has been computed as the ratio of the outstanding amount at the year end to previous year's total assets. Table 2.1 presents the identified variables together with their measurements.

TABLE 2.1

Operationalization and Measurement of Study Variables

Type	Variable	Operationalization and Measurement	Supporting Literature
Dependent Variable	Firm Value	Tobin's Q = $\frac{\text{Market Capitalisation + Total Debt}}{\text{Total Assets}}$	(Laghari & Chengang, 2019)
Independent Variables	Cash Management	$\frac{\text{Cash and Cash Equivalent}}{\text{One Year Lag of Total Assets}}$	(Asante-Darko, et. al 2018)
	Receivable Management	$\frac{\text{Closing Receivables}}{\text{One Year Lag of Total Assets}}$	(Osinubi, 2020)
	Payable Management	$\frac{\text{Closing Payables}}{\text{One Year Lag of Total Assets}}$	(Osinubi, 2020)
	Inventory Management	$\frac{\text{Closing Inventory}}{\text{One Year Lag of Total Assets}}$	(Bagh, Nazir, Khan, & Razzaq, 2016)

Source: Author (2021)

CHAPTER THREE

RESEARCH DESIGN

3.1 Introduction

This chapter presents the resign design that the study adopted. Further, presents the target population and the sampling procedures. What follows is a discussion of the various data analysis techniques. In what follows is a discussion of the specification and diagnostic tests that preceded data analysis. The chapter concludes with a discussion of the data processing, analyses and presentation techniques.

3.2 Research Design

The study adopted quantitative research design. To establish the influence of short-term financing decisions on firm value of non-financial companies quoted at the Nairobi Securities Exchange, the study used cross section-time series technique otherwise referred to as the longitudinal or panel research design.Longitudinal studies designs are the best for studying causation (Gujarati & Sangeetha, 2013). Longitudinal research allows for scholars to observe changes over time. They are helpful in looking at how things change over time and explain why certain developments take place. This method has an advantage as it affords the research an opportunity to look at how variables change over time. Furthermore, panel studies help in raising the number of observations point while at the same time providing an opportunity flow looking at both cross sectional data together with cross sectional data. As such panel data considers both cross sectional effects as well as time effects. Panel data have added opportunity of catering for lack of homogeneity that is connected to individual firms. Furthermore, panel data allows for variability, reduced collinearity while allowing for more degrees of freedom. The enumerated advantages justified the choice of longitudinal research design (Gujarati & Sangeetha, 2013).

3.3 Target Population

Target population is the universe to which the findings of the study will be generalized on. This study targeted all the non-financial firms quoted on the Nairobi Securities Exchange for the period 2010 to 2019. The period 2020 was excluded as firm value was heavily influenced by the global pandemic. As atDecember 2020 there were 44 non-financial firms listed and trading on NSE (CMA, 2021). Appendix I is a list of non-financial firms listed on the NSE. Due to the small number of non-financial firms listed on the stock market, the study did not result to sampling.Hence, the study adopted census and considered all the firms that formed the populationCensus studies are proved to reduce errors that are occasioned by sampling (Saunders & Tossey, 2015).

3.4 Data and Data Analysis

This study employed panel data collected from audited financial statements of the targeted listed non-financial firms. Data collection sheet shall be used in data collection. Appendix II is the data collection sheet.Gujarati and Sangeetha (2013) define panel data as a breed of cross-sectional data and time series data and alternatively refer to it as longitudinal data. Panel data offer more latitude and allow for multiple issues to be examined compared to time series or cross-sectional data alone (Greene, 2012). As a result, panel data is more informative with limited multicollinearity among the variables, more variable and allows for additional degrees of freedom and is more efficient. The rationale behind use of panel data is its ability to deal heterogeneity and the arising endogeneity. The problem of endogeneity, the correlation among independent variables and error term is as a result of the unobserved heterogeneity, the unobserved dependency among independent variables (Greene, 2012). Unlike the case of the normal linear regression in which heterogeneity often leads to biased and spurious results, panel data regression deals with the issue by controlling for

heterogeneity.Depending on panel types, there are three types of panel regression models: Pooled ordinary least squared model; the fixed effects model and the random effect model. These are discussed in the subsections that follows

3.4.1 Pooled Ordinary Least Squares Regression

The pooled ordinary least squares (OLS) model is the simple regression model, but performed on panel data (Gujarati & Sangeetha, 2013). The pooled OLS approach, however ignore time and individual features and instead focuses on dependencies between variables. Moreover, the simple pooled model assumes no correlation among unobserved variables and independent variables and amongst independent variables (Gujarati & Sangeetha, 2013).

3.4.2 Fixed Effects Model

The fixed effects model relaxes the assumptions in the pooled ordinary least squares and in this case endogeneity can be present. The fixed effect model makes assumptions and determines the individual effects of the independent and unobserved variables as though they are constant over time (Greene, 2012).

3.4.3 Random Effect Model

The third type of panel regression, random effect model allows for the determination of the unobserved, independent constructs as though they were random over time and is able to switch between the ordinary least squares and the fixed effects model. The random effects model focus is therefore not only on the dependencies between individual variables but also within individual variables (Gujarati & Sangeetha, 2013).

3.5 Specification and Diagnostic Tests

The choice of the suitable regression model is dependent on the meeting or not meeting the assumptions of the simple linear regression model and a specification text,

outlined in the section that follows. The assumptions include linearity in parameters being estimated, homoscedasticity, absence of multicollinearity between independent variables, absence of autocorrelation of the residuals and normality of the error terms. If the assumptions are not violated, pooled ordinary least square model would be appropriate. If on the other hand, the stated assumptions are violated, then the study will opt for either fixed effect model or the random effect model as they would be the most suitable. The choice between fixed effects and random effects will be made by performing the Hausman specification tests (Gujarati & Sangeetha, 2013).

Models in panel data investigates for group effects, that is individual-specific effect, cross sectional effects or both so as to work with individual; effect or heterogeneity that might be observed or not observed (Gujarati & Sangeetha, 2013). The effects could either be random or fixed. The fixed effect model check if the intercept changes across the group or across time period. Random effect models examine the differences present in the variance of the error component across time period or across individual variables. As stated in the foregoing section, pooled ordinary least squares regression will be appropriate, and will produce efficient and consistent estimates to the parameters, if individual effects, that cross sectional or time specific do not exists (Greene, 2012).

3.5.1 Pooled Ordinary Least Squares Tests

To determine if the study will use the pooled Ordinary Least Squares (OLS) regression model, the assumptions of the classical linear regression model will be tested. Greene (2012) lists five critical assumptions; error terms are homoscedatic and absence of autocorrelation; linearity; normality;and no multicollinelity. In the event the none of assumptiona are not violated, the study will opt for the ordinary least regression model.

3.5.2 Multicollinearity Test

Where independent variables in a regression model are correlated, there is said to be multicollinearity. Multicollinearity presents a problem in regression since predictor variables should be independent (Greene, 2012). When the independent variables have high inter-correlations among themselves, problems of fitting the model and interpreting the results arise. When regression is carried out with presence of multicollinearity, confidence intervals are wide and there is less than reliable probability values leading to misleading results. To detect multicollinearity, this study adopts the Variance Inflation Factor (VIF). If the computed VIF value is less than 5, the study concluded that there is no multicollinearity amongst the independent variables.

3.5.3 Normality Tests

The assumption of normality is important as it offers validity to the inferences, specification tests and forecasting. The consequencies of non-normal error term is that the inferences may not be reliable (Gujarati & Sangeetha, 2013). This includes standard errors in a regression not being the smallest and they could be biased. Thus confidence intervals and significant parameters may lead to wrong conclussions. This study adopts the Jarque-Bera test to test for normality as it is more conclusive than the alternative graphical method. The null hypothesis is that the error terms are not normally and the alternative hypothesis is that error terms are normally distributed. The null is rejected if the computed p-value is less than 0.05.

3.5.4 Homoscedasticity Test

Error terms are assumed to have constant variance. When this is violated, that is the residuals do not have constant variances, problem of heteroscedasticity arises. To identify if the heteroscedasticity is present, the study will run the Breusch-Pagan-Test and Cook-

Weisberg test. Heteroscedasticity will be indicated if the computed p-value is less than 0.05, and thus the assumption of homoscedasticity will have been violated.

3.5.5 Autocorrelation Test

To test if the data is autocorrelated or if alternatively there is no autocorrelation, the study will adopt the Wooldridge test for autocorrelation. The null hypothesis in the Wooldridge test for autocorrelationis that there is no serial correlation (Greene, 2012). If the Wooldridge test for autocorrelation yields significant p-values, the data is serially correlated.

3.5.6 Hausman Specifications Test

In the event diagnostic tests indicates the assumptions are violated, then either the Fixed Effect Model (FEM) or the Random Effect Model (REM) would be more appropriate. The Hausman specification test aids in choosing between the random effects model or a fixed effects model (Gujarati & Sangeetha, 2013). The model tests for alternative paramenter estimates and it is useful in determining endogeneity issues, incorrect fuctional form and simultaneoues correlation between unique errors and and the regressoers in the model. The null hypothesis is that there is no endogeinity in the model. In what is alternativivley refered to as the Hausman specification test, the null hypothesis is that the most preferred model is random effect while the alternative hypothesis is that the preferred model is fixed effects (Gujarati & Sangeetha, 2013). Interpretation of the Hausman test is to reject the null if the the p-value is very small, that is, less than 0.05.

3.6 Data Processing, Analysis and Presentation

Data processing involves the cleaning of raw data to ensure that it is consistent with the requirement for estimating the variables. Secondary data was extracted from the audited and published financial reports. Data collected was then be analysed quantitatively using

regression equations which shall be solved usingStata 10 software. To describe the nature of the relationship in a more explicit way, the model presented in equation I was be tested.

$FirVal_{it} = \beta_0 + \beta_{it}InvMgt_{it} + \beta_{iit}RecMgti_t + \beta_{iiit}CasMgt_{it} + \beta_{ivt}PayMgt_{it} + \acute{\varepsilon}$---------- (I)

Where: $FirVal_{it}$representFirm Value for each firm overtime;CasMgtrepresents Cash Management; RecMgtrepresents Receivable Management; InvMgtrepresents Inventory Management; PayMgtrepresents Payables Management; $\beta_{it.}$ represents the regression coefficient for inventory management; β_{iit}isthe regression for receivables management; β_{iiit} the regression coefficient for cash management; β_{ivt} is the regression coefficient for payables management; β_0 is the constant term and $\acute{\varepsilon}$ is the error term.

The final model chosen was dependent on the specification tests.

CHAPTER FOUR

RESEARCH FINDINGS, INTERPRETATION AND DISCUSSIONS

4.1 Introduction

This chapter is a presentation of research findings. It provides the descriptive statistics, results of the diagnostic and specification tests. Further, the chapter provides the inferential statistics together with results interpretation. To facilitate the interpretation and discussion of findings, the analysed dataare presented in Tables and narrations.

4.2 Descriptive Statistics

Descriptive statistics allows for the user understanding of large volumes of data thus enhancing effective communication. Descriptive statics for all the variables used in the model over the study period 2011 to 2012 were obtained and summarised in Table 4.1.

TABLE 4.1

Descriptive Statistics

Variables /(Ratio)	Obs.	Min.	Max.	Mean	Std. Dev
Firm Value	249	0.1052	7.3573	1.7430	1.3386
Inventory Management	249	0.0000	1.0189	0.1623	0.1764
Receivables Management	249	0.0056	0.7712	0.1929	0.1427
Cash Management	249	-0.6014	0.4304	0.0516	0.1368
Payables Management	249	0.0000	2.0462	0.2440	0.2417

Table 4.1 present a summary of descriptive statistics in relation to all the variables that shall be included in the regression model. The study had 249 firm year observations which all the variables share. The mean value for firm value during the study period was 1.7430 with a standard deviation of 1.3386. This indicates a large variability in firm value over time. This infers that while some listed companies created value, others reduced it. The minimum value of 0.1052 indicates that on average firms that created lowest value were only able to offer a return of 10 percent. On the other hand, the maximum value of 7.3573 implied that some firms created up to seven times their value.

The results on inventory management show a minimum value of zero. This implied that some firms did not hold any inventory. The maximum value for the inventory was 1.0189 implying that some firms held inventory that were equivalent to their total assets. The mean for inventory management is 0.1623 and a standard deviation of 0.1764. This shows a wide disparity in inventory management over the study period. This could be attributed to different inventory management policies applied in the varied firms.

The results further show that on average, firms' held receivables equivalent to 19.29 percent of total assets and this had a standard deviation of 0.1427. Receivable management had the second lowest standard deviation implying that the amount held as receivables by various firms were dispersed close to the mean. The minimum value for receivables was less than 1 percent implying that some firms held almost zero in receivables. The maximum number of receivables was equivalent to 77 percent of the firm total assets. This implied that some firms held more than two thirds of their assets in form of receivables.

Table 4.1 further indicates that the mean value for cash management was 0.00516 with a standard deviation of 0.1368. The minimum value of cash holdings was – 0.6014. The negative observation implies that some firm operated on negative cash balances and hence

funded some of their operations by bank overdrafts. The maximum value for cash management is 0.4304 implying that some firms' cash contribution to total assets was approximately 43 percent. Payables management had a minimum value of zero. This implied that some firms held no payables over the study period. The maximum value for payables is 2.0462 implying that some firms had payables two times higher than the total assets and indication of negative working capital. The mean value for payable management was 0.2440 with a standard deviation of 0.2417.

4.3 Diagnostic Tests

In line with presentations made in chapter three, this study undertook various diagnostic tests to ensure the assumptions of the classical linear regression are met. In addition, post estimation test to make a decision between random effect model and fixed effect model were carried out. In the sections that follow, the results of the multicollinearity test, normality test, homoscedastic tests autocorrelation test and Hausman specification tests are presented.

4.3.1 Multicollinearity Tests

The problem of multicollinearity results to inflated standard errors and confidence intervals resulting to unstable coefficients for individual variables. To detect for multicollinearity, this study adopted Variance Inflation Factor. A variance inflation factor value in excess of 5 is an indicator of presence of harmful multicollinearity. Variance inflation factor values less than five indicates multicollinearity is not present. The results of the test are presented in Table 4.2.

TABLE 4.2

Multicollinearity Test Results

Variable	VIF	1/VIF
Firm Value	1.79	0.5576
Inventory Management	1.74	0.5749
Receivables Management	1.37	0.7275
Cash Management	1.09	0.9133
Payables Management	1.79	0.5576
Overall Mean	**1.50**	

The results presented in Table 4.2 shows the variance inflation values for both dependent and independent variable were all less than 5. Firm value had a value of 1.79, Inventory management 1.74, receivables management 1.37, cash management 1.09, payables management 1.79 and the man variance inflation factor was 1.50. As a result, the study concluded that there was no multicollinearity and that the data was suitable for further analysis.

4.3.2 Test for Normality

The assumption of normality is the other classical linear regression. The residuals are assumed to be normally distributed. The study adopted the JarqueBera test for normality as it is more conclusive. The null hypothesis for the test is that the residuals are not normally distributed. The decision criteria are to fail reject the null hypothesis if the p-value obtained in the JarqueBera test is more than0.05. Table 4.3 presents the results.

TABLE 4.3

Results JarqueBera Test for Normality

Variable	Chi – Square	P-Value
Residuals	70.47	0.0000

The results in Table 4.3 indicates a p-value of 0.0000 which is less than the critical value of 0.05. In this case therefore, the study rejected the null hypothesis and concluded that the error term was normally distributed.

4.3.3 Homoscedastic Test

The residuals are assumed to have constant variance, and hence homoscedastic. The study adopted the Breusch-Pagan-Test and Cook-Weisberg test to determine ir error terms had constant variance. The null hypothesis of error terms have constant variance was rejected if the computed p-value was less than 0.05. The results of the test are presented in Table 4.4.

TABLE 4.4

Homoscedastic Test Results

Breusch-Pagan / Cook-Weisberg test for Heteroskedasticity	
chi2(1)	3.11
Prob > chi2	0.0777

Based on the results in Table 4.4, the study failed to reject the null hypothesis, as the p-value computed of 0.077 was greater than the threshold value of 0.05. The study thus concluded that the residuals had constant variance,

4.3.4 Tests for Autocorrelation

To determine if the residuals were serially correlated over time, the study conducted the Wooldridge test for autocorrelation. The stated null hypothesis for the test is that the residuals are not serially correlated. The study fails to reject the null if the p-value computed is greater than 5 percent. Table 4.5 presents the results.

TABLE 4.5

Results for Autocorrelation Test

Wooldridge test for autocorrelation in panel data	
F (1, 27)	6.871
Prob > F	0.0142

The statistics presented in Table 4.5 indicates that the data is serially correlated as the computed p-value is significant, that is less than 5 percent. To remedy the situation, the study failed to adopt the pooled ordinary least squares regression and instead opted for either the fixed effect model or random effect model.

4.3.5 Hausman Specification Tests

In panel data analysis, the researcher must make a decision on whether to use the fixed effect model, or the random effect model. Hausman specification test helps choose between the fixed effect model and the random effect model. In order to make the determination on the suitable model, coefficients are estimated by used of both fixed and

random effects. The results are presented in Appendix. To choose between the two, the Hausman specification test was carried out and the results are presented in Table 4.6

TABLE 4.6

Hausman Specification Test Results

	Coefficients			
	(b)	**(B)**	**(b-B)**	**sqrt(diag(V_b-V_B))**
Variables	**Fixed**	**Random**	**Difference**	**S-E**
Inventory management	1.4658	1.3548	0.1110	0.1650
Receivables management	0.3917	0.2593	0.1324	0.1460
Cash management	0.4329	0.4912	- 0.0583	0.0477
Payables management	0.9274	1.1380	- 0.2107	0.0183

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test:Ho:difference in coefficients not systematic

chi2(4) = (b-B)'[(V_b-V_B) ^ (-1)] (b-B) = 6.36

Prob>chi2 = 0.1740

(V_b-V_B is not positive definite)

In choosing between fixed effect model and random effect model, where firm value was the dependent variable, the study undertook the Hausman test and the results are presented in Table 4.6. The null hypothesis for the Hausman specification was that the random effect model is the preferred model. The criteria for failing to reject the null hypothesis is if the computed p-value is significant. The results indicate a p-value of 0.1740 indicating that at 5 percent, the chi-square value obtained is not statistically significant. The study therefore failed to reject the null as the p-value was not significant. As a result, the study concluded that the random effects model was preferred to the fixed effect model. Therefore, the random effects model is adopted.

4.4 Correlational Analysis

In order to investigate the nature and extent of the statistical relationship amongst each pair of variables, the study conducted correlation analysis. Table 4.7 show the correlation matrix of all the variables considered in the study.

TABLE 4.7

Correlation Matrix

	Firm Value	Inventory Management	Receivables Management	Cash Management	Payables Management
Firm Value	1				
Inventory Management	0.3367*	1			
Receivables Management	0.2059*	0.3981*	1		
Cash Management	0.0203	-0.2446*	0.0506	1	
Payables Management	0.5957*	0.6069*	0.4904*	-0.0825	1

(*) Statistically significant at 5 percent

The results presented in Table 4.9, correlation matrix indicates that inventory management, receivables management and payables management have a significant positive relationship with firm value. However, cash management association with firm management through positive, is not significant at 5 percent level of confidence.

4.5 Regression Analysis

This study investigates the relationship between short term financing and firm value. The four specific objectives of the study determine the individual and independent effect of

inventory management, receivables management, cash management and payables management on firm value. The main objective is to examine the combined effect the four specific variables. The study therefore examines individual effects before embarking on combined effects. The regression analysis is conducted at 95 percent level of confidence so as to establish the statistical significance of each hypothesised relationship. The subsequent subsection presents the results of regression analysis. The results provide an empirical interpretation of the results and compares them with findings of previous studies on short term financing and theories. The subsection is structured in line with the specific objectives of the study.

4.5.1 Effect of Cash Management on Firm Value

The first objective of the study was to examine the influence of cash management on firm value of non-financial firms listed on the Nairobi Securities Exchange. Firm value was proxied by the Tobin's Q ratio whereas cash management was measured as the ratio of cash and cash equivalent to one-year lagged values of firm assets. The results are presented in Table 4.8 and discussion follows.

TABLE 4.8

Regression Results of Cash Management and Firm Value

Model	Random-effects GLS regression: xtregFirValCasMgt, re					
Firm Value	Coef.	Std. Err.	Z	p>z	[95% Conf. Interval]	
Cash Management	0.5115	0.3439	1.49	0.1370	-0.1625	1.1855
Constant	1.4566	0.1816	8.02	0.0000	1.1007	1.8125

R-Squared	0.000
Wald $chi^2(1)$	2.21
Prob > chi^2	0.1369

The results in Table 4.8 shows the regression results of the cash management and firm value.Individually, cash management is not able to explain the changes in firm value as indicated by the R-square value of zero percent. The P-value of 0.1369 indicates that the model is not robust enough to explain the relationship between cash management. Furthermore cash management had p-value of 0.1370 which is above the five percent. On the basis of this, the study fails to reject the null hypothesis and concludes that cash management does not have statistically significant influence on firm value. The results concur with Akomeah and Frimpong (2019) whose results revealed that cash management had insignifcant assoication with firm value. However, the results are in variance with Dimitropoulos, et. al, (2019) whose findings indicated that cash management had a postive and signifcant association with firm value. The results further contradicts (Anokye & Quansah, 2017; Arachchi, et al 2017; Asante-Darko, et al, 2018) who all found that cash management had a negative and significant relationship with firm value. The results confirms the trade off theory argument that on it own cash is not productive and does not explain firm value.

The nully hypothesis was that cash management does not have a statistically significant influence on non-financial companies quoted at the NSE in Kenya. The study used the random effect model, to test the hypothesis. Cash management had a p-value of 0.1369 as shown in Table 4.8. This was more than the stated p-value of 0.05 and therefore the study

failed to reject the hypothesis. Therefore, the study concluded that there was statistically insignificant relationship between cash management and firm value in non-financial firms listed on the Nairobi Securities Exchange in Kenya.

4.5.2 Receivable Management and Firm Value

The second objective of this study sought to investigate the influence of receivables management and firm value. Receivable management was proxied as the ratio of year end receivables to one year lag of total assets. Tobin's Q ratio was used to measure firm value. Receivables management was regressed against firm value and the results are presented in Table 4.9.

TABLE 4.9

Regression Results of Receivables Management and Firm Value

Model	Random-effects GLS regression: xtregFirValRecMgt, re					
Firm Value	Coef.	Std. Err.	z	p>z	[95% Conf.	Interval]
Receivable Management	1.6929	0.4119	4.11	0.0000	0.18855	2.5000
Constant	1.1690	0.11921	6.09	0.0000	0.7954	1.5454
R-Squared	0.0424					
Wald $chi^2(1)$	16.89					
Prob > chi^2	0.000					

The results in Table 4.9 indicates that receivables management is positively and significantly related to firm value (β =1.6929; p-value = 0.0000). The optimal model can therefore be stated as:

Firm Value = 1.1690 + 1.6929 Receivables Management

This implies a unit change in receivables management results to 169.29 percentage change in firm value. The R -square value of 0.0424 however indicates that receivables management accounts for a 4.24 percent change in firm value. The probability value for the Chi – square indicates that the model is robust enough to explain the results. The study findings are consistent with Altaf and Shah (2018) as well as Kilonzo et al. (2016) whose findings revealed that receivable management had a posittive and significant relationship with firm value. However, the findings contradicts Onchangwa, et al (2018) and Vijayakumaran (2019) who found out that though receivables management was significantly associated with firm value, that association was inverse. The results further contradicts Sianipar and Prijadi (2018) whose study results implied that reveivable management had insignificant assoication with firm value.

The null hypothesis was that there is no statistically significant effect between receivables management and firm value of non-financial companies quoted at the Nairobi Securities Exchange in Kenya. This was tested using panel regression. Receivables management had a p-value less than 0.05 (p= 0.0000) as shown in Table 4.9. The hypothesis was thus rejected. Therefore, there is statistically significant effect between receivables management and firm value in non-financial firms quoted at the Nairobi Securities Exchange.

4.5.3 Payables Management and Firm Value

The third objective of the study was to establish the effect of payables management on firm value of non-financial companies quoted at the Nairobi Securities Exchange. Firm value was measured using the Tobin's Q ratio with payables management measured as the ratio of closing payables to total assets. The results of regression analysis are presented in Table 4.10.

TABLE 4.10

Regression Results forPayables Management and Firm Value

Model	Random-effects GLS regression: xtregFirValPayMgt, re					
Firm Value	Coef.	Std. Err.	z	p>z	[95% Conf. Interval]	
Payable Management	1.5424	0.2253	6.85	0.0000	1.1012	1.9845
Constant	1.1677	0.1371	8.52	0.0000	0.8990	1.4365
R-Squared	0.3549					
Wald $chi^2(1)$	46.88					
Prob > chi^2	0.000					

The regression results in Table 4.10 reveals that payables management is positively and significantly related with firm value (β= 1.5454; p-value = 0.0000). This implies that a unitary increase in payables management would result to an increase in firm value by 154.54 percent. The R – squared value of 0.3549 indicated that the model explained 35.49 percent of the variation in the dependent variable, firm value. The Wald chi – square p – value of 0.000 indicates that the model was sufficiently robust to explain the relationship. The optimal model could thus be stated as:

Firm Value = 1.677 + 1.5454 Payables Management.

The findings corroborate Akbar et al. (2020) sudy that observed payables management had positive and statistically significant linkages with firm value. The results are also in tandem with the findings in Shikumo et. al (2020) that revealed a positive and significant association with firm value. However, the findings differs from those in Hoang et al. (2019) that found a negative relationship between payables management and firm value. Furthermore, the findings contradicts Khan et. al. (2016) whose results indicated a an issignificant association amongst payables and firm value.

The null hypotheses was that there is no significant association between payables management and firm value of non-financial companies quoted at the NSE in Kenya. The hypothesis was tested using the panel regression model. Payables management had a p-value of 0.000, which was less than the critical value of 0.05 as shown in Table 4.10, thus the hypothesis was rejected. Therefore, there is statistically significant effect between payables management and firm value.

4.5.4 Inventory Management and Firm Value

The fourth objective of the study was to determine the effect of inventory management on firm value of in non-financial firms quoted at the Nairobi Securities Exchange in Kenya. Inventory management was measured as the proportion of closing inventory to the total assets. Tobin's Q ratio was maintained as the proxy for firm value. The results of the regression model are tabulated in Table 4.11

TABLE 4.11

Regression Results for Inventory Management and Firm Value

Model	Random-effects GLS regression: xtregFirValInvMgt, re				
Firm Value	Coef.	Std. Err.	z	p>z	[95% Conf. Interval]

Inventory Management	2.2736	0.3771	6.03	0.0000	1.5343	3.0127
Constant	1.1566	0.1759	6.57	0.0000	0.8118	1.5014
R-Squared	0. 1133					
Wald $chi^2(1)$	36.34					
Prob > chi^2	0.000					

The results presented in Table 4.11 indicates that inventory management Wald statistics had a p-value of 0.000. This revealed that the model was good enough to explain the relationship amongst the variables. The optimal model could thus be stated as:

Firm Value = 1.1566 + 2.2736 Inventory management.

The regression results in Table 4.12 shows that inventory management is positively and significantly related to firm value ($\beta = 2.2736$; $p = 0.0000$). This means that a unit change in inventory management would lead to a positive increase in firm value up to 227.36 percent. The model's R – squared value of 0.1133 implies that the model explains 11.33 percent of the variations in firm value. The results concur with Laghari and Chengang (2019) whose findings revealed that inventory management had a positive and statistically significant impact on firm value. The results are also in agreement with Amponsah-Kwatiah and Asiamah (2020) research study that revealed that firm value is positively and significantly influenced by inventory management. The findings are however not consistent with those on the study undertaken by Akbar et al.(2020) indicating that inventory management corroborated inversely with firm value.

This study had a null hypothesis corresponding to the fourth specific objective. The hypothesis was that inventory management did not have statistically significant association with firm value of non-financial companies quoted on the NSE in Kenya. The study adopted

the Random-effects generalised least squares regression. Findings in Table 4.11 reveals that inventory management had a p- value of 0.0000 which being less than the 5 percent threshold meant that the hypothesis was rejected. Therefore, there is a statistically significant effect between inventory management and firm value in non-financial companies quoted on the Nairobi Securities Exchange in Kenya

4.6 Combined Effect of Short-Term Financing Decisions and Firm Value

To determine the joint effect of the disaggregated variables of short-term financing decisions, a joint panel regression model was estimated. This equally helped determine which of the specific variables contributed greatly to firm value. The results are presented in Table 4.12.

TABLE 4.12

Regression Results of Short-Term Financing Decisions and Firm Value

Model	Random-effects GLS regression					
Firm Value	Coef.	Std. Err.	Z	p>z	[95% Conf. Interval]	
Inventory Management	1.355	0.408	3.32	0.001	0.556	2.154
Receivable Management	0.259	0.436	0.59	0.552	-0.596	1.142
Cash Management	0.491	0.319	1.54	0.124	-0.134	1.116
Payables Management	1.138	0.256	4.44	0.000	0.636	1.640
Constant	0.981	0.149	6.58	0.000	0.689	1.273
R-Squared	0.274			Number of Obs.		249
Wald $chi^2(1)$	66.76			Number of groups		28
Prob > chi^2	0.000					

The optimal model is stated as:$FirVal_{it}$ = 0.981 + 1.355$InvMgt_{it}$ + 0.259 $RecMgt_{it}$ + 0.491$CasMgt_{it}$ + 1.138$PayMgt_{it}$

(0.001) (0.552) (0.124) (0.000)

Where: FirVal = Firm Value;CasMgt= Cash Management; RecMgt = Receivable Management; InvMgt = Inventory Management; PayMgt = Payables Management.

Inventory management, receivables management, cash management and payable management jointly explain 27.4 percent of the variations in firm value, which is take as the dependent variable. 63.6 percent of variations are on account of other variables not captured by the model. In all, the joint model was found to be statistically significant as indicated by the p -value of Wald Chi square statistics which at 0.000 was less than 0.05. The implication of this is that all the specific independent constructs jointly explain the dependent variable firm value. Inventory management indicates a positive and statistically significant impact on firm value with a p – value of 0.001 which is less than 0.05 and a regression coefficient, β = 1.355. This indicates that a unit increase in inventory management contributes to a 1.355 increase in firm value. This represents the highest impact on firm value. Similarly, payables management and firm value have a positive and statistically significant relationship; p value = 0.000 which is below the 0.05 threshold and a coefficient of 1.138. The results signifies that a unitary rise in payables management would improve firm value by 1.138 units. This is the second highest contribution to firm value. Cash management and firm value have a direct and positive association as evidenced by the regression coefficient value of 0.491. The implication is that cash management increase by one unit would improve firm value by 49.1 percent. This association is however not statistically significant. p -value 0.124 greater than the requisite 5 percent. Receivable management positively contributes to firm value, regression coefficient 0.259. This implies that a unit increase in receivable management

contributes 25.9 percent to firm value. This relationship is not statistically significant, p - value 0.552 above the cut off value of 5 per cent.

The study had four objectives based on which four hypotheses in their null form were formulated and tested. Table 4.13 represents a summary of the individual hypotheses' tests.

TABLE 4.13

Summary of the Hypotheses Tests Results

Specific Objectives	Null Hypotheses	Decision
To establish the effect of inventory management on firm value of non-financial firms listed on the NSE in Kenya.	Inventory management has no significant influence on firm value of non-financial companies quoted at the NSE in Kenya.	Failed to reject the null hypothesis.
To investigate the effect of receivables management on firm value of non-financial firms listed on the NSE in Kenya.	Receivables management has no significant influence on firm value of non-financial companies quoted at the NSE in Kenya.	Rejected the null hypothesis.
To examine the effect of cash management on firm value of non-financial companies listed on the NSE in Kenya.	Cash management has no significant influence of firm value of non-financial companies quoted at the NSE in Kenya.	Rejected the null hypothesis
To examine the effect of payables management on firm value of non-financial firms	Payables management has no significant effect on firm value of non-financial companies quoted at	Rejected the null hypothesis.

listed on the NSE in Kenya. the NSE in Kenya.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of the study in line with the specific objectives. It also presents the conclusions drawn from the findings and makes recommendations for further research.

5.2 Summary

Corporate short-term financial decisions play a crucial role in the overall performance and profitability of business enterprises. The decisions are also linked to firm value creation. The main goal of any business entity is to create value. It is not an open and shut case as to the variables that would enhance firm value. It is therefore the prerogative of individual firms across different sectors to test and find out which variables are most effective. Changes in business environment has exposed shareholders and firm they own to only to opportunities but also threats. Notably, a number of firms listed in the Nairobi Securities Exchange have been financial distressed with others recording declining financial performance, and hence firm value. Yet others have not only recorded impressive performance, but also increased in value.

It is against this back drop that this study sought to investigate empirically the influence of short-term financing decisions on firm value of non-financial firms listed in the Nairobi securities Exchange. The study adopted the longitudinal research design. A census of 44 non-financial firms listed ononthe Nairobi Securities Exchange was undertaken. However, only 28 were studied. This was due to some firms being excluded from the study as a result due to unavailability of data for some firms, financial distress of some firms leading to their expulsion in the securities market during the study period and exclusion of non-Kenyan

firms. Panel data relating to the companies for the period 2010 to 2019 were analysed using the random effect generalized least squares regression.

First, the study sought to determine the effect of cash management on firm value of non-financial firms listed ononthe Nairobi Securities Exchange. Cash management was measured as the ration to total cash and cash equivalent at hear end, to total assets of the firm. Firm value was indicated by the Tobin's Q ratio. The study utilized the random effect generalized least squares regressionsand established that cash management had a positive influence on firm value. However, this association was not statistically significant. The study therefore concluded that cash management was unrelated to firm value.

Secondly, the study sought to investigate the influence of receivables management of firm value of non-financial corporations listed on the Nairobi Securities Exchange. The study adopted the ratio of year end trade receivables expressed as a percentage of total assets to represent receivables management. Firm value was measured using Tobin's Q ratio. The results of the generalized least square regression via random effects revealed that there was a positive relationship between receivables management and firm value. The relationship was found to be statistically significant. However, jointly with other variables, receivable management was found to have positive but a statistically insignificant association with firm value.

The third objective of the study set out to examine the effect of payables management of firm value in non-financial firms quoted at the Nairobi Securities Exchange. Payables management was measured using the ratio of closing payables to total assets of the firm in the year of analysis. The measure of firm value was maintained as the Tobin's Q quotient. By utilizing the random effect regression, the study revealed that payables management had a positive linkage with firm value. Furthermore, this association was statistically significant.

The finding emphasised by utilizing the spontaneous financing occasioned by payables by extending the payables payment period enhanced firm value. This perhaps was due to the fact that corporate entities used creditors' funds u-in their operations thereby enhancing value.

The fourth and last objective sought to examine the effect of inventory management on firm value of non-financial firms listed ononthe Nairobi securities Exchange in Kenya. To measure inventory management, year-end inventories were expressed as a ratio of total firms' assets. Using the generalised random effect least squares regression, the study was able to confirm that inventory management had a positive and a statistically significant influence with firm value.

5.3 Conclusion of the Study

This study concluded that short-term financing decisions have mixed effects on firm value as measured by Tobin's Q in non-financial firms listed on the Nairobi Securities Exchange in Kenya. The findings show that firm value is dependent on the short-term financing decision made. This implies that the pecking-order theory which postulates that firms rank in terms of preferences the financing decisions is not applicable amongst non-financial firms listed on the Nairobi Securities Exchange. The Trade-off theory however provided insights to firms on the trade-off between liquidity and profitability. The study established that various financing decisions affect firms' value differently. Inventory management recorded the highest effect on firm value both as a study alone and jointly with other variables. The study thus concluded that inventory management have positive effects on firm value. Payables management recorded the second highest joint contribution to firm value. Individually, payables management came third after receivables management. The study therefore concluded that payables management affects firm value positively. In spite of receivables management recording the second highest contribution at individual level, it

recorded the lowest contribution to firm value when combined with other factors. Nonetheless, the study concluded that receivables management had a positive contribution to firm value.Individually, cash management recorded the lowest contribution to firm value. This contribution though positive was statistically insignificant both jointly and singly. The study therefore concluded that cash management has a non-significant effect on firm value. Management should therefore maintain a keen outlook on the implication of short-term financing decisions on firm value.

5.4 Recommendations of the Study

The findings of this study revealed that decisions related to short-term financing decisions are critical as they have continuous impact on firm value. As a result, a number of various recommendations relating to policy, practice and further studies can be drawn.

5.4.1 Recommendation for Practice

One of the recommendations made by this study is that listed firm in Kenya should start disclosing firm value as part of financial information contained in their audited financial statements, both interim and final. This would enhance the quality of financial reports in terms of both content and disclosures. Managers of listed firms should make conscious decisions that would enhance use and management of various components of short-term finance items as their contribution to firm value is varied. The study was able to establish the key role played by the various short-term sources of finance available to a firm. Different sources impacted on firm value differently. Practicing managers should ensure they have a clear understanding of firm value and how it is driven by short-term financing decisions. The study recommends that managers should periodically analyse the impact of their short-term financing decisions on firm value.

5.4.2 Recommendations for Policy

The regulatory authority in Kenya, the Capital Markets Authority, should come up with regulations that guide on reporting framework of the firm value. Further, the Capital Markets Authority should enforce firm value reporting, in addition to the other mandatory financial statements. If implemented, statement on firm value would provide depth to financial information that would go a long way in assisting in making better financial decisions, both in short and long run. Additionally, the regulator should create awareness among investors and provide information to them, particularly on potential drivers and pitfall of firm value. Noting that firm value is one way of growing an economy, the Gross Domestic Product, the government, both national and regional should ensure necessary conducive and enabling investment opportunities are availed.

5.4.3 Recommendations for Further Studies

Further studies using other variables that indicate firm value is recommended. The variables that this study considered only explained 27 percent of variations in firm value. This implies that there are other variables that impact on firm value. Furthermore, this study only used one measure of value. The researcher therefore recommends for further research that would consider other variables both quantitative and qualitative. The study did not consider financial firms. Future studies should endeavour for a comparative study of between financial firms and non-financial firms. The study only considered listed firms. Future studies should extend to non-listed firms.

5.5 Limitations of the Study

Though the study attained its objectives, it wasnot without some limitations. First, this study focussed only on non-financial listed firms in exclusion of the financial institutions. Financial firms excluded includes the banking, insurance and investing listed firms. The

excluded firms are short term financing decisions are dissimilar to the non-financial ones. This arises out of the regulatory regimes that financial firms operate in. As a result, the results of this study may not be generalized to financial firms. As a delimitation measure, this study suggests this as an area of further research.

The Nairobi Securities Exchange has less than 70 firms listed a small figure compared to other parts of the world. This had an impact on the size of the target population. Moreover, some of the non-financial firms were either distressed of had some of the information missing, thus constricting on the population further. A lengthy study period in addition to use of panel data may have covered on this shortcoming by increasing on the number of firm year observations.

This study exclusively used secondary data obtained from published financial statements. While this eliminated reliability concerns as it was audited and filled with regulatory authorities, missing data for some firm resulted into unbalanced panel.

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APPENDICIES

Appendix I: Listed Non-Financial Firms in Kenya

Firm/Sector

Agricultural

1. Eaagads Ltd
2. Kakuzi Plc
3. Kapchorua Tea Co. Ltd
4. The Limuru Tea Co. Plc
5. Sasini Plc
6. Williamson Tea Kenya Ltd

Automobiles and Accessories

7. Car & General (K) Ltd

Commercial and Services

8. Deacons (East Africa) Plc
9. Eveready East Africa Ltd
10. Express Kenya Ltd
11. Homeboyz Entertainment Plc
12. Kenya Airways Ltd
13. Longhorn Publishers Plc
14. Nairobi Business Ventures Ltd
15. Nation Media Group Ltd
16. Sameer Africa Plc
17. Standard Group Plc
18. TPS Eastern Africa Ltd

19. Uchumi Supermarket Plc
20. WPP Scangroup Plc

Construction and Allied

21. ARM Cement Plc
22. Bamburi Cement Ltd
23. Crown Paints Kenya Plc
24. E.A. Cables Ltd
25. E.A. Portland Cement Co. Ltd

Energy and Petroleum

26. KenGen Co. Plc
27. Kenya Power & Lighting Co Ltd
28. Total Kenya Ltd
29. Umeme Ltd

Investment

30. Centum Investment Co Plc
31. Home Afrika Ltd
32. Kurwitu Ventures Ltd
33. Olympia Capital Holdings ltd
34. Trans-Century Plc

Investment Services

35. Nairobi Securities Exchange Plc

Manufacturing and Allied

36. B.O.C Kenya Plc

37. British American Tobacco Kenya Plc
38. Carbacid Investments Ltd
39. East African Breweries Ltd
40. Flame Tree Group Holdings Ltd
41. Kenya Orchards Ltd
42. Mumias Sugar Co. Ltd
43. Unga Group Ltd

Telecommunication and Technology

44. Safaricom Plc

Source: (CMA, 2021)

Appendix II: Data Collection Sheet

Period	Firms	Market Capitalization	Total Debt	Total Assets	Cash	Receivables	Payables	Inventories
2010-2019	Eaagads							
2010-2019	ARM Cement							
2010-2019	BOC							
2010-2019	Bamburi Cement							
2010-2019	BAT							
2010-2019	Car & General							
2010-2019	Carbacid							
2010-2019	Centum							
2010-2019	Crown Paints							
2010-2019	Deacons							
2010-2019	E.A. Cables Ltd							

2010-2019	E.A. Portland
2010-2019	EABL
2010-2019	Eveready
2010-2019	Express Kenya
2010-2019	Flame Tree
2010-2019	Home Afrika
2010-2019	Homeboyz
2010-2019	Kakuzi Plc
2010-2019	Kapchorua Tea
2010-2019	KenGen
2010-2019	Kenya Airways
2010-2019	Kenya Orchards
2010-2019	Kenya Power
2010-2019	Kurwitu Ventures
2010-2019	Longhorn Publishers

2010-2019	Mumias Sugar
2010-2019	Nairobi Business
2010-2019	NSE Plc
2010-2019	Nation Media
2010-2019	Olympia Capital
2010-2019	Safaricom Plc
2010-2019	Sameer Plc
2010-2019	Sasini Plc
2010-2019	Standard Group
2010-2019	Limuru Tea
2010-2019	Total Kenya
2010-2019	TPS
2010-2019	Trans-Century
2010-2019	Uchumi
2010-2019	Umeme Ltd

2010-2019 Unga

2010-2019 Williamson Tea

2010-2019 WPP Scangroup

		Firm Value	Cash Management	Receivable Management	Payable Management	Inventory Management
2010-2019	Eaagads					
2010-2019	ARM Cement					
2010-2019	BOC					
2010-2019	Bamburi Cement					
2010-2019	BAT					
2010-2019	Car & General					
2010-2019	Carbacid					
2010-2019	Centum					
2010-2019	Crown Paints					
2010-2019	Deacons					
2010-2019	E.A. Cables Ltd					
2010-2019	E.A. Portland					
2010-2019	EABL					

2010-2019	Eveready
2010-2019	Express Kenya
2010-2019	Flame Tree
2010-2019	Home Afrika
2010-2019	Homeboyz
2010-2019	Kakuzi Plc
2010-2019	Kapchorua Tea
2010-2019	KenGen
2010-2019	Kenya Airways
2010-2019	Kenya Orchards
2010-2019	Kenya Power
2010-2019	Kurwitu Ventures
2010-2019	Longhorn Publishers
2010-2019	Mumias Sugar
2010-2019	Nairobi Business

2010-2019	NSE Plc
2010-2019	Nation Media
2010-2019	Olympia Capital
2010-2019	Safaricom Plc
2010-2019	Sameer Plc
2010-2019	Sasini Plc
2010-2019	Standard Group
2010-2019	Limuru Tea
2010-2019	Total Kenya
2010-2019	TPS
2010-2019	Trans-Century
2010-2019	Uchumi
2010-2019	Umeme Ltd
2010-2019	Unga
2010-2019	Williamson Tea