INFLUENCE OF FINANCIAL RISK MANAGEMENT ON PERFORMANCE OF REAL ESTATE FIRMS IN NAIROBI COUNTY, KENYA

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A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF DEGREE OF MASTER OF BUSINESS ADMINISTRATION (FINANCE OPTION) AT KENYA METHODIST UNIVERSITY
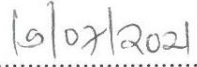
JULY 2021

DECLARATION

I declare that this thesis is my original work and has not been presented for examination in any other university.

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

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DEDICATION

I dedicate this thesis to my family and to my friend Endel Bucquet for the love, moral

support and guidance that has brought me this far. May God bless you abundantly.

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I would like to extend my gratitude and appreciation to all those who assisted me in making this Thesis a success. Thanks to Almighty God for the blessings and making things possible till the end.

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To my parents, brothers, sisters and my friend Endel Bucquet, you treasured my hard work, encouraged and supported me financially and morally throughout this study. May God bless you abundantly.

ABSTRACT

The present study set out to investigate how the performance of real estate firms is influenced by financial risk management with reference to firms within Nairobi County, Kenya. The study particularly sought to assess the influence of operational risk management on performance of real estate firms in Nairobi County, Kenya; to establish the influence of liquidity risk management on performance of real estate firms in Nairobi County, Kenya; to investigate the influence of currency risk management on performance of real estate firms in Nairobi County, Kenya; and to ascertain the influence of market risk management on performance of real estate firms in Nairobi County, Kenya. The study was anchored on agency theory, stakeholder theory, financial economic theory and new institutional economics theory. A descriptive survey design was adopted in the study, and the target population comprised of the 80 licensed firms by the Nairobi County Government which had been in business for over three years with focus on real estate agent officers. From the population of 80 real estate firms, samples of 66 firms were selected. The researcher developed and used a questionnaire as the key data collection instrument. Data collected were quantitative in nature. Quantitative data were analyzed by descriptive analysis. Statistical tools including Statistical Package for the Social Sciences (SPSS) version 26 helped the researcher to analyze and describe the data. Further, ANOVA and regression correlation analysis was conducted. The results were analyzed in frequencies and percentages.From the analysis, the study concluded that there was positive and important relationship between operational risk management and performance of real estate firms(β = .122, p = .000<.05); between liquidity risk management and performance (β = .996, p = .000<.05); between currency risk management and productivity (β = .272, p = .000<.05); and between market risk management and productivity of real estate firms (β = .215, p = .000<.05). The study recommends sound mechanisms for real estate firms to increase the performance, the firms should aim at reducing the possibility of deferred maintenance, reduce risk of rising expenses to keep the real estate operational, reduce the possibility that the installed technology will not negatively influence the core business process and ensure that they reduce health and safety related incident performance risk. In addition, firm managers should assign tasks associated with marketing to third parties, such as brokerage organizations to reduce cost.

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LIST OF ACRONYMS AND ABBREVIATION

EAPI   **:**   East Africa Property Investment

IT   **:**   Information Technology

KNBS   **:**   Kenya National Bureau of Statistics

KRA   **:**   Kenya Revenue Authority

MS   **:**   Microsoft

NSE   **:**   Nairobi Stock Exchange

ROA   **:**   Return on Asset

ROE   **:**   Return on Equity

SPSS   **:**   Statistical Package for social Sciences

U.S   **:**   United States

UK   **:**   United Kingdom

USP   **:**   Unique selling proposition

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter builds the case for studying the influence of financial risk management on performance of real estate firms in Nairobi County, Kenya. To this end, it explores the conceptual definitions of the main variables in the study as well as the contextual justification of the study. The chapter particularly discusses the background to the study, followed by an in-depth characterization of the study constructs that is level of profit, leverage, liquidity, size of the firm and dividend payout. The chapter further discusses the research problem, objectives, hypotheses, significance and scope of the study.

1.2 Background of the Study

Real estate development is well-thought-out to be the riskiest corporate activities in the business world today. Since the making of real estate items is in several circumstances speculative, by which an expectation of an unidentified future demand, with risks and a lot of uncertainty are vital components of any real estate progression. The growing profession is to be considered as vastly recurring and unpredictable. According to Ali et al. (2019), the real estate expansion is shrewdly taking a risk. Real estate advancement is liable to various hazardous factors. Effective advancement, inter alia, is subject to introducing a satisfactory timely and at the correct price item to the ready market in real estate (Armeanu & Bãlu, 2017). The expansion income relies on accomplishing everything whereas balancing expenses against price of the real estate items. Growth is static equally in time and in the outer space and includes somewhat huge sums of capital.

Moreover, real estate advancement is an intricate and multi-disciplinary assignment as it characteristically stresses on a devoted group of individuals with diverse ranges of abilities and proficiency, and the synchronization of an extensive variety of interconnected events. Local authorities, lawful necessities, occupants and neighbors are to be contented, strategy groups and contractual workers to be overseen, time gauges, expenses and emergencies to be supervised and creditors and additional shareholders - particularly potential occupiers and venture capitalists - to be satisfied. Additionally, real estate creators are frequently cope with substantial variations within their surroundings and fresh encounters compelled by the macroeconomic, societal, urban-planning, political-legal, supervisory, ecological and technological background circumstances. Nevertheless, notwithstanding the great risk aspects, the real estate advancement business lingers behind different ventures in its intricacy and use of risk identification, assessment, moderation and control. Tseng (2007) reported that developers were regularly critiqued for not satisfactorily comprehending and scrutinizing risk.

The banking and insurance cover divisions have for a long time established and engaged complicated systems of risk managing approaches and the extent of educational study in these parts is too abundant to break down. Their efficiency is definitely arguable subsequently looking at the worldwide fiscal predicament, even though it's probably attributable to insufficient industrious use of said methods. Agreement as per constitutional requests on risk aspects is also well recognized in the grounds of good quality, surroundings and also safety measures. During development levels or commercial levels which have unnoticed risks or are identified too late can generate predicaments in the long run. Frequently irrevocable destruction has transpired or losses

have been suffered by then. As a regulation, marginal possibility for action is left at this late phase and it is normally no longer probable to accomplish the required reversal. Real estate advancement occupation necessitates an unlimited consciousness of risk as well as its control methods (Bhagat & Black, 2001). Not only does it branch from the uncertain landscape of the development procedure and its intricacy but also from the supervisory, capital market and shareholders stresses which demand prodigious mindfulness of risk and risk management.

Regulatory pressure and corporate ascendency provisions are gradually demanding better mindfulness of risk and risk management; It has become a compulsory obligation in a numerous number of countries and no longer voluntary so as to safeguard the establishment's shareholders from the allegations of the establishment's evasion of its responsibilities. The core objective of regulation has been intended for the executive committee, advocating for more control and discipline concerning efficacy in the procedure, dependability of fiscal reporting in addition to obedience of rules and regulations. The regulatory modification of the banking and investment division through the reviewed rules of the Basel Capital Accord has an imperative influence on consciousness of risk and the various risk administration techniques in real estate advancement. Consequently, Basel ought to end in better consciousness of risk and its administration in real estate advancement and it ought to provide a benefit to risk administration capable home and property designers who will be able to scrounge at additionally beneficial charges. Capital markets weight notwithstanding the administrative weight, the capital market presently likewise necessitates satisfactory business risk management. On the same note, Plat and Heynick (2001) found out that the

organizations which were capable of providing proof of competent risk administration may well have profited from a further advantageous budget of capital. In disparity, developers who can't exhibit orderly opportunities and management of risks, that is a vital constituent of any business regulation contrivance fixated on conception of assessment, and lacking a reward for a high level of assurance and being reprimanded by the so called capital markets (Meen, 1990).

Shareholders' pressure, likewise, other shareholders of real estate development establishments anticipate an effective distribution and usage of resources. It is harmless assume that organizations that are capable of demonstrating their conscious of their risks and manage threats and openings in an effective and entrepreneurial way, capable to arouse self-assurance amongst their shareholders as well as any additional corporate associates who are willing to ponder an association controlled in a risk-aware style considered credit-worthy. When it comes to sharing risk-specific features to main shareholders, a substantial objective for management is to guarantee them that satisfactory risk management policies have been instigated. Achievement in fulfilling real estate advancement mandate or joining combined endeavor investments will depend, among other things, on indicating that sound suppositions concerning risk aspects have been considered. Devoid of sound risk management, real estate advancement administrations stand a high chance of being reprimanded as responsiveness to risk and risk management enforcement. There has been an extensively engraved conviction that an organized risk management tactic is a vital achievement aspect for real estate development and under dire circumstances be a contributing factor of the final results as either successful or failure. Nonetheless it mostly does not manifest during times of

strong economic growth but always evident during economic decay periods (Meen, 1990). According to Millington (2013) advancement establishments ought to implement risk declining and risk control procedures.

United States of America dictates commercial asset markets, accounting for roughly one third of world assessment. In contrast, Europe as a continent contributes approximately an equivalent fraction. The over-all value of non-government possessed real estate was roughly $25 trillion in the mid 2000's, as compared to an estimated stock market assessment of roughly $20 trillion at that time. Approximately 55% of real estate value was in private equity, 19% in private debt, 16% in public debt and 10% in public equity. Although the value of real estate is focused in technologically advanced land, the latter is merely about 6% of the entire land region in the U.S. The prevalent shares of land use are water regions and civic land (approximately 23%), followed by forest land (21%) and then several agrarian uses. These statistics have altered only to some extent over the previous two decades. In terms of percentage alteration, on the other hand, technologically advanced land has improved by about one-third during that period. Real estate contends against additional asset classes in the capital markets, and over the past numerous years there has been numerous upsurge in business flows. Overall commercial real estate capacity in the U.S. was approximately $300 billion in 2006, and ought to approach that figure in 2007. In contrast, in 2001 the capacity was $65 billion, and in 2004 $160 billion.

Real estate stakeholders have continued to be more than careful of the Sub-Saharan area, which is logical to a certain degree, since regular risks are still alleged to be remarkably high. Aversive political and politico-economic influences, exchange risks, illiquidity and

the low amount of pellucidity prevalent in these markets in addition to a number of eternal institutional restrictions are only but a few aspects to state that still ruthlessly damage the image of Sub-Saharan Africa as a target for real estate venture. Consequently, of the prevalent worldwide fiscal crisis, undoubtedly these image aspects have even grown in prominence. Thus, overseas real estate venture capitalists' insights stay engrossed on the flaws and risks of Sub-Saharan Africa's investment climate as an alternative for the growth potential in Situ. The evident assumption must be made that overseas real estate venture capitalists' image formation of Sub-Saharan Africa is a sheer consequence of restricted coherent conduct. According to fresh empirical data on venture capitalists' topographical selection, Sub-Saharan African real estate markets have so far been of excessively low prominence. The apparent risks, which vividly seem to dissuade potential overseas financiers could, however, be well replaced by a variety of optimistic aspects recently attributed to Sub-Saharan Africa, explicitly effective change potentials and high-yield potential (Burns & Scapens, 2011).

Performance of Real Estate Firms

Profit maximization stands out as among the still relevant and long-standing objectives of an organization. Popularly considered as the key most factors of organizational performance, profit can be defined as the extra income earned after accounting for the expenditure experienced in producing the same income. The excess amount of revenue gained over expenses incurred is considered as Profit when it comes to accounting (Crouhy et al., 2006). Whereas though a great majority of the population does not comprehend other organizational performance measures, most do value and understand profits, indicating its significance. In view of the growing competition globally, it is

nowadays paramount for organizations to maintain and create a high competitive niche in their individual industries. For the same to take place, organizations are required to have infrastructure which may be sought either externally through debt financing or internally through retained earnings. Even with regard to external sources through debt financing, an organization may have the capacity to repay, when and as the obligation becomes due, the debt instrument. As such, organizations which luck profitability may not have credit. They therefore will not endure in the future and consequently fall away from the market (Hudáková, & Dvorský, 2018).

In the real estate sector, there exist three different techniques employed in assessing an organization's performance, including: market-based approach, economic approach and traditional approaches. In the traditional approach, measuring performance can be conducted in two different ways, including relative or absolute performance measurement (Ha et al., 2001). Whereas the relative technique considers the traditional ratios as measuring performance, the level of profit acquired as an accumulation of income less total expenses is used in the absolute terms. These are the gross margin, with net income margin, together with return on assets, (ROA) and also return on equity, (ROE). In this measure of performance, ROA assesses the pre-tax incomes to the total firm (Hudáková, & Dvorský, 2018). It associates the profit earned by a firm, to its total assets base. ROE is further an assessment of pre-tax earnings to the equity base. It associates the profit earned by a firm, to its total assets base. ROE is further an assessment of pre-tax earnings to the equity base. The net margin and gross margin ratios assess the organization's efficiency with regard to the amount of the sales that can be turned into profits.

The economic technique on the other hand compared to the traditional expenses, considers the opportunity cost sustained by a business. Its aim is to assess an organization's labor abilities, as well as the net worth of the business' management and money. As such, the opportunity cost is considered as investment returns predetermined by the lack of resources invested elsewhere. Therefore, alongside other conventional expenses, these are deducted as they form part of the expenses, from income. The viewpoint provides a long-term outlook of a business operation and reveals instances where resources could have been put to better use (Frank, 2014). The time value for money is under this approach, also measured and all cash flows are reduced to the net present value. It therefore takes into consideration variations in price increase rates with a view to reflect the actual value of cash flows expected at dissimilar timing.

In the United Kingdom (UK) and the United States of America (USA), performance of the main commercial real estate is mostly measured by a variety of valuation-based indices, including repeat sales, hedonic modelling and real estate equity performance (Sukrri et al., 2019). In the year 2020, the real estate performance in the UK was projected to continue on a growth trajectory, with Office, Retail, Industrial and Logistics and Multifamily portfolios making up the largest share. In spite of ongoing political background noise at the time, office occupier markets were particularly poised to keep performing well across the UK. Demand in the sub-sectors was projected to be driven by a broad range of industries such as the public sector and professional services (Raynor, & Whitzman, 2020). Performance was projected to be strongest in London and the neighboring major urban locations while divergence of assets saw prime retail outperform the rest. Also, in the year 2020, the key trend was repurposing of assets,

characterized by converting excess retail space into the creation of mixed-use destination arrangements (United Kingdom Housing Corporation [UKHC], 2021).

In the United States, the real estate sector had until the year 2020 been on a growth trajectory with respect to performance. Yield compression was on the capital markets side, realized during the year 2019 as uncertainty dissipated while structural change continued in the retail sub-sector, also in the year 2019 (Partnerships, 2013).Demand for logistics further remained high in 2019which resulted in growth in rents alongside high volumes of investment. By the year 2019, the multifamily real estate sub-sector had become established in the United States property market. The sub-sector had grown from less than 1% in 2014, to contribute to 7% of total investment in real estate in the USA. The year 2019 also saw new entrants into the market, as extant investors continued to build their respective portfolios (Raynor, & Whitzman, 2020).Also, in the United States, growing demand for operational real estate continued to increase the quantity of deals for substitutes. In 2019, cyclical and structural factors resulted in a larger apportion of capital of the institutional nature to alternate property. Complete mergers or tighter partnerships of brand owners and real estate owners drove pricing and volume as sectors 'hotelified' (Dacquisto & Rodda, 2020).

In Nigeria, the real estate sector had as of the year 2019been faced with decreasing occupation demand with disparities between actual and expected income which was largely negative particularly in the commercial real estate sub-sector. The same period saw a doubling and even tripling of prices in real estate (National Bureau of Statistics [NBS], 2020). Further, housing units' demand continued to exceed the supply. For many

investors, the Nigerian real estate market's scale and size renders it a lucrative and attractive sector (Abdul-Rasheed & Tajudeen, 2006).Between the year 2010 and 2019,the building sector' value-added to the GDP in real estate industry increased from 3.5% to 13.4%, indicating an annual growth or compound development rate of approximately 11.2%. Real estate and property segments' contribution to GDP increased and expanded from 3.9% in 2010 to 4.7% in 2019. Statistics however indicate that the growth and contribution of real estate market to GDP has recorded declining growth paces over the same period (NBS, 2020).

In South Africa, the real estate sector made up 5.6% of the country's GDP in the year 2019. The listed-property sector in South Africa is worth approximately R500bn, 46% of which reflecting overseas market investments (Morgan Stanley Capital International [MSCI], 2021). Performance of the real estate sector in South Africa depends largely on drivers of the economy and has been during the past five (5) years confronted by slow economic growth. The number of firms quoted on Johannesburg Stock Exchange's real estate sectors grew since 2017, although between 2017 and November 2019, their capitalization of the market decreased by 64.4% as the country moved into recession (Nedbank, 2021). Further, property share prices between November 2019 and April 2020 lost 34.2% following the coronavirus outbreak which severely impacted local and global markets. Office demand however remained unexpectedly stable over the last 3-yearsamidst a constricting economy characterized by unemployment, largely owing to strong growth in businesses' gross fixed capital formation (MSCI, 2021).

In Kenya, the real estate sector is currently on a rising trend, owing to the increasing growing demand for housing units occasioned largely by both rural to urban migration and increase in population (Cytonn, 2019). With the growth of customer base and investor appetite in tandem, the real estate sector in Kenya continues to grow and expand. As of the year 2020 however, factors including the global Covid-19 outbreak, improved networking capabilities and increasing operational costs have seen a significant corporate focus shift opting for flex space and satellite setups to scale down from traditional office space (Cytonn, 2019). Subsequently, slowed rental growth trends and growing vacancy rates in outmoded office spaces are beginning to emerge in a considerable number of markets. Industrial space in contrast remains the strongest class of asset, with leading capital growth year-on-year supported by low rates of vacancy (Cytonn, 2019).

Financial Risk Management in Real Estate Sector

Over the most recent decades, risk investigation and commercial risk management activities have become precisely essential components for both commercial as well as non-financial corporations. Financial risk management according to Collier and Berry (2012) reported that it refers to formation of economic value in a firm by usage monetary systems to be able to cope with its venerability to risk, principally to credit risk plus the market risk. In light of overall risk management, financial risk management necessitates isolating the main causes and gauging it while coming up with strategies to address them. Financial risk management is frequently well-outlined as the sudden inconsistency or volatility of earnings and hence incorporates the credit, liquidity and market risks. Consequently, financial risk management encompasses processes and techniques widely used by administrators in an effort of protecting an association from credit, liquidity and

market risks. Credit, liquidity risk management and market risks are the three main groupings that constitutes to financial risk management, credit, liquidity and market risks (Collier et al., 2014).

The paramount aim of fiscal risk management enactment is meant to uphold commercial productivity in the real estate subdivision as features of risk management endorse initial cautionary method of observing pertinent pointers; on top of inspiring and making provisions for potential truthful pressures on the system by conducting stress analysis. This assists the controllers to observe the system and strategize techniques to avoid potential or uncovered stress on the system hence establishing financial performance (Bikker & Metzmakers, 2005).

In Australia, speculation about the real estate market has been strong since the year 2003. Accordingly the International Monitory Fund (IMF) did in the rear 2008warn that the Australian housing bubble would bust, as the property market was overrated by about 25% (Bisset et al., 2004). More recently, The Economist (2019) pointed out that according to house price indices, house prices in Australia were the most extortionate globally, being overpriced by 56.1% vis a vis long-run price to rents average ratio. Similarly, Carmassi et al. (2019) observed that in the wake of a housing bubble that is unsustainable which could at any time burst and with house prices north of 50% relative to their fair value. Brown et al. (2010) further asserted that over a 20-year period, Australian real estate consumers have been overly borrowing to purchase assets which they believe always appreciate in value, terming this as a typical sign of an asset bubble, with home prices above fair value by between 30 and 40%. To address the potential bust, real estate firms in Australia over the years adopted a number of risk management

practices including risk identification, at which level risk is classified as whether operational, liquidity, currency and market risk. The risk is then analyzed and evaluated for potential impacts after which it is treated (Susilawati, 2020).

In Malaysia, the main risks identified in the real estate sector are liquidity and operational risks (Goh & Abdul-Rahman, 2018). Both kinds have been found to have a substantial effect on the performance of project with regard to quality, time and cost. Accordingly, Osipova and Eriksson (2019) suggested that in Malaysia, a major project performance improvement would be realized by focusing on addressing both of the risks, as opposed to managing a greater number of risks that are minor. The standard risk management strategies across a majority of real estate firms in Malaysia include risk identification which attempts to establish potential risks characteristic in any project including risk sources; risk assessment in which a quantitative and qualitative analyses are carried out; risk response where strategies are a formulated to deal with the established and assessed risk events as they occur; and risk monitoring which entails responding and monitoring to emerging and current risks (Banaitiene et al., 2019).

In Ghana, the real estate sector alone contributed 1.78% of GDP in the year 2018(Ghana Statistical Service, 2019). In spite of this, only a scanty number of transactions in real estate were recorded. This was largely attributed to impediments in the housing supply in Ghana, rendering it significantly challenging. To handle the housing deficit, a number of statistics point to Ghana requiring at least 190,000 units' annual delivery for at least 8 consecutive years (Addae-Dapaah & Yong, 2018). The said inability of the Ghanaian housing delivery system to effectively address demand has over the years resulted in strain on the extant housing infrastructure and stock, particularly in urban areas resulting

in greater attention to be shifted to regions outside the capital city. To a large extent the housing inadequacy in Ghana has been attributed to dismal performance by developers in the real estate sector who cease to operate mid-projects as a majority run into financial problems occasioned by risks which have been identified as currency, liquidity and operational (Ametepey & Ansah, 2019).

In Tanzania, the real estate sector is currently experiencing a growth in housing demand largely exacerbated by the fast-growing population which is approximated at 53.47 million, and which is anticipated to double by the year 2050 and the growth rate to increase to 2.98 million per year in 2025 from the present 1.56 million per year (UN-HABITAT, 2018).A survey by Kongela (2013), revealed that despite the fast-growing real estate sector, a number of challenges greatly hamper the full realization of the sector's potential from the developers' perspectives. Key among these include currency, liquidity and operational risks, lack of development finance, hiking of construction material prices, high interest rates, inflated land prices, unclear property rights, and over taxation of real estate transactions.

In Kenya, real estate is recognized by the Central Bank of Kenya (CBK, 2018) as a main sector in the Kenya economy. The real estate sector in Kenya has over the last decade witnessed rapid growth, largely attributed to high investor confidence both international and local owing to the sector's attractive returns in comparison to other types of investment including bonds and equities (Cytonn, 2019). According to CBK (2018), 30 to 40 percent of real estate investments in Kenya is contributed by Kenyans living abroad while17.0% of the country's real estate business emanates from the diaspora. With the continued growth in the country's real estate sector, the market has been subjected to a

plethora of risks which include among others; liquidity risk, operational risks, market risks and currency risks (Cytonn, 2019).

Real Estate Sector in Kenya

When it comes to real estate, it can be defined as all organizations that are involved in land and any possessions that sit on it. Real estate is categorized into residential, commercial and Industrial real estates. Kenya had experienced a great improvement in the real estate division recently; such that it was classified as standing at number four among the highest firms to contribute to the economy of the country (Kenya National Bureau of Statistics [KNBS], 2013). This is as a straight reaction to increased level of demand. The Kenyan population is growing fast coupled with an upsurge in rural-urban relocation. The middle-class citizens with demand for accommodation in urban areas are fast escalating. The availability of mortgage had also enabled home ownership among the Kenyan middleclass citizens. As such, in this sector, the profits have been considerably great since mid-2000s to the present and anticipated to rise into the future. While the housing and land prices have been increasing, the overly high profits can be attributed to slower rise in building materials. This led to even foreign investors being attracted to invest in the real estate sector. Among other foreign investors include Knight Frank from the United Kingdoms (UK), which is currently among the major letting companies for such notable properties as the latest Garden City Mall which houses over 120 retail stores. The mid and upper class in Kenya have embraced a new way of shopping which has resulted in a rise in shopping malls across the city Centre and expanding now to the city outskirts.

To finance their projects, the real estate firms need a huge preliminary investment. A majority of them turn to financial institutions for debt financing, as to a majority of the investors, this may not be attainable. As opposed to longstanding debt however, short term debts are more preferable to financial institutions thereby making longstanding debt less affordable (Kamau, 2011). Compared to equity therefore, a majority of the real estate firms are characterized by a higher debt level. Consequently, the high debt structure has a tendency to increase the firms' liability to equity ratio an effectively influencing both performance and the cost of capital.

1.3 Statement of the Research Problem

In line with East Africa Property Investment (EAPI, 2018) the decline of the Kenyan shilling compared to main currencies, double digit price increases and interest tariffs climb to a history making 30% up from 14% in 2011 took its toll on one of Kenya's utmost robust sectors. Inventors and purchasers carry on the fight to meet funding costs prompted by ever-increasing interest rates generated through tough constriction of financial policy to counter the declining of the Kenyan shilling and escalating prices. The irony is some inventors are deserting developments, delaying phases, or decreasing the quantity of homes being built, building laborers are being left without a job and fore closures are expected in approaching months- all these in the midst of a yearly demand of 250,000 housing units and supply of merely 60,000 hence wearing away the bulk of their incomes which had been attributed to ineptitude in financial risk management.

Financial risk management research done locally include: Muteti (2017) completed an investigation on the connection between financial risk administration and the financial performance and presumed that there was a bad connection between operational risks,

with liquidity risks, currency risks, together with market risks and financial performance. He further uncovered a positive connection between capital management risk, bank stores, bank measure and also on areas of financial productivity of most of commercial Kenyan banks. Githinji (2013) completed an investigation on impacts of financial risk management on the part of financial productivity of business banks found in Kenya.

After all reviewed research studies, it is obvious that there exist narrow studies concentrating on real estate firms which fall among the real estate division in Kenyan setting. It is against this circumstance that this research embarked to close the prevailing contextual and conceptual loop holes by seeking to create the influence of financial risk management on productivity of real estate industry in Nairobi County, Kenya.

1.4 Objectives of the Study

1.4.1 General Objective

The underlining overall purpose of this research was to examine the influence of financial risk management on performance of real estate firms in Nairobi County, Kenya.

1.4.2 Specific Objectives

Below are four specific objectives that guided the study:

  i.   To assess the influence of operational risk management on performance of real estate firms in Nairobi County, Kenya.

  ii. To establish the influence of liquidity risk management on performance of real estate firms in Nairobi County, Kenya.

  iii. To investigate the influence of currency risk management on performance of real estate firms in Nairobi County, Kenya.

iv.   To ascertain the influence of market risk management on performance of real estate firms in Nairobi County, Kenya.

1.5 Hypothesis

In this study, the ensuing research hypotheses were tested:

i.   **H0$_1$**: There is no significant relationship between operational risk management and performance of real estate firms in Nairobi County, Kenya.

ii.   **H0$_2$**: There is no significant relationship between liquidity risk management and performance of real estate firms in Nairobi County and liquidity risk management.

iii.   **H0$_3$**: There is no significant relationship between currency risk management and performance of real estate firms found in Nairobi County, Kenya

iv.   **H0$_4$**: There is no significant relationship between market risk management and performance of real estate firms in Nairobi County, Kenya.

1.6 Significance of the Study

Findings emanating from this study are of potential benefit to a number of stakeholders pertinent to financial risk management among real estate companies in Nairobi County, Kenya, as hereunder elaborated:

Real Estate Companies

Real estate companies will immensely benefit from the study findings as they will be informed of the various financial risks inherent in Nairobi county real estate sector and how their management same influence their firm performance. These include operational risk, liquidity risk, currency risk and market risk. This will equipment with the necessary

knowledge that will enable them develops effective financial risk management strategies in tandem with their respective risk appetites.

Real Estate Investors

Investors in the Kenya real estate sector will also benefit from the study findings, as they too will be informed of the operational risk, liquidity risk, currency risk and market risk.to which they subject their investments and how management of the same can yield them their returns on investment. Most of the outcomes of this case study set up the key attributes of each kind of financial risk management. In this manner it will be helpful to partners in the real estate industry and even new speculators as they get to unmistakably comprehend the benefits and negative marks of each sort of risk management. The partners in the business will subsequently be settling on educated choices dependent on realities and not on suppositions in light of expanding benefit.

Policy Makers

The policy makers will definitely find this case study to be useful and more so the government and the Estate Agents Registration Board (EARB) in carrying out their role of regulation. The study will identify the challenges that companies in the real estate sector face and therefore disclose areas in which the regulatory organizations can step in, in order to forefront development in the industry and in return, the overall economic growth.

Scholars

This study will also contribute to the Kenyan body of knowledge pertinent to financial risk management and performance of real estate firms in the country. This will add a pool

of knowledge and will help scholars get an insight on the impact of financial risk management on operation of real estate companies found in Nairobi County, Kenya. For academicians, the study will be a reference point for those looking to further investigate the region of financial risk management. Future specialists will almost certainly advance the point further and better as this study includes the current assemblage of information.

1.7 Limitations of the Study

One key limitation of this research pointed out was a sure unwillingness of the respondents to share important information that assisted the researcher to conduct the research adequately for confidentiality purposes and fear of victimization. To address this, the researcher completed the study successfully by assuring the respondents that he or she would keep the information given very secretive and would use it only for academic purposes only.

The study was also limited to the four specific objectives and accordingly, the four risk management practices and therefore did not explore full spectrum of variables which influence performance among real estate firms in the country. To address this limitation, the study made a suggestion for further studies into other possible variables influence performance among real estate firms in the country.

Further, the study was limited to the sample size of 66 estate agents in the country and could not reach the entire population of registered real estate firms. This ran the risk of misrepresenting the actual scenario on ground. To address this, the study also made a suggestion for future studies to reach other areas apart from Nairobi in order to capture scenario as experienced by other real estate firms across the country.

1.8 Delimitations of the Study

Constraints like time and funds were some of the boundaries encountered in this study. It was demarcated to real estate firms functioning within the capital city of Kenya, Nairobi County, only the sampled population provided the needed data, it was also restricted to the approaches of data collection stated and finally, the study narrowed down to achieving its objectives.

1.9 Scope of the Study

The demographics of the study were carried out within 80 real estate firms found in Nairobi County. Stratified random and purposive sampling was the criteria used in selecting the respondents which comprised of real estate agent officers from Nairobi County. Real estate agent officers provided the data needed, after which it was coded, analysed and recorded within the period of April, 2019.

1.10 Assumptions of the Study

During this research, the outlined deductions were made: The research variables namely operational, liquidity, currency, and market risk management influenced accomplishment of real estate firms in Kenya. The researcher would get full support from the respondents in the process of collecting data and that data and information sought by the researcher would be readily available and easily accessible. The respondents would be honest in providing information to the researcher.

1.11 Operational Definition of Key Terms

The research was based on the following basic terms as defined.

Currency Risk management Conferring to Van Rooij et al. (2011), it is the management of the disclosure encountered by venture capitalists or corporations that work through diverse countries, in regard to volatile additions or losses owing to fluctuations in the value of a single currency with respect to another currency.

Liquidity Risk management Muteti (2017) defines it as the management of the risk that branches from the absence of marketability of an investment that cannot be credited or put up for sale swiftly and carefully to avert or diminish a loss.

Market risk management Refers to the management of risks connected with losses in situations escalating from fluctuations in market values (Siegrist et al., 2005).

Operational risk management According to Wang (2009), it refers to the recurring procedure that comprise of risk assessment procedure, risk in decision making, and enactment on measure of the risk controls, making headway to approval, moderation, or evasion of risk.

Performance   Refers to the definite results or achievement of an association as compared to its anticipated targets or yields (Dibrell et al., 2014).

Risk   Olsson (2002) stated that risk refers to the probability of antagonistic consequences happening.

Risk management   According to Weber and Milliman (2013), the definition of risk management in simple terms is an organized, disciplined tactic that aligns plans, procedures, people, technological tools and understanding with the drive of assessing and handling doubts a real estate advancement firm encounter as it increases its value.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter gives a synopsis of literature material from other researchers and authors who have undertaken their exploration in a similar ground of research is provided. The particular parts in this chapter looked into were theoretical and empirical review, the conceptual and operational framework.

2.2 Theoretical Literature Review

There are a number of motivation theories that create the foundation of this research. The advancement of these theories has been able to explain the effects of financial risk management on the performance of real estate firms. This research study narrows down to the following theories; agency, stakeholder, financial economic and new institutional economics philosophy.

Agency Theory

In the opinion of Smith and Stulz (1985), agency theory clarifies the connection between the principals of the associations and the administrators of the firm. This relationship fuses segment of ownership and control, and administrative motivation. Agency theory concerns itself chiefly in settling issues that emerge in this relationship either due to unaligned objectives or on account of risk levels of repugnance. In business risk management issues will in general influence the organization's performance on risk taking and evading (Chowdhry & Goyal, 2000). Agency theory likewise takes a gander at the intrigue varieties between the proprietors, directors and debt holders (Collieret al., 2014). Due to deviation in income, the administration may result in taking excessive

risks or it may deliberately avert participating in ventures which may well have encouraging returns. Consequently, agency theory suggests that separate supportive methods can have a notable influence on organization value, Collier et al. (2014) initially proposed why it is significant for the executives of an organization to adopt risk management. He states that executives ought to be working for the stockholders and they are supposed to concern themselves into refining the performance of the organizations and the anticipated yield of the firm's assessment. For stockholders, decent risk management will save their investment by cutting on agency costs since they decrease in deviation of revenues of their corporations.

Executive motivations in the implementation of risk management have been well thought-out by numerous researchers to have an undesirable outcome. Regardless, optimistic ratification was found by Collier and Berry (2012) in the analysis he conducted on gold excavation and of mining industry in the United States Fiscal plan. Concepts were endeavored in analyses of the money associated postulates, since both assumptions gave virtually indistinguishable statistics; however, the enormity of experimental evidence is by all explanations in contradiction of this assumption. Agency theory supports the methodology of risk management as a reaction to frustrate among managerial spurring powers and investor premiums. Stockholders plus management will consistently contrast towards the enthusiasm of the firm and the goal of risk management is additionally expected to differ. Stockholders may well anticipate great risk – great profit ventures, but the executives might favor low risk and high profit ventures. There agency theory ought to give emphasis to respectable risk management geared towards

supporting the interest of the executives and those of the stockholders so as to influence on the commercial performance.

Agency theory can be unveiled the echoing of the words on paper written by Berle and Means (1991) which states that in large corporations there is a need to separate between ownership and control. In the opinion of Jensen and Meckling (1976), this is a company whose network of contracts are defined understood synchronized and clear, among numerous gatherings or shareholders which can include the society, employees bondholders and shareholders. Managers are being hired to manage the corporations in these modern times as there are no shareholders involved in the daily operations since they are widely dispersed and cannot manage their companies efficiently (Habbash, 2010). The agency theory functionality is manifested when the management is separated from the owners.

Stakeholder's interest in real estate agency theory brings problems when it's not aligned with the principles interests. Conflicts vary in categories depending on the agencies parties involved such as; stockholders vs. management (managerial or managerialism); stockholders vs. bondholders; private vs. public sectors (social agency); private vs. public sectors and political agency. This study is beneficial because it justifies the management risk as purely agency theory. Therefore this principle is applicable to the present-day study since it enables the attainment of the core objective that pursues to know the impact of financial risk administration on the productivity of real estate organizations within Kenya, Nairobi County.

Stakeholder Theory

The primary determinant of corporate strategy revolves around putting emphasizes on the theory of balancing the stakeholders concerns. In specific enterprises, especially cutting edge and administrations, buyer trust in the organization having the option to keep offering its administrations later on can generously add to organization esteem. Wheeler et al. (2002) disputed that sociological and organizational discipline is the combinations were stakeholder theory is derived from. Undeniably, shareholders theory is informally a combined theory but diversely a research tradition, with it carrying ethics, political theory, law, philosophy, economics, and organizational science.

Donaldson and Preston (1995) pronounced that there is an intrinsic value on all the stakeholders' interests, and none of the managerial decision making should be considered to be greater in this theory than the others. Unlike agency theory were the stakeholders don't work but have left all the day to day operations to the managers, Shareholders theorists' network of relationships with the managers within the organization suggest that managers serve the likes of shareholders, employees and suppliers. In agency theory the relationship between employee and owner-manager is not as essential as the group networking (Wheeler et al., 2002). For the goodness and productivity of a firm, stake holder theory is key strategy and essential as taking care of the stakeholder need. Nevertheless, the estimation of these understood cases is exceedingly delicate to anticipated expenses of fiscal unrest and liquidation. Subsequently corporate risk management led to a decline in these normal costs, an organization's worth rises (Crouhy et al., 2006).

Consequently, shareholder theory delivers a fresh understanding of potential underlying principle for risk management. Corporations can decrease the probability of monetary distress by equivocating unpredictability in net income by supervision of financial risk (Jensen, 2001). The accrued gains of firms constituencies, its assumption as a single-valued objective critique the Stakeholders theory. The gains gotten from a firm's performance should not be a firm's measure of performance according to Jensen (2001) dispute. He further pointed out that the gains from the produce of the firm to its stakeholders is not and should not be the standard to which it's being measured on, but rather measure how information flows senior management flows through other key ranks underneath, even between person to person relations, and also considering the place of work, and many other factors need to be considered and attended to as critical issues. A proposal was made of a new theory called enlightened stakeholder, mentioned as an extension of the theory. Nonetheless, its relevance was limited due to the problem of relating to empirical testing of the extension (Sanda et al., 2005). This principle is applicable to the present case study since it enables the attainment of agenda three that pursues to research the impact of currency risk management on productivity of real estate corporations in Nairobi County Kenya.

Financial Economic Theory

The principle of financial economic philosophy stipulates that business risk supervision is suitable to raise corporation worth in the existence of capital market inadequacies for instance bankruptcy expenditures, a convex tax agenda, or under-investment difficulties. Risk management can raise stockholder worth by coordinating sponsoring and investment strategies. A dependable risk management can lessen under-investment expenses by

decreasing the instability of corporation value. As the under-investment difficulty that comprises of fiscal risk management is expected to be further severe for companies with substantial expansion and investment openings, a number of measures such as the market to book quotient, research and growth to sales ratio, capital expenditure to sales, remaining assets from procurements to size which are pointers of financial performance are taken to try out the under-investment theory (Hudáková, & Dvorský, 2018). Factors that the present study mentions as having important influence on financial performance included size and debt of the firm as well as capital investment. Other attributes include economies of scale, barriers to entry, product and service quality, market share, capacity utilization and industry characteristics. Many studies looking into the connection between debt and financial productivity have been conducted.

Jensen and Meckling (1976) determined that debt and financial performances have a positive relationship. There is a contention that debt acts as a catalyst to that motivates the undertaking of profitable ventures by the managers to make it possible for the organization payoff their debt obligation and thus increasing profits and improving financial productivity of the organization. Nonetheless, this research unveils a caution which is agency costs. According to Jensen and Meckling (1976), the existence of leverage which brought about an increase in profitability is at a risk of diminishing because of that agency costs experienced to manage the association between shareholders and managers. Saliha and Abdessatar (2011) studied the antecedents of financial performance with a particular interest on the association between form of debt and control and performance. During the period 1998-2006 a study was conducted on 40 Tunisian listed companies. Results of performance, debt and form of control show a very

important relationship between them in this study. This relationship is more prominent in listed firms owing to their ease of capital rising via equity and/or debt marked by profitability and higher growth than unlisted companies as well as their un-concentrated ownership structure and.

According to Agustinus and Rachmadi (2008), the factors defining the performance of 238 listed corporations in the Indonesian Jakarta Stock Exchange (JSX) in the period 1994 -2004. Relationship between firm size and profitability, have shown a positive result. Firm size is in the study measured by use of the natural logarithm of total assets whereas Return on Assets is used as the measure of firm profitability. This philosophy is applicable to the present case study since it enables the realization of the fourth objective that strives to explore the impact of market risk management on productivity of real estate partnerships within Kenya, specifically Nairobi County.

New Institutional Economics Theory

As stated by Frank (2014), within a particular business or market this concept foretells that risk management may be established by organizations or become a recognized practice. Additionally, this concept associate's safety by way of explicit assets procurement, which suggests that risk management, can be vital in agreements that bring together two parties without authorizing expansion, for instance a bulky financing agreement or close collaboration within a supply sequence. Corporations in controlled production firms deliver the best management with insufficient chances for caution in business investment and financing choices. Gallagher and Gallagher (2016) exhibited that managerial control is a crucial factor of a corporation's business fiscal strategy.

Consequently, if regulated companies encounter thorough analysis and encounter lesser contracting expenses, then they are unlikely to evade business risk. Particularly, companies can evade cash flows to elude a deficit in capital that possibly will need an expensive official visit to the capital markets and simultaneously, fiscal risk management is positively connected to actions of the company's investment opening fixed delegations. This concept is applicable to the second objective in the present case study since it pursues to realize the impact of liquidity risk management on productivity of real estate companies among Nairobi County, Kenya.

Figure 2. 1

Theoretical Framework
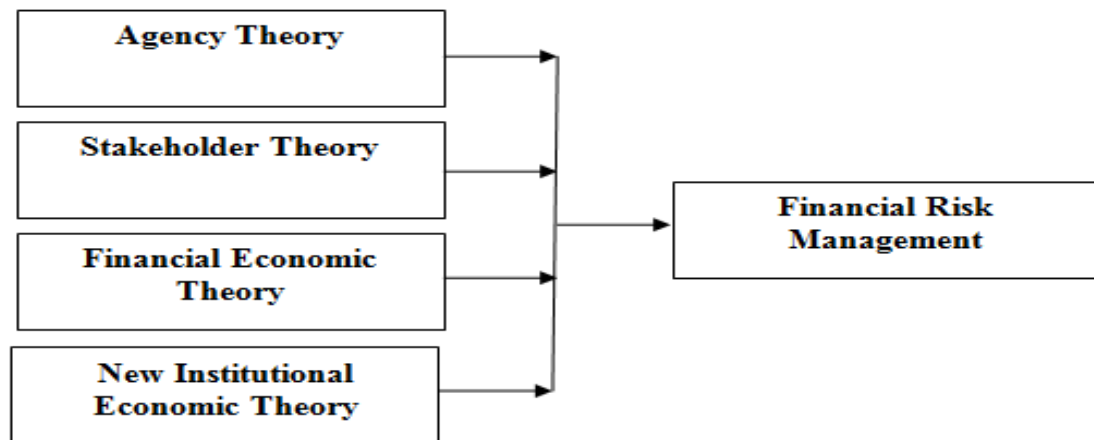
Source: Author (2019)

The foregoing theories can be conceptualized as elucidating financial risk management as illustrated in Figure 2.1. While agency theory enables the attainment of the core objective that pursues to know the impact of financial risk administration on the productivity of real estate organizations within Nairobi County, Kenya. Stakeholder theory enables the attainment of agenda three that pursues to research the impact of currency risk

management on productivity of real estate corporations in Kenya, Nairobi County. Financial economic theory on the other hand enables the realization of the fourth objective that strives to explore the impact of market risk management on productivity of real estate partnerships within Kenya, specifically Nairobi County while new institutional economic theory pursues to realize the impact of liquidity risk management on productivity of real estate companies among Nairobi County, Kenya.

2.3 Empirical Literature Review

The study reviews various studies attached to motivational factors affecting employee performance. This section includes various sections based on the research objectives.

Operational Risk Management and Performance

Gilbert and Rasche (2013) conducted a study that was directed by two aims: To realize the operational risks management as well as fiscal performance in real estate field in Tanzania and to establish the operational risk sources amongst profitable ban real estate industry in Tanzania. During this research a target population of 36 certified real estate corporations was through a descriptive research design as at December 31st 2013 with a test population of the 36 companies being studied. Secondary data was acquired from the fiscal statements of real estate corporations between 2009 and 2013.The study developed a regression model with the predictor variables consisting of mostly credit risk, bankruptcy risk and operative effectiveness and firm productivity being measured by ROA. In these research findings, it established that the independent variables had unstable degrees of connections with fiscal performance of real estate firms. The examination affirmed that working viability was positively correlated together with fiscal

performance of real estate companies while credit risk and bankruptcy risk negatively affected the fiscal exhibition of real estate corporations.

Githinji (2013) conducted on the association amid operational risk and administrative surroundings in land and property corporations, to investigate the association amid administrative surroundings and administrative performance and to find out the association amid operational risk and administrative level of performance in real estate firms located in Uganda. This research assumed both cross-sectional and descriptive survey design with the specific target population consisting of a 60 member staff of associates 14 risk management workers, 9 human resource advisors, 18 workers in IT, 13 operation workers and a total of 11 high-ranking executives. This was established through questionnaires and interviews being used to acquire facts through study of 51 respondents sampled. The study obtained secondary data from extant companies' journals council reports and literature. The findings of the study established that there was a substantial and positive association amid operational risk management, administrative setting and administrative performance. The regression analysis additionally revealed that administrative setting and operational risk management were significant pointers of organizational performance.

The continuity, performance and management of business activities in an estate are contained in an operational risk management, this is considered in three levels; the firm, assets and portfolio levels (Taylor et al., 2008). The risks entailed here are Strategic and business operating risk plus leverage, product design features together with asset correlation and investment concentration. The three level sets can also be used in the forum of Property Investment; these are considered as risk management strategies. Risk

management entails a process of evaluation which utilizes the analysis through the comparison and prioritization of the potential risk influences. Christensen (2001) in his study noted that the three factors that are required for an action to be outsourced include: specification of the function to enhance comprehension of the function of the requirements by both parties, secondly is the development of measures in a transference manner which evaluates as the requirements are being met, the third one is that the organization ought to comprehend the influence on total performance of a failure to meet.

According to Simons et al. (1999), during the development and implementation of strategies, organizations are subjected to risk thus require tools to define when, and if, these risks maybe unacceptable. The bases of strategic risk are always drawn in the strategic management literature in specific terms such as production risk, technological risk, financial risk, output and mostly market varying risk, managerial capability and efficiency, environmental and competitive risks (Thompson, 2001). According to Simons et al. (1999), Strategic risks that influence all organizations are broken down to three key sources: competitive risk, operations risk and asset impairment risk. The relationship to corporate real estate can be determined through a coherent way of grouping risks and taking each one in turn through this framework.

The genesis of operations risk is the breakdown in a core performing, manufacturing or even processing ability (Simons et al., 1999). At any level of strategy, it is connected to the events in an organization that are crucial to the makeup worth. From the view of corporate real estate, the potential for system failure of a key project could create operations risk. For example, Loss of revenue and reduced customer confidence may be

experienced in a financial service organization due to a leaking roof or a power failure in a data Centre therefore hindering future growth and overall competitiveness.

In these variables, the quality of works examined is measured by the effect of ISO standards. A firm's financial and risk management impact is determined by the implementation of quality standards. For example, ISO 9001 makes it possible for a firm to realize their goals and help align their objectives with internal processes. Effective management of risks in the firm needs managers through these processes for quality service to draw up tactics that guarantee success. Universal concepts are unveiled as quality practices, which have a large impact through applicable in all contexts and having a large impact through application in all contexts on business productivity. A firm performance is largely determined by the kind of quality management and practices revealed from an extensive empirical research done to support the notion (Hendricks & Singhal, 1997; Lemak et al., 1997; Samson & Terziovski, 1999). The American Quality Foundation study released by Ernst Young was one of the most well-known studies of quality practice on the international Quality study 1992.In firms that already perform well, this goes on to show the impact of quality management in this firms as evidence of this study (Hendricks & Singhal, 1997). They found that many organizations that are award winners see the impact of quality practices during their research on quality as the main focus.

Operational risk management is centered on three major aspects. First the susceptibility for impairment in the value of balance sheet assets, secondly a deduction in intangible worth, and thirdly the physical impairment of the products (Simons et al., 1999). Bearing

in mind that corporate real estate is a major asset and a relevant proportion of the net tangible products of almost all corporations, this type of risk is highly significant.

As organizations attempt to manage the risk in corporate real estate, a model is necessary to find out the sources of risk in a relevant way to that developed for business strategic risk (Simons et al., 1999). It is believed that there are three genera categorized risk associated with corporate property: One is financial risk, then asset market risk and finally business risk. Even though there is some overlap, each of these requires an understanding and management.

Governance is also a key factor that is intertwined directly with the organizational performance studies show that a firm quality of service and risk management determines its profitability in effect of relationship between corporate governance and performance. Gompers et al. (2003), had results from the studies done on 1500 US firms in the beginning of the year 1990s, measured corporate governance development into a reliable index. Furthermore, Gompers et al. (2003) and Drobetz et al. (2004) conducted studies in German firms on high standard of service to positive corporates in which it was attributed to. Bauer and Matzler (2014) GMI established that 15% as the margin between efficient organizations with good governance in the region from the database of business environment from the information acquired from the Japanese. For overall performance to improve the enterprise governance as the center stage, it is believed that the whole pictures view is obtained there need to be ideal objectives arranged and ensure good control. Moreover, it comes as a huge opportunity and a large task. The leadership variable is also frequently found in organizational diagnostic simulations (Burke & Litwin, 1992; Waterman et al., 1980; Weisbord, 1976). Serious decisions on financial

performance and risk management in an organization is critically determined by leadership. Among 1993 companies in the manufacturing industry, the leadership study conducted by Weiner and Mahoney (1981) showed that the share price and profitability was largely influenced by how the system of management was being led. In order to improve firm performance its key driving force is with the leadership. Organizations shareholders are not the key decision makers in the acquisition, deployment, development of organization resources but that of the leaders, and the leaders should add value and deliver valuable products and services. Therefore, competitive advantage comes from managerial rents sources which can sustain it (Rowe, 2001). For employees and the organization to archive its objectives more efficiently and do a good job, leadership helps in giving rewards to good performance. Intellectually stimulating, inspirational, and captivating styles are the ones needed for a global competition for the new work environment with high levels of integration and interdependencies far from management-by-election and reinforcement are basic styles used in transactional that leadership needs to move away from (Avolio, 1999; Bass 1997; Bass & Avolio 1993).

Liquidity Risk Management and Performance

Glaum (2017) carried out a study whose main aim was diagnose the impact of liquidity risk management on the fiscal productivity of land and property corporations in Zambia. A detailed study design was introduced with the target population being the Real estate companies as at December 31st 2013 became the target population with the adopted detailed research design. A secondary data was gotten from available accounts of real estate firms which included declaration of income statement, monetary position as well as other disclosures between the periods, 2010 to 2013. The study established a regression

model with the independent variables being: liquid to overall assets, and liquid assets to overall credits, balances owing to other firms/overall assets and asset value whereas performance being tested using the ROA. The findings of the research deduced that liquidity risk management had a substantial detrimental affiliation with real estate firm's performance. The study further deduced that holding extra liquid assets in contrast with overall assets would lead to inferior returns to real estate firms but at 5%, the effect was insignificant holding extra liquid assets in contrast with overall credits would lead to lower returns to real estate firms with its effect being significant at 5%, a small upsurge in liquid asset to overall asset fraction decreased returns on assets by 1%, a small upsurge in liquid asset to overall credits fraction decreased revenues on assets by 2.2% while a small upsurge in borrowings from real estate firms decreased revenues on assets by 14.2%.

Hameeda (2015) investigated the liquidity faced by real estate corporations in Kenya and to define the association amid liquidity risk and the productivity of corporations found in Kenya. Consequently, that case study integrated a correlation research design with information being gathered from annual reports gotten from a sample of 14 real estate firms being analyzed between 2008 and 2012. Regression model was established specifically with the independent variables consisting of cash and liquidity gap and the dependent variable being PBT. The research findings established that performance was adversely influenced owing to an upsurge in liquidity gap and control. Moreover, the study depicted a substantial influence of every aspect of liquidity risk on real estate firms' performance.

Kibara (2017) conducted a research whose focal aim was figure out the liquidity trends of selected real estate companies in an attempt to ascertain the performance tendency of some of the selected real estate firms to be able to analyze and find out the connection between firm liquidity and performance levels in Ghana. Data was collected between 2006 and 2009. The ratios of liquidity employed in the study were cash ratio, present ratio, rapid ratio and networking cash flow ratio while the performance ratios comprised of net asset turnover, net income margin, revenue on equity and revenue on assets. To achieve the set objective, trend analysis was adopted. The results of the study found out that there was no positive association amongst liquidity trend and performance whereas a negative association existed amid liquidity and firm's profit in Ghana.

Using data in the Amman Stock Market, Muteti (2017) investigated the liquidity management effect on productivity in Jordanian real estate companies between the years 2005 and 2012. The study developed a regression model with performance being determined by ROE and ROA while the predictor variables consisting of rapid acid, liquid ratio, ratio asset ratio, net credit amenities/overall assets and investment ratio. The study found out that when measured by ROE, liquidity management has an effect on performance where the consequence asset ratio and rapid ratios on performance. The impact of capital ratios on performance was positive as tested by ROA while the influence of the additional predictor variables on ROE and ROA was negative. The negative effect was attributed by the researcher to better capacity of unexploited credits at the Jordanian real estate firms.

Although the past studies have used regression examination to show the effect of liquidity risk management on performance, none of the studies had considered the panel

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data attributes by testing the relevant diagnostic test such as Hausman test, heteroscedasticity test and multicollinearity there is need for the current study to test these diagnostic tests and consequently fit the appropriate model. Moreover, there are contrasting results and even if the studies were done in different regional locations there is need for a similar study in Nairobi County, Kenya so as to test role of liquidity risk management strategies on performance among profit making organizations.

For institutional investors, investing pension savings, it is necessary to be with a whole foundation of low risk assets. These very assets can be utilized to limit future liabilities. The most familiar used asset for limiting has customarily been highly rated bonds (Anson et al., 2011). The diversification in interest rates, with reduction of return on all periods and the connections with the shortest period even having negative result has led to investors searching for optional investments that have higher output to complement the connections (Fransson, 2017).

This optional investment always entails a lower level of liquidity, which implies that the asset takes longer duration to sell (Amihud & Mendelson, 1986) to a justifiable price (Damodaran, 2005). In spite of this fact, alternative investment has grown in popularity as interest rates have fallen. The shift has been that investors have increased their allocation in most types of illiquid products; the biggest and most heavily invested type of real, illiquid investment has however been real estate and alternative types of property. However, having only minimal amount invested in any asset class is a good diversification and can deduct the risk of the overall portfolio. It is when a larger ratio of the total portfolio consists of illiquid assets that the risks may gain merit (Anson et al., 2011).

Some specific key studies done on liquidity by different chosen Nigerian Banks include Toby (2008) who in that research declared the discovery by Bordeleau et al. (2009).Berg and Koziol (2008) did actually use a regression theory to evaluate the threat of banks in Brunei which are owned by Islam's and the reason why they were failing. They noted that the three risk factors, determination, evaluation and analysis were the most influence variables. Akhtar et al. (2011) consequently investigate the solvency of a financial organization linked to liquidity risk through a relative analysis between ordinary and Islamic banks in Pakistan from 2006to 2009. The research found relevant but unimportant connection between The net-working capital and size of the bank with liquidity risks was the connection found between the two during this research but unimportant. Between the years 2004 to 2009 while in Pakistan, Ahmed et al. (2012) use repeated regressions examine 22 Pakistani banks liquidity risk and its influence on banks' profitability. Bank profitability was significantly affected by liquidity risk according to their research study. The two factors worsening the liquidity risk are liquidity gap and non-performing products as they have a negative connection with profitability.

Currency Risk Management and Performance

Sang (2017) indicated that financial offshoots are employed more broadly by companies with financial constraints that are tighter as well as by companies with more know-how in the use of derivatives. If in a position to endure volatility in the short term, firms do less in currency risk management. With internationally diversified revenue, global businesses may consider their global diversification as offering a natural border against currency instabilities. There are currencies that are difficult to hedge or more expensive; rather than bearing the extra costs in these markets, these might be left unhedged.

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In a study by Lyambiko (2015) on recommendations, practice and theory with respect to multi-asset investment portfolios, it was found that realizing a perfect hedge is made practically impossible by uncertainty of cash flows. It was also found that the optimum ratio of hedging is frequently less than one, for instance of the value of overseas investments, it may be better to hedge 80% or 60%, more than 100%. Sewanyana (2018) views that real estate industry advice and practice in regard to currency risk management widely varies, ranging from currency overlap strategies in which case a firm appoints professional currency manager to vary hedging ratios with time or conduct hedging depending on financial and market macroeconomic circumstances, balance non-domestic liabilities and assets and manage the net exposure) through partial hedging, and full hedging to 'naked exposure' with the proposition that it is dependent on the investor's risk tolerance, location, objectives among others.

A study by Schoemaker (2016) established that there are a number of ways to manage cash, from those that regard this to be as the responsibility of others to those that assume full responsibility of overseeing money hazard. As shown in the results, while most executives paid attention to that remote instruments of trade being utilized to supervise financial opportunities, these were utilized in a variety of ways, with a huge predisposition away from management of financial opportunities where there was a 'cost' of production as such: for example, where the external finances were relied upon to diminish in comparison to the local cash. Consequently, this implied that the finances overseen by the executives were being used particularly to oversee hazard as much as lift returns.

According to Alshatti (2014), a number of reservations raised by land support chiefs do not understand the full expenditures of supporting financial opportunities of portfolios. There is therefore a presupposition to comprehend the expenditure of money hazard by the executives. A distinctive requirement between the costs of exchange for instruments of cash supporting, the different expenses and effect of the loan fee differential may be valuable in incorporating administration of financial opportunities into speculation choices. In the performance of supporting for instance the buy of advances, swaps or choices – access to live market information and estimating is expected to guarantee exchange expenses are limited. What is the most proper instrument will rely upon a wide scope of components and master skill or counsel is required. There was a recommendation influence is at times higher than it would have generally been so as to lessen outside trade chance. This appears to just intensify one lot of dangers to lessen another, money hazard.

According to Selcuk et al. (2010) creating markets results in singular money subjects because quickly developing economies and equivocation cash danger of implausible loan cost is disposed to regularly having a large undesirable impact on returns while cash progresses can have a particularly huge impact on the conveyed returns and these monetary forms are increasingly unstable. Nevertheless, with less created external trade markets, instruments to manage cash hazard and the spending from the financing cost differential are at times, not accessible and progressively costly. Land financial authorities have therefore, for emerging markets where external trade markets are incompetently grown, constrained capacity to manage financial hazard. For emerging

markets, where managing financial hazard is possible, the choice for supporting ought to reflect similar issues to the ones in created markets.

According to Sibel and Selim (2017), there is a dearth of answers on what a director or land financial specialist should do concerning administration of cash chance, provided it is dependent on the speculator's resilience for various dangers, targets, their home, the costs engaged with supporting danger and the position for explicit markets. Along these lines, the best practice is to have a straightforward and reasonable approach that sets out what is not and what is supported, in what conditions and why variety is allowable. Additionally, data on supported positions and money exposures should be accumulated to enable the approximation of hazard and the management of cash hazard ought to be likewise checked for instance regardless of whether the effect of money developments in harmony with desires has been expelled by cash supporting.

Market Risk Management and Performance

In real estate business, dissemination strategy is usually categorized by explicit methods of in-house and third-party trades. Particular methods, for instance the trading of stocks in open or closed real estate assets will not be further deliberated on currently. While the building task arrives to a conclusion, workload progressively shifts towards project promotion and advertisement, while some separate marketing assignments have progressed in parallel with the whole advancement procedure. Outsiders can be appointed with the task associated with promotion and advertising, for example brokerage corporations. Since the lasting achievement of the assets is in all respects emphatically subject to a viable renting system and on finding a suitable blend of inhabitants. The emphasis is consequently on coming up with and securing a 'unique selling proposition'

(USP), that which bestows the venture with profits in the judgment of future consumers or venture capitalist's likened to rival ventures or properties, and in this manner presents significant factors of rivalry as well as price (Siegrist et al., 2005).

A commonly appropriate integration of the rental performance part of the development procedure is not likely and not mandatory. Rental and leasing activities begin with the preliminary acquaintances with customers. The earlier renting or leasing happens, the larger the economic safety of the whole development venture. Promotion and searching aim to deliver advertising tools and data to prospects and facilitate to pinpoint lessees to rent the property (Simon, 2016).

Vital performance pointers to assess the efficacy of the rental procedure are brokerage expenditure as a part of yearly leasing revenue, promotional cash used for every outlook or publicizing cash expended for each square meter rented. An evaluation of accounted lease to definite lease ought to be made during the renting procedure, and the tenancy level ought to be supervised. Additional information to be collected and evaluated comprises of rental and advertising expenditure for every cent of income, and typical allowed lease (or concessions) on fresh tenancies. Substantial risks of the rental procedure are that not enough leaseholders are fascinated with the upgrade. So as to realize filled tenancy, greater offers/discounts may have to be delivered to the leaseholders and sub-optimal agreements are employed, eventually bringing about lesser revenues. Unsatisfactory tenancy may well for the reason that agreements cannot be completed due to criterion problems, or residents choose not to rent space owing to market details or asset nature.

Moreover, sub-optimal agreements come up if tenancy arrangements are disorganised in agreement with lawful regulations, clauses in tenancy contracts are ambiguous and bring about misinterpretations, and collegial tenancy terms are approved because of an absence of market information or arbitration abilities. There is a substantial risk that a resident can dismiss a lawfully defective contract hastily, particularly when market leases have deteriorated, compelling the landlord to pursue a new occupant in hostile market situations. Other risks comprise the prospect of breaking laws if rental managers do not make available satisfactory certification to conform to laws of fairness (Sjöberg & Engelberg, 2017).

2.4 Summary of Literature Review

The theoretical underpinnings of the study problem, empirical literature and conceptual framework have been reviewed in this chapter. Under the theoretical framework, the chapter identifies and discusses relevant theories. The section delves deep into the models and theories underpinning the study. The theories are discussed with a view to understand, predict and explain occurrences and, in most instances to extend and challenge existing knowledge, within the confines of the bounding norms.

The empirical literature has further assessed previous scholarly work with respect to the present study objectives. The main study variables have been explored with respect to previous contributions of scholars as the gaps are discovered. Finally, the chapter has gone further to present a diagrammatic representation of the nexus association among the concepts of the study. Empirical literature is in this regard reported in a way that other researchers exactly understand what was studied and determined in a given study so that

they could replicate the research to find out whether when repeated, the results are reproduced.

A conceptual framework is further presented, identifying and mapping out pertinent variables guiding the study demonstrates what the researcher expects to establish from their study. The conceptual framework was used to define the various variables explored in the study and demonstrate how they could relate to one another. The conceptual framework was further used to indicate how the identified gaps will be addressed and the hypothesis tested.

2.5 Conceptualization

A detailed figure that demonstrates the connection between independent variables and the dependent variable is referred to as a conceptual framework. This investigation has the dependent variable as performance of real estate corporations whereas the independent variables are: Operational risk management, Liquidity risk management, Currency risk management and Market risk management.

Figure 2.2:
Conceptual Framework
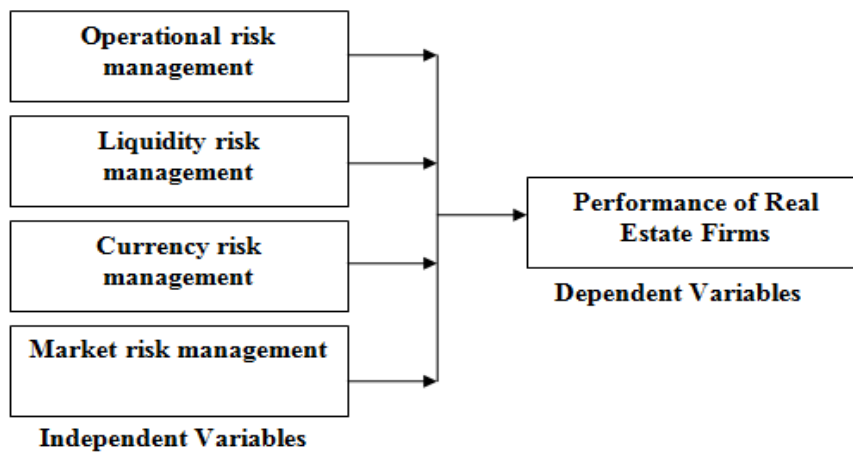
Source: Author (2019)

As shown by Figure 2.2, Risk management, operation risk management, liquidity risk management, currency risk management as some of the various financial risk management factors prompting the performance of most of the real estate firms in Nairobi.

2.6 Operationalization

In order to conduct research on Operationalizing Variables in Science, reasoning, logic, and ethics are some of the basic pillars combined among many (Muhammad, 2015).

Figure 2.3:

Operational Framework
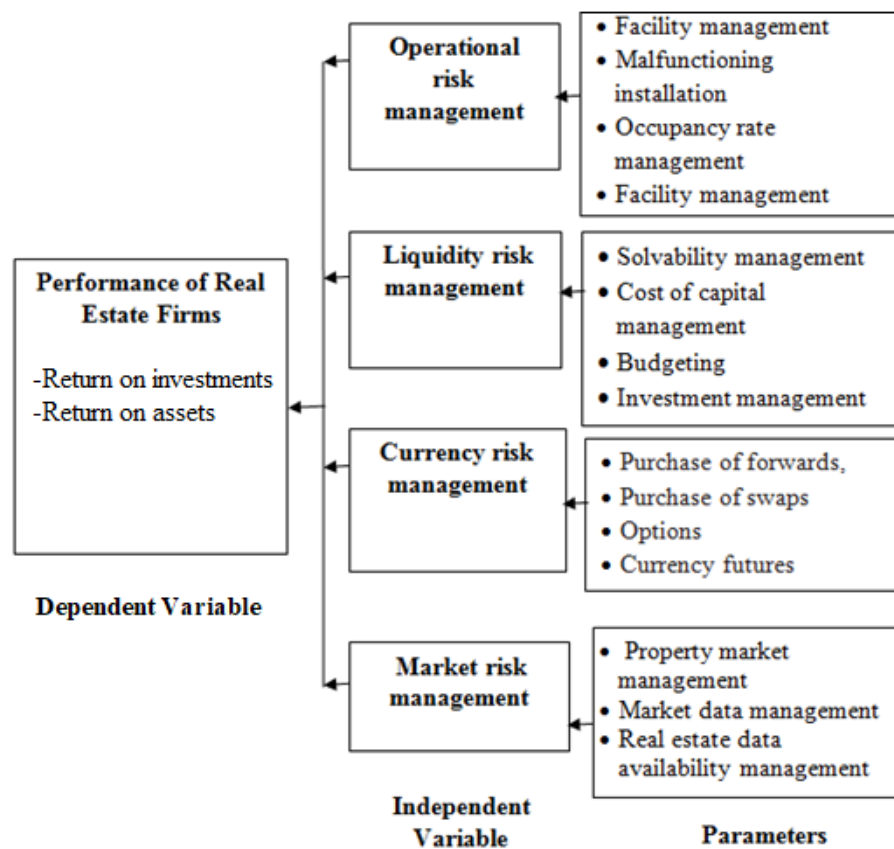
Source: (Author, 2019)

Return on Investment

Return on investment of training programme in India, Government enterprise indicated that (ROI) is one of the most intriguing and challenging issues facing the performance improvement and human resources development (HRD) fields. With ROI, in a study conducted by Subramanian et al. (2012) stipulates that decision makers evaluate investments by associating the magnitude and timing of expected gains `compared to investment costs. Therefore, performance of organizations as well as real estate firms requires a good ROI suggests that profits equate favorably to capital. This specific scholar's point of observation was good and precise however, it only evaluated programs in Government enterprises. Threshold Programme and the Excellence in Project Management were two programmes chosen for the study with each having 30 participants: Therefore, the study can contribute to the knowledge gap on return investments in real estate firm's performance in Nairobi, County, Kenya

Return on Assets

Over the period of 2004 to 2013 by a research carried out on the effects of financial performance on capital structure by Dasuki (2016), indicated that ROA ratios were statistically unimportant on the financial performance measured among the 180 manufacturing companies quoted on Borsa Stock Exchange Istanbul Turkey. Therefore, the conclusion derived from the study is that the ratio of debt-to-equity has a positive effect on productivity.

Operational Risk Management

Operational risk relates with the responsibility of the management. This involves the management of risk related with property maintenance. This is the possibility real estate

fails to operate at its full potential owing to deferred maintenance. The other operational risk that was managed was related to facility management. This was concerned with energy, cleaning, catering, surveillance and maintenance. Operational risk management also involved malfunctioning installation that concerned the possibility that the installation technology did not meet the requirements and negatively influenced the core business process. Occupancy rate management involved dealing with occupancy and losses that can come by.

Liquidity Risk Management

Liquidity risk originates from the absence of marketability of a venture that cannot be credited nor retailed fast enough to avoid or lessen a loss. The study will focus on solvability management. Solvability management is the likelihood that the firm may not have the ability to realize its long term financial responsibilities owing to the level of debt equity capitalized in real estate. Cost of capital management entails reducing the long and short term financial influence as a result of the decision how to finance real estate business. Budgeting seeks to reduce the possibility that real estate budget cuts lead to declining real estate performance. Concerning real estate investment management, firms seek to minimize the likelihood that the real estate investment does not give the prerequisite return on investment.

Currency Risk Management

Currency risk is in close association with economic risk, which refers to the economic situation influenced exchange rates. Currency risk was the possibility that rents would increase due to fluctuating exchange rates. In this study currency risk management involved purchase of forwards, purchase of swaps, options and currency futures.

Market Risk Management

When it comes to real estate industry market risk management becomes the likelihood that developments in the property market raise the costs of real estate. The property market had two different effects on real estate performance. The first effect was that owner occupiers would want to reinvest their extra real estate assets in an economic recession. The space available on the property market would increase, leading to reduced real estate value. The second effect was the effect on the market rent. Real estate rents tend to alter rendering the timing very crucial.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

On this specific chapter, it illustrates fundamentals of how the research was carried out
and procedures that are engaged to examine the effect of financial risk management on
performance of real estate Company's in Nairobi County. Specifically, it covers study
design, common masses, data collection, sample and sampling process used the research
instruments, validity and most reliable of the research instruments, data analysis and
presentation.

3.2 Research Design

The study adopted a descriptive research design, since it involved the use of a survey data
collection instrument, particularly a questionnaire. The design is based on an observation
or exploration of two or more phenomena known for its identification of attributes of a
particular phenomenon according to Carr (1994) Further, this design involves data
collection techniques through interviews, observations, questionnaires and documents
review. A detailed research design is the ideal for this research since it includes data
collection and utilizes surveys to gather opinions from the participants (Steenkamp &
Baumgartner, 2013).

3.3 Target Population

A specific target population is that group a researcher wishes to take a broad view in a
study (Van et al., 2017). According to this study, the target population was estate agents
from the 80 real estate firms in registered to operate in Nairobi County, as per the real

estate agents in Kenya, 2018records. The real estate firms formed the units of analysis while the 80 respondents formed the units of observation.

Table 3.1

Target Population

Real estate Agent Officers Category	Frequency (F)	Percentage %
Residential real estate agent officers	23	28.7
Commercial real estate agent officers	20	25.0
Industrial real estate agent officers	19	23.8
Real estate officers dealing with Land only	18	22.5
Total	80	100.0

Source: (Real Estate Agents in Kenya, 2019)

3.4 Sampling Design

To arrive at the sample size, the study utilized a formula by Yin (2009) as indicated in Krejcie and Morgan (1970) table for determining the sample size. The following formula was utilized to arrive at the sample size:

$$S = X^2NP (1-P) / \{d^2 (N-1) + X^2 P(1-P)\}$$

S = determined sample size

N = the size of the target population

X^2 = the table chi-square value for 1 degree of freedom at the given confidence level (3.841)

d = the degree of accuracy presented as a proportion (.05).

P = the proportion of the population (assumed to be .50 as this would give the maximum sample size).

$S = X^2NP\,(1\text{-}P) \,/\, \{d^2(N\text{-}1) + X^2\,P(1\text{-}P)\}$

$S = \{3.841*80*0.5(1\text{-}0.5)\}/\{0.05^2 *(80\text{-}1) + 3.841*0.5(1\text{-}0.5)\}$

$S = \{3.841*80*0.25\} \,/\, \{0.05^2*79 + 3.841*0.25\}$

$S = 66$

3.5 Sample Procedure

This study adopted stratified random sampling procedure in selecting respondents in every firm category, which formed the strata. As shown in Table 3.2, the determined sample size, 66, was then proportionately distributed across the strata, as per the percentage proportions established in Table 3.2.

Table 3.2

Sample Size

Firm category	Respondents	Percentage %	Sample Size
Residential real estate	23	28.7	19
Commercial real estate	20	25.0	17
Industrial real estate	19	23.8	16
Firms dealing with Land only	18	22.5	15
Total	**80**		**66**

Source: (Researcher, 2019)

3.6 Data Collection Method

In Order to ensure that unnecessary data collection was avoided, the appropriate data collection instruments were selected to address the study objectives. This study, being descriptive in nature, questionnaires was used for data collection as a key instrument. The relevance of questionnaires for this study was based on their ease to administer, their

wider reach that cuts on costs and can be drafted in a format that is familiar with the participants. Questionnaires are also simple and quick to complete and data is collected in a standardized way. The questionnaire consisted of closed-ended questions in this study, as they are effective in restricting responses into relevant information towards directly addressing the study objectives (see appendix II).

Furthermore, data collection process is referred to as the gathering of information from any study via the use of research instruments. The entire needed essential documents to where used be obtained from the relevant authorities to facilitate the process (Cooper & Schindler, 2006). After receiving these necessary documents, questionnaires were distributed to the real estate agents and a follow up was done to ensure the questionnaires were filled and collected back.

3.7 Data Collection Procedure

After approval of the proposal, a letter from the University was presented to the management of the respective real estate firms under study two weeks in advance. This was for purposes of creating a rapport with the study participants. All the essential documents to facilitate the process of data collection were obtained by the researcher. Kenya Methodist University is where the letter of introduction was obtained and used to acquire other essential documents from NACOSTI, like research permit from relevant authorities in Ministry of education.

Further the nature and purpose of this exercise was to raise their self-esteem and boldness. In conducting of this study, respondents were guaranteed of confidentially when being administered with the research instruments. Questionnaires were the

instruments of study adopted for data collection. They were designed in such a way they would elicit astounding information from the respondents and included both open-ended and closed-ended questions.

Pilot Test

According to Brymen (2011), piloting is a necessary phase of any study since it ensures that the measurements from the instruments are of acceptable reliability and validity. The questionnaires were piloted in Kiambu County which had similar characteristics with Nairobi County. Findings from the pilot test were used to eliminate any ambiguity in the questionnaires.

In order to establish trustworthiness of the research instruments a case study was done in Kiambu County since it neighbors Nairobi County. Questionnaires were administered to 20 real estate agent officers at pilot firms which were selected randomly. These agents were chosen purposively as the agents in the study area to ensure that they bear the same characteristics. The study adopted the pilot study in Kiambu County so as to regulate the "halo effect" and to broaden the practicality of the research. The very tests were done so as to establish whether the terms used identify with the agents as respondents. The feedback obtained from the piloted agents was helpful to the study in revising the research instruments to make sure the purposes of the study were covered sufficiently.

Piloting was also conducted to ensure as much as possible that the items in the questionnaire elicited and gave the type of responses study with intent to get and that they were satisfactory in terms of their content. Furthermore, the content for accuracy and consistency used in the instruments on the pilot test ensured that unclear information was

removed while deficiencies and weakness were noted and corrected (Creswell, 2014). This ensured simplicity and suitability of the items.

Validity Test

In reference to Validity, it is the degree to which evidence supports any interpretations the study concludes data collected based on the research instrument used (Fraenkel, 2012). Pointing out on this study, two types of validity were tested to prove that the questionnaires were able to measure all they intended to measure on face validity and content validity.

The likelihood that questions in a data collection tool will be understood is referred to as Face validity. A pilot study was conducted in a neighbouring county with similar characteristics after which responses to each item were observed to identify any ambiguity and misunderstandings to improve on the face validity. Some of the items found to be ambiguous or unclear were adapted thereby making face validity better.

Whether a data collection instrument offers adequate coverage of the topic is referred to as content validity. Pre-testing of open-ended questions and expert opinions literature searches were used to better improve the content validity, pre-testing of open-ended questions, literature searches and experts' opinions were used. The questions in the questionnaire with the instruments with guidance from the university supervisors were brainstormed with mates and necessary corrections made thereafter. The pilot study results were consequently helpful in the upgrading of the content validity.

Reliability Test

The internal consistency test was utilized on this study to examine the questionnaire's reliability. Cronbach's alpha (α) is according to Field (2006) used to measure the reliability index of a questionnaire. Technically, Cronbach's α is a coefficient of reliability Ibrahim, (2011) since it assesses a questionnaire's the consistency with regard to its construct (items) and shows an error free scale. According to Ogwueleka (2011), in adopting Cronbach's α, negative constructs can be detected and positive constructs accepted ranging from a scale of 0 to 1.0. According to Ogwueleka (2011), the acceptable minimum value for Cronbach's alpha is from 0.5 to 0.6. In this study, the cut-off value for was 0.70. In this study, for items to be considered to form a scale, the items ought to be above the cut-off value. The two broad constructs in the questionnaires included demographic profiles and study objectives.

3.8 Methods of Data Analysis

The completed questionnaires were edited to ensure they are complete and consistent after which the data was coded to group the responses into various groupings. The data collected that was quantitative in nature was examined using descriptive statistics in terms of frequencies, percentage, mean and standard deviation. The study utilized a statistical analysis tool SPSS 26 to analyze data collected.

To quantify the strength of the relationship among the variables, the study adopted this regression analysis model:

Regression Analysis Model

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where; Y= the outcome variable (Profitability)

α - Is a constant and is the Y value when each of the predictor variables (X_1, X_2, X_3 and X_4) are zero;

The beta coefficients (β_1, β_2, β_3 and β_4) denote the regression coefficients' constants expressing the independent variables' condition in relation to the dependent variables

X_1= Operational risk management

X_2 = liquidity risk management

X_3 = Currency risk management

X_4 = Market risk management

ε - (Extraneous) Error term accounting for the variability as an outcome of other factors not included in the model

3.9 Method of Data Presentation

A variety of methods were used in presenting the analyzed data. Whereas frequencies, percentages, means and standard deviation were used in descriptive analyses, both Pearson correlation and regression coefficients were used in inferential analysis. The data was visually presented in both tables and graphical charts.

3.10 Ethical Consideration

The NACOSTI permission was asked before commencing data collection. It was the aim of the study to avoid whatever can cause bodily or psychological to the subjects. Further, biasness and personal opinions peradventure data collection was important to avoid. The intent of the study was disclosed to participants before requesting them to fill the questionnaire. It was mandatory to ensure that when reporting findings from the study, after data analysis the respondents' research report reported accurately what was observed.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1 Introduction

The study examined the influence of financial risk management on performance of real estate firms through distinct attention on industries operating in Nairobi County, Kenya. This section of the report covers response rate, sample features, presentation of information examination, explanation and discussion of outcomes. Depending on the particular aims of the case study is where data presentation is systematized.

4.2 Response Rate

The data collection which was done between March 2019 and April 2019 using a questionnaire, sixty-six (66) questionnaires were issued. Out of sixty-six (66) questionnaires issued sixty-two (62) were returned signifying ninety-three-point nine percent response rates (93.9%) as showed in

Table 4.1

Response Rate

Questionnaires	Frequency	Percent (%)
Returned	66	93.9
Unreturned	62	6.1
Distributed	**40**	**100.0**

As shown in Table 4.1, response rate was well thought-out to be satisfactory since Mugenda and Mugenda (2003) recommend on response rates above 50% and Hager et al. (2003) commend 50%. Saunders and Lewis (2009) recommend a 30-40% percent response rate.

4.3 Instrument Reliability and Validity

A pilot study was conducted to assess both the reliability and validity of the questionnaire. The internal consistency test was utilized on this study to examine the questionnaire's reliability, using the Cronbach's alpha (α) coefficient with the acceptable minimum value at 0.7 (Field, 2006).Currency Risk Management recorded the highest reliability at a coefficient of 0.872, followed by Liquidity Risk Management at a coefficient of 0.847, then Market Risk Management at 0.763. Operational Risk Management and Performance tied at a coefficient of 0.724 (Table 4.2).

Table 4.2

Reliability Coefficients

Scale	Items	Final Cronbach Alpha
Operational Risk Management	5	.724
Liquidity Risk Management	7	.847
Currency Risk Management	4	.872
Market Risk Management	5	.763
Performance	10	.724

Source: Survey Data (2021)

Content validity of the questionnaire was tested to determine whether a data collection instrument offers adequate coverage of the topic. To this end, expert opinion and literature searches were used to better improve the content validity. The questions in the questionnaire were drafted with guidance from the university supervisors as well as brainstorming with mates and necessary corrections made thereafter. The pilot study results were consequently helpful in the upgrading of the content validity.

4.4 Respondents' Demographics

Current post on highest level of education and duration included the background information of the respondents.

Working Experience of Respondents

The researcher intended to determine the working knowledge of the respondents. Table 4.3 the results.

Table 4.3

Working Experience

	Frequency F	Percentage %
Less than 1 year	7	11
1 year to 3 years	21	34
3 year to 5 years	6	10
Over 5 years	28	45
Total	**62**	**100**

From Table 4.3, 45.0% of the respondents had occupied the office for three years and below in the institutions they served. 11% of them with less than 1 year consisted of newly recruited staff. Slightly more than half (55%) of staff indicates commitment in the private domain and which is positive for growing the organization having served the institutions for over 3 years.

These outcomes are in consistent with a research carried out by Kamau (2011), the act played by demographic features on administrative development among executive staff in the real estate division clearly exposed that 50% plus member staff had operated for not less than 3 years. The allegation of these outcomes is that in terms of performance translates into capability to experience the performance of monetary management short-term and in the long-term.

Respondents' Education Level

According to the level of education attained, the Participants were asked to give their responses according to the level of education attained. The Pie chart clearly shows the results in Figure 4.1.

Figure 4. 1

Education Level
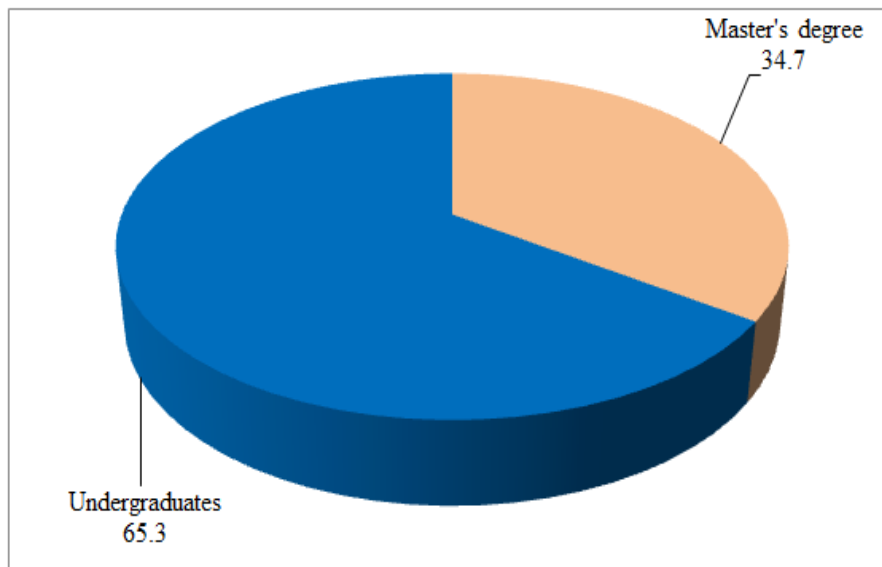
The results in Figure 4.1, nearly two thirds (65.3%) of the respondents who took part during the study were undergraduates while slightly more than a third (34.7%) of them had attained master's degree. This finding conforms to a research carried out by Gichure (2014) more than 60% respondents had bachelor's degree at managerial level in real estate firms.

4.5 Descriptive Analysis

This section delves into the descriptive analysis of the variables underpinning the study, including operational risk, market risk, currency risk, and liquidity risk management

performance of real estate firms. The variables have been analyzed by descriptive statistics including means and standard deviations.

Influence of Operational Risk Management on Performance of Real Estate Firms

Operational risk management on performance of real estate effect was determined by the respondents who took part in the study when asked to give their response and the findings are tabulated in Table 4.4. The answers were taken via Likert scale ranging from 1 – "strongly disagree" to 5 – "Strongly agree".

Table 4.4

Analysis for Operational Risk Management

		SD	D	N	A	SA	Mean	SD
The firm reduces the possibility of deferred maintenance	F	0	0	0	49	13	4.2097	.41040
	%	0.0	0.0	0.0	79.0	21.0		
The firm reduces risk of rising expenses to keep the real estate operational	F	0	1	2	47	12	4.1290	.52741
	%	0.0	1.6	3.2	75.8	19.4		
The firm reduces the possibility that there will installation technology negatively influencing the core business process	F	0	0	12	42	8	3.9355	.56889
	%	0.0	0.0	19.4	67.7	12.9		
The firm reduces health and safety related incident performance risk	F	0	4	1	44	13	4.0645	.69826
	%	0.0	6.5	1.6	71.0	21.0		
The firm reduces the possibility that a low occupancy rate may cause real estate costs per square feet to rise	F	0	4	10	36	12	3.9032	.78322
	%	0.0	6.5	16.1	58.1	19.4		
Composite score	**F**	**0**	**2**	**5**	**44**	**12**	**4.048**	**0.598**
	%	**0.0**	**2.92**	**8.06**	**70.32**	**18.74**		

Majority of respondents were on average highly in agreement with regard to how operational risk management influences performance of real estate ($\overline{x}$=4.04838; 70.32%). With reference to whether the firms had reduced possibility of deferred maintenance, a majority of respondents ($\overline{x}$=4.2097; 79.0%) were highly in agreement. Majority of respondents were also in agreement that that firm reduces risk of rising expenses to keep the real estate operational ($\overline{x}$=4.1290; 75.8%); that firm reduces health and safety related incident performance risk ($\overline{x}$=4.0645; 71.0%); the firm reduces the possibility that there will installation technology negatively influencing the core business process ($\overline{x}$=3.9355; 67.7%); and that firm reduces the possibility that a low occupancy rate may cause real estate costs per square feet to rise ($\overline{x}$=3.9032; 58.1%).

It can be deduced from the foregoing finding that majority of firms have reduced risk of rising expenses to keep the real estate operational, this was supported by majority of respondents who affirmed the statement. It can also be deduced that most firms have reduced the risk of rising expenses to keep the real estate operational. The study also deduces that majority of firms have reduced possibility that there will be installation technology negatively influencing the core business process, as majority of the respondents affirmed the statement. Only a few real estate firms disagreed that the firm had reduced possibility installation of technology which negatively influenced the core business process. The study further concludes that majority of the real estate firms had reduced health and safety related incident performance risk as majorities were highly in agreement of the statement. It can also be concluded that majority of the real estate firms had reduced the possibility that a low occupancy rate may cause real estate costs per square feet to rise.

Influence of Liquidity Risk Management on Performance of Real Estate Firms

This research intended to examine participants' level of agreement with the declaration on the influence of liquidity risk management on performance of real estate firms in Nairobi County. Likert scale was used where 1 must have strongly agree, 2 was in agreement, 3 was unsure, 4 not in agreement and 5 completely disagree. The conclusive report is presented in Table 4.5.

Table 4.5

Analysis for Liquidity Risk Management

		SD	D	N	A	SA	Means	Std. Dev
Risk related to capital allocation and constraints Liquidity risk	F	0	1	2	47	12	4.1290	.52741
	%	0.0	1.6	3.2	75.8	19.4		
The finance manager makes financial decision to assign scarce financial resources to real estate	F	0	0	0	49	13	4.2097	.41040
	%	0.0	0.0	0.0	79.0	21.0		
The liquidity risk is reduced by leasing	F	0	4	1	44	13	4.0645	.69826
	%	0.0	6.5	1.6	71.0	21.0		
The firm manages risk related to ability to fulfill its long-term financial obligations	F	0	0	0	48	14	4.2258	.42153
	%	0.0	0.0	0.0	77.4	22.6		
The firm manages cost of capital risk which include all risks associated with how the company finances Real estate.	F	0	0	0	47	15	4.2258	.42153
	%	0.0	0.0	0.0	76.2	23.8		
The firm ensure it manages budget risk by ensuring the budget is sufficient	F	0	0	1	48	13	4.1935	.43753
	%	0.0	0.0	1.6	77.4	21.0		
The firm manages investment risk by ensuring there is a return on investment.	F	0	5	13	35	9	3.7742	.79793
	%	0.0	8.1	21.0	56.5	14.5		
Composite score	**F**	**0**	**1**	**2**	**46**	**13**	**4.1175**	**0.5307**
	%	**0.0**	**2.3**	**3.9**	**73.5**	**20.3**		

Majority of respondents were in high agreement with all the statements posed with regard to the influence of liquidity risk management on real estate firms' performance ($\bar{x}$=4.1175; 73.5%). Majority of respondents particularly agreed that finance manager makes financial decision to allocate limited financial resources to real estate ($\bar{x}$=4.2097;

79.0%); that the firms ensure it manages budget risk by ensuring the budget is sufficient ($\overline{x}$=4.2258; 77.4%); that the respective firms manage risk related to ability to fulfill its long term financial obligations ($\overline{x}$=4.2258; 77.4%); the firm manages cost of capital risk which include all risks associated with how the company finances Real estate ($\overline{x}$=4.2258; 76.2%); that risk related to capital allocation and constraints liquidity risk ($\overline{x}$=4.1290; 75.8%); and that the respective firms manage investment risk by ensuring there is a return on investment ($\overline{x}$=3.7742; 56.5%).

It can be deduced from the foregoing findings that majorities of real estate firms have put in place measures to manage liquidity risks. Particularly, in real estate firms, the finance manager makes financial decision to allocate limited financial resources to real estate. Majority of the real estate firms further adopt leasing a measure to reduce liquidity risk is reduced by leasing. It is further found that most of the firms manage risk related to ability to fulfill its long term financial obligations. Further, most firms managed cost of capital risk which included all risks associated with how the company financed real estate.

Influence of Currency Risk Management on Performance of Real Estate Firms
Real estate firms on performance on Currency Risk Management (CRM) on this research was sought after to determine its impact. When asked how currency risk management affected results on the performance of many real estate firms, some of the responses were given and image table 4.6 illustrates the breakdown of the respondents' feedback.

Table 4.6

Analysis for Currency Risk Management

		SD	D	N	A	SA	Mean	Std dev
The firm uses local financing (local leverage) to reduce currency exposure	F	9	7	21	21	4	3.0645	1.14335
	%	14.5	11.3	33.9	33.9	6.5		
This firm borrows locally to reduce the influence of currency movements on earnings	F	3	26	17	14	2	2.7742	.96529
	%	4.8	41.9	27.4	22.6	3.2		
International diversification is used as a natural hedge against currency fluctuations	F	1	15	19	22	5	3.0968	.93580
	%	1.6	24.2	30.6	35.5	8.1		
Financial derivatives are used more extensively when the firm is facing tighter financial constraints	F	1	17	23	17	4	3.2419	.96980
	%	1.6	27.4	37.1	27.4	6.5		
Composite score	**F**	**3**	**16**	**20**	**19**	**4**	**3**	**1.004**
	%	**5.6**	**26.2**	**32.3**	**29.9**	**6.1**		

On average, majority of respondents ($\bar{x}$=3; 32.3%) were found to only moderate affirm to currency risk management as a common practice in their respective real estate firms. Majority particularly moderately agreed that the firm uses local financing (local leverage) to reduce currency exposure ($\bar{x}$=3.0645; 33.9%); that international diversification is used as a natural hedge against currency fluctuations ($\bar{x}$=3.0968; 35.5%); financial derivatives are used more extensively when the firm is facing tighter financial constraints ($\bar{x}$=3.2419; 37.1%); and that the firm borrows locally to reduce the influence of currency movements on earnings ($\bar{x}$=2.7742; 41.9%).

It can be deduced from the foregoing findings that majority of the real estate firms only moderately use local financing in reducing currency exposure. A considerable number of respondents are also of the view that firms cannot use local financing to reduce currency

exposure in real estate firms. Further, it can be deduced that majority of the real estate firms borrows locally to reduce the influence of currency movements on earnings of real estate firms' performance only to a moderate extent. Majority of real estate firms in the country further use financial derivatives to a moderate extent when the firm is facing tighter financial constraints. These results show that majority of real estate firms in Kenya, Nairobi County are not borrowing locally to reduce the influence of currency movements on earnings.

Influence of Market Risk Management on Performance of Real Estate Firms

Real estate performance case study sought to establish the influence of Market Risk Management. When asked how real estate financial performance got affected by market risk management, responses were given and table 4.7 Summarize the feedback of the respondents.

Table 4.7

Analysis for Market Risk Management

		SD	D	N	A	SA	Mean	Std. Dev
The assignments related with marketing is allocated to third parties, including brokerage firms to lessen reduce cost	F	0	0	0	49	13	4.2097	.41040
	%	0.0	0.0	0.0	79.0	21.0		
Marketing and prospecting provide promotional materials about property.	F	0	4	1	44	13	4.0645	.69826
	%	0.0	6.5	1.6	71.0	21.0		
Cooperative agreements with brokers are developed and managed to ensure there is compliance with government regulations during transactions	F	0	0	0	48	14	4.2258	.42153
	%	0.0	0.0	0.0	77.4	22.6		
For low credit risk tenants, the property is rented out leased at the highest possible rent.	F	0	0	14	37	11	3.9516	.63832
	%	0.0	0.0	22.6	59.7	17.7		
The firm avoids spoiling the popularity of a project through an unappealing tenant mix.	F	0	0	1	48	13	4.1935	.43753
	%	0.0	0.0	1.6	77.4	21.0		
Composite score	**F**	**0**	**4**	**5**	**45**	**13**	**4**	**0.521**
	%	**0.0**	**6.5**	**8.6**	**72.9**	**20.7**		

On average, majority of respondents highly affirmed to the influence of market risk management on performance of real estate firms in the country ($\bar{x}$=4; 72.9%). Majority of respondents particularly highly agreed that tasks associated with marketing is allocated to third parties, including brokerage organizations to reduce cost ($\bar{x}$=4.2097; 79.0%); that the respective firm avoids spoiling the popularity of a project through an unappealing tenant mix ($\bar{x}$=4.2258; 77.4%); that cooperative agreements with brokers are developed and managed to ensure there is compliance with government regulations during transactions ($\bar{x}$=3.9516; 77.4%); marketing and prospecting provide promotional materials about property ($\bar{x}$=4.0645; 71.0%); and that the property is leased at the highest likely rent to tenants with credit risks that are low ($\bar{x}$=4.1935; 59.7%).

It can be deduced from the foregoing finding that most real estate firms in the country duties connected with marketing is assigned to other representatives, i.e. Brokerage organizations to reduce cost influence performance. Further, in majority of the firms, advertising and seeking potential clients provide promotional accessories about property.

Performance of Real Estate Firms

This study sought to determine the performance of real estate firms for the last 5 years. Respondents were therefore asked to rank their performance in the last 5 years, as indicated by both ROI and ROA. This was on a 5-point Likert scale: 1= Very Low; 2= Low; 3= Neutral; 4= High; 5= Very High. The responses are summarized in Table 4.8.

Table 4.8

Descriptive Analysis for Performance

Performance Metric	Year		Very Low	Low	Neutral	High	Very High
ROI	2015	F	0	5	13	36	9
		%	0	8.1	21	56.5	14.5
	2016	F	0	0	0	50	13
		%	0	0	0	79	21
	2017	F	0	0	1	49	13
		%	0	0	1.6	77.4	21
	2018	F	0	0	0	50	13
		%	0	0	0	79	21
	2019	F	0	4	10	37	12
		%	0	6.5	16.1	58.1	19.4
ROA	2015	F	9	7	21	21	4
		%	14.5	11.3	33.9	33.9	6.5
	2016	F	0	0	0	50	13
		%	0	0	0	79	21
	2017	F	0	1	2	48	12
		%	0	1.6	3.2	75.8	19.4
	2018	F	0	0	0	49	14
		%	0	0	0	77.4	22.6
	2019	F	0	0	1	49	13
		%	0	0	1.6	77.4	Q 21

Table 4.8 shows that majority of the respondents indicated that return on investments adopted by the real estate firms was high in 2015 (56.5%), in 2016 (79.0%), in 2017 (77.4%), 2018 (79.0%) and 2019 (58.1%). On return on assets, a moderately high performance was recorded in 2015 (33.9%), while high performance was recorded in 2016 (79.0%), 2017 (75.8%), 2018 (77.4%) and 2019 (77.4%).

4.6 Inferential Analysis

In order to assess the influence of financial risk management on performance of real estate firms, Pearson correlation and ANOVA was computed. The four financial risk management factors were fixed as independent variables and on performance of real estate firms were set as the dependent variable. The four predictors are operational risk management, liquidity risk management, currency risk management as well as market risk management. DeCoster (1998), states that the relationship between two variables should be approximately linear for validation of inferences. However, a curved relationship between independent and dependent variables renders inferences invalid.

According to Nassiuma and Mwangi (2004), a regression model could contain several independent variables as was the case in this study. These authors indicated that the goals of regression analysis include description of relationships between models, control and prediction variables. Inferences about the population from which sample was obtained are made. Cozby and Bates (2011) argue that regressions equations are prediction equations grounded on information that is unknown about the association between two variables. In essence, the method is used for making estimates based only on predictor variable scores. Centered multiple regression model was used to measure weighted response variables namely: performance of real estate firms as the dependent

variable. The Independent variables were; currency risk, liquidity risk, and operational risk management as well as market risk management presented.

Relationship between Financial Risk Management and Performance

The study conducted a correlation analysis between the variables: Market risk, liquidity risk, currency risk and operational risk management and organizational performance. The study used Karl Pearson's coefficient of correlation to assess the magnitude of the association between the variables. A 2-tailed Pearson Correlation test was done at 95% confidence level and the analysis presented in Table 4.9.

Table 4.9

Pearson Correlation Table

		P2	ORMM	LRMM	MRMM	CRMM
P2	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	62				
ORMM	Pearson Correlation	.845**	1			
	Sig. (2-tailed)	.000				
	N	62	62			
LRMM	Pearson Correlation	.843**	.847**	1		
	Sig. (2-tailed)	.000	.000			
	N	62	62	62		
MRMM	Pearson Correlation	.879**	.836**	.957**	1	
	Sig. (2-tailed)	.000	.000	.000		
	N	62	62	62	62	
CRMM	Pearson Correlation	.449**	.221	.181	.140	1
	Sig. (2-tailed)	.000	.084	.160	.279	
	N	62	62	62	62	62

**. Correlation is significant at the 0.01 level (2-tailed).

The results in Table 4.9 indicate that there is a strong, positive and important relationship between market risk management and performance of real estate firms (r = .879, *p* <0.05); between operational risk management and performance of real estate firms (r =

.845, p <0.05);and between liquidity risk management and performance of real estate

firms (r = .843, p <0.05). A moderate, positive and important relationship was however

observed between currency risk management and performance of real estate firms (r =

.843, p <0.05).

Influence of Financial Risk Management on Performance

The study tested four hypotheses to establish whether there is a statistically significant

association between selected factors on the influence of financial risk management on

performance of real estate firms (market risk management, liquidity risk management,

currency risk management and operational risk management and the level of performance

of real estate firms in Nairobi County. To establish the statistical associations, Analysis

of Variance (ANOVA) which is appropriate for test of association between two

categorical variables was applied.

To aid in the regression analysis, the following regression model was used:

$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$

Where: Y= the dependent variable (Profitability); α - Is a constant and is the Y denotes

the score value when all the independent variables (X_1, X_2, X_3 and X_4) are zero; while the

beta coefficients (β_1, β_2, β_3 and β_4) denote constants of regression coefficients indicating

the dependent variables' condition in relation to the independent variables to; X_1=

Operational risk management; X_2 = liquidity risk management; X_3 = Currency risk

management; X_4 = Market risk management; and ε - (Extraneous) Error term accounting

for the erraticism as a result of other attributes not factored in the model.

Model Summary

With a view to assess how well the identified factors account for the dependent variable (performance of real estate firms) R computation were carried out. Table 4.10 shows the R squared results.

Table 4.10

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.988[a]	.975	.974	.61292

a. Predictors: (Constant), Operational risk management; Liquidity risk management; Currency risk management; Market risk management

From Table 4.10, R represents linear correlations coefficient with the array varying between -1 and +1. The R value at .988 means that there is a strong and positive relation between the overall financial risk management factors and performance of real estate firms in Nairobi County.

R^2 represents a determination of how much of the change in the dependent variable is represented by the independent variables and it lies between 0 and 1 referred to as the coefficient of determination. Since the R square value is .975; which means that the financial risk management factors explain 97.5 per cent of the variance on performance of real estate firms. Adjusted R square offers an indication of the extent to which the model provides a generalization and it would be preferable for its value to be close to or the same as the value of R square. Because the difference is 0.001 (.975-.974=0.038 or 0.1%), it shows that if the data was acquired not from the sample, but the population, it would approximately explain 0.1% less variance in the outcome.

The root mean squared error (RMSE), also referred to as the standard error estimate (SE est.), is an indicator of the variability (dispersion) in the forecast values in a regression (understood as the unexplained variance's standard deviation, which is an absolute measure of fit (better fit is indicated by lower values of SE est./ RMSE) and possesses the important property of being in the similar values as the response variable). Because the SE est. value is moderate (0.61292), many of the established data points lie close to the models predicted scores, therefore indicating good fit.

Model Fit

As presented in Table 4.11, Analysis of Variance (ANOVA) was performed to determine whether the independent and dependent variables have a significant mean difference.

Table 4.11

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	850.796	4	212.699	566.185	.000[b]
	Residual	21.413	57	.376		
	Total	872.210	61			

a. Dependent Variable: Performance
b. Predictors: (Constant), Operational risk management; Liquidity risk management; Currency risk management; Market risk management

The ANOVA was conducted at 95% confidence level. The P-value of 0.000 implies that the financial risk management factors have a significant joint relationship with performance of real estate firms, which is significant at a confidence interval of 0.05.

Coefficients

With a view to assess the relative significance of financial risk management factors in predicting performance of real estate firm's regression model equation was computed. Table 4.12 presents the parameter estimates (coefficients).

Table 4.12

Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.717	.866		1.983	.052
	Operational risk management	.219	.072	.122	3.046	.004
	Liquidity risk management	1.356	.103	.996	13.196	.000
	Currency risk management	.301	.024	.272	12.657	.000
	Market risk management	.425	.145	.215	2.924	.005

a. Dependent Variable: Performance

Based on the results on Table 4.12, the coefficient associated with the regression constant is 1.717 with a standard error of .866. The coefficient associated with the first independent variable, namely operational risk management .122 with a standard error of .072. The coefficient associated with the second independent variable, namely liquidity risk management, .996 with a standard error of .103. The coefficient associated with the third variable, namely currency risk management, .272 with a standard error of .024. Finally, the coefficient associated with the fourth independent variable (market risk management) was.215 with a standard error of .145.

Consequently, the regression model can be stated as:

$$Y = 1.717 + .122\ X_1 + .996\ X_2 + .272 X_3 + .215 X_4$$

Where:

Y = Performance of real estate firms

X_1 = Operational risk management

X_2 = Liquidity risk management

X_3 = Currency risk management

X_4 = Market risk management

This implies that for each additional unit in the score of operational risk management, the score of performance of real estate firms increases by .122 units, a unit increase in the score of liquidity risk management, the score of performance of real estate firms decreases by .996 units, a unit increase in the score of currency risk management, the score of performance of real estate firms in Nairobi increases by .272 units and a unit increase in the score of market risk management, the score of performance of real estate in Nairobi increases by .215 units. Thus, the predictors can be used to explain the variability in performance of real estate firms in Nairobi, Kenya.

Hypothesis Testing

Inferential statistics were further employed to test the study hypotheses which were stated in the null. To this end, the coefficients associated with each variable were tested for statistical significance at 95% confidence level. As such, the condition for statistical significance and therefore decision to reject or accept the null hypotheses was determined at 0.05 confidence interval. Coefficients associated with variables with P-values less than

the level of significance (P<.05) led to rejection of the null hypotheses stated while Coefficients associated with variables with P-values greater than the level of significance (P>.05) led to acceptance of the null hypotheses stated.

H_{01}: There is no significant relationship between operational risk management and performance of real estate firms in Nairobi County, Kenya

Operational risk management was significantly associated with performance of real estate firms (β = .122, p = .000<.05). The foregoing findings provide enough evidence to reject the null hypotheses that there is no relationship between operational risk management and performance of real estate firms in Nairobi (H_{01}). The study therefore concludes that there exists a statistically significant relationship between operational risk management and performance of real estate firms in Nairobi.

This is in agreement with Lyambiko (2015) whose study also revealed that in Tanzania, returns commercial banks' returns were influenced by operational risk management, positively. He further established that realizing a perfect hedge is made practically impossible by uncertainty of cash flows. It was also found that the optimum ratio of hedging is frequently less than one, for instance of the value of overseas investments, it may be better to hedge 80% or 60%, more than 100%.

The finding is however in contrast with Zubairi and Ahson (2015) examine the strength of the association between five Pakistani Islamic Banks' profitability and current risk management practices. It was found in the study that during the period under review, risk management framework had a negative and statistically significant influence on

profitability. The difference in the findings could attribute to controlling effect for other external and internal antecedents of profitability by adopting an econometric outline.

These findings further bare witness with Nocco and Stulz (2006) who pointed out that proper risk management is paramount on day-to-day executions of any real estate industry to be safe from economic risks and liquidation. To ensure that the company is increasing its value by managing risks, Banks (2004) bears witness with the study's findings on ensuring continued profitability of the firm. In a similar study, Githinji (2013) conducted on the association amid operational risk and administrative surroundings in land and property corporations, to investigate the association amid administrative surroundings and administrative performance and to find out the association amid operational risk and administrative level of performance in real estate firms located in Uganda. This research assumed both cross-sectional and descriptive survey design with the specific target population consisting of a 60 member staff of associates 14 risk management workers, 9 human resource advisors, 18 workers in IT, 13 operation workers and a total of 11 high-ranking executives. This was established through questionnaires and interviews being used to acquire facts through study of 51 respondents sampled. The study obtained secondary data from extant companies' journals council reports and literature. The findings of the study established that there was a substantial and positive association amid operational risk management, administrative setting and administrative performance. The regression analysis additionally revealed that administrative setting and operational risk management were significant pointers of organizational performance.

The study also agrees with Christensen (2001) who argued that the continuity, performance and management of business activities in an estate are contained in an

operational risk management, this is considered in three levels; the firm, assets and portfolio levels. The risks entailed here are Strategic and business operating risk plus leverage, product design features together with asset correlation and investment concentration. The three level sets can also be used in the forum of Property Investment; these are considered as risk management strategies. Risk management entails a process of evaluation which utilizes the analysis through the comparison and prioritization of the potential risk influences. Additionally, Christensen (2001) noted that the three factors that are required for an action to be outsourced include: specification of the function to enhance comprehension of the function of the requirements by both parties, secondly is the development of measures in a transference manner which evaluates as the requirements are being met, the third one is that the organization ought to comprehend the influence on total performance of a failure to meet

H_{02}: There is no significant relationship between liquidity risk management and performance of real estate firms in Nairobi County.

The study found a significant association between liquidity risk management and performance of real estate firms ($\beta = .996$, $p = .000 < .05$). The foregoing findings provide enough evidence to reject the null hypotheses that there is no relationship betweenliquidity risk management and performance of real estate firms in Nairobi (H_{02}). The study therefore concludes that there exists a statistically significant relationship betweenliquidity risk management and performance of real estate firms in Nairobi.

The finding is in agreement with Dassie (2018) whose study revealed a significant negative association between financial returns and liquidity risk management of Sierra Leonean commercial banks. The difference can be attributed to the measurement of

liquidity risk management, whereby in the study, the variable was measured by liquid assets to total assets ratio, loans and advances to total deposit ratio, total liabilities to total assets ratio, capital adequacy ratio and operating expenses to total revenue ration.

The study is however in contrast with Alshatti (2014) in whose study aimed at assessing the effect of the banking liquidity risk management on organizational performance of the Jordanian commercial banks established a positive albeit non-significant relationship. The researcher attributed the non-significance of the relationship to the amplified volume of the Jordanian commercial banks' unused deposits. The researcher consequently expresses the need to reinvest the surplus liquidity at the disposal of the banks, in different investments aspects with a view to raise the profitability of commercial and to accrue profits from the available money's time value.

With the understanding on the liquidity risk and how it relates to firm performance help policy makers to put in place stratagems and policies geared towards creating a strong financial sector. There are contradictory views on whether liquidity influences financial performance of real estate firms. For instance, Shen et al. (2010) state that liquidity risk is positively correlated to NIM; a suggestion that real estate firm with substantial liquidity levels receive greater interest revenue.

The finding is also in agreement with Glaum (2017) carried out a study whose main aim was diagnose how the fiscal productivity of land and property corporations in Zambia is influenced by liquidity risk management. A detailed study design was introduced with the target population being the Real estate companies as at December 31st 2013 became the target population with the adopted detailed research design. A secondary data was gotten

from available accounts of real estate firms which included declaration of income statement, monetary position as well as other disclosures between the period 2010 to 2013. The study established a regression model with the independent variables being: liquid to overall assets, and liquid assets to overall credits, balances owing to other firms/overall assets and asset value whereas performance being tested using the ROA. The findings of the research deduced that liquidity risk management had a substantial detrimental affiliation with real estate firm's performance. The study further deduced that holding extra liquid assets in contrast with overall assets would lead to inferior returns to real estate firms but at 5%, the effect was insignificant holding extra liquid assets in contrast with overall credits would lead to lower returns to real estate firms with its effect being significant at 5%, a small upsurge in liquid asset to overall asset fraction decreased returns on assets by 1%, a small upsurge in liquid asset to overall credits fraction decreased revenues on assets by 2.2% while a small upsurge in borrowings from real estate firms decreased revenues on assets by 14.2%.

Ferrouhi (2014) undertook a study on bank liquidity and financial performance with a focus on the Moroccan banking industry. The objective of the research was to assess the connection between performance and liquidity risk among banks in Morocco. This study used panel data regression of 4 Moroccan banks during the period 2001-2012. Findings on this study indicated that Moroccan banks' determinant on performance is mainly 7; among them was the liquidity ratio. The study was well conducted with reference to the financial ratios that determine bank performance, such a study could be replicated in other firms like real estate firms to ascertain any similarities and/or differences.

Kyule (2015) conducted a study with firms listed at the Nairobi Securities Exchange an objective of determining the effect of liquidity and solvency on financial performance. Using regression analysis method on data collection, then analyzed findings indicated firms listed at NSE on the ROA had positive liquidity impacts. However, 5% level on ROA liquidity effect statistically is not significant. Therefore, the study was comprehensive and the study period covered was long enough to underpin reliable findings or conclusions.

The study is further in agreement with Hameeda (2015) in Kenya who investigated the liquidity faced by real estate corporations and to define the association amid liquidity risk and the productivity of corporations found in Kenya. Consequently, that case study integrated a correlation research design with information being collected between 2008 and 2012 from annual financial reports acquired from a sample of 14 real estate firms being analyzed. The research findings established that performance was adversely influenced owing to an upsurge in liquidity gap and control. Moreover, the study depicted a substantial influence of every aspect of liquidity risk on real estate firms' performance.

H_{03}: There is no significant relationship between currency risk management and performance of real estate firms found in Nairobi County, Kenya

There was no association between currency risk management and performance of real estate firms with a (β = .272, p = .000<.05). The foregoing findings provide enough evidence to reject the null hypotheses that there is no relationship betweencurrency risk management and performance of real estate firms in Nairobi (H_{03}). The study therefore

concludes that there exists a statistically significant relationship betweencurrency risk management and performance of real estate firms in Nairobi.

The finding is in tandem with Mwangi (2013), in whose study on how the organizational performance of microfinance institutions is influenced by foreign exchange risk management in Kenya found out that the use of options and forward contracts as foreign exchange risk management approach has a positive and strong association with financial performance in terms of ROA. The difference in findings may be attributed to the difference in the target population. While in the present study surveyed real estate firms, Mwangi (2013) focused on Microfinance institutions.

The finding is also in line with Lambe (2015) whose study revealed that increases in Profit After Tax (PAT) leads to an increase in exchange rate and indicated equally that there is a significant association between performance and exchange rate management of financial institutions, particularly commercial banks. The study recommended that commercial banks ought to create a central entity within its operations as an adequate way of handling exchange rate risk, as an institutional strategy to deal with the real-world features of the implementation of exchange rate prediction, while the hedging technique ought to be adopted in the procedure of accounting with reference to currency risk. Similarly, the difference could be attributed to the difference in the target sample.

The finding is in agreement with Sang (2017) indicated that financial offshoots are employed more broadly by companies with financial constraints that are tighter as well as by companies with more know-how in the use of derivatives. If in a position to endure volatility in the short term, firms do less in currency risk management. With

internationally diversified revenue, global businesses may consider their global diversification as offering a natural border against currency instabilities. There are currencies that are difficult to hedge or more expensive; rather than bearing the extra costs in these markets, these might be left unhedged.

The study further agrees with According to Sibel and Selim (2017) who argue that there is a dearth of answers on what a director or land financial specialist should do concerning administration of cash chance, provided it is dependent on the speculator's resilience for various dangers, targets, their home, the costs engaged with supporting danger and the position for explicit markets. Along these lines, the best practice is to have a straightforward and reasonable approach that sets out what is not and what is supported, in what conditions and why variety is allowable. Additionally, data on supported positions and money exposures should be accumulated to enable the approximation of hazard and the management of cash hazard ought to be likewise checked for instance regardless of whether the effect of money developments in harmony with desires has been expelled by cash supporting.

H_{04}: There is no significant relationship between market risk management and performance of real estate firms in Nairobi County, Kenya

Finally, there was a significant association between market risk management and performance of real estate firms (β = .215, p = .000<.05). The findings further provide enough evidence to reject the null hypotheses. The foregoing findings provide enough evidence to reject the null hypotheses that there is no relationship betweenmarket risk management and performance of real estate firms in Nairobi (H_{04}). The study therefore

concludes that there exists a statistically significant relationship betweenmarket risk management and performance of real estate firms in Nairobi.

The finding is in agreement with Ishtiaq (2015) whose study found that in Kenya, commercial banks' financial performance is affected significantly by of market risk both in the long run and in the short run. This result leads to a deduction that the board of directors ought to establish adequate systems of risk management which should entail the establishment of the organization's risk strategy, risk appetite and annual risk limit in order to curtail the unnecessary risk taking of the management.

In contrast to the present study findings, Kolapo et al. (2012) found in their study that market risk management does not have significant relationship profitability. Similarly, a positive but non-significant association between the two variables was established by (Odeke & Odongo, 2014). The difference may be accounted for by the fact that most banks in Uganda and Nigeria selected floating interest rate exposure which would record at least in the short term, significantly lower interest rates as compared to commercial banks with fixed exposure.

The finding is in agreement with Kolapo et al. (2012) who argued that vital performance pointers to assess the efficacy of the rental procedure are brokerage expenditure as a part of yearly leasing revenue, promotional cash used for every outlook or publicizing cash expended for each square meter rented. An evaluation of accounted lease to definite lease ought to be made during the renting procedure, and the tenancy level ought to be supervised. Additional information to be collected and evaluated comprises of rental and advertising expenditure for every cent of income, and typical allowed lease (or

concessions) on fresh tenancies. Substantial risks of the rental procedure are that not enough leaseholders are fascinated with the upgrade. So as to realize filled tenancy, greater offers/discounts may have to be delivered to the leaseholders and sub-optimal agreements are employed, eventually bringing about lesser revenues. Unsatisfactory tenancy may well for the reason that agreements cannot be completed due to criterion problems, or residents choose not to rent space owing to market details or asset nature.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The case study in this chapter gives a synopsis of the outcomes made, and gives recommendations on how real estate firms in Nairobi County, Kenya can advance and raise their level of performance. The synopsis of the outcomes, the deductions and the recommendations are given for every studied objective. Lastly, this section suggests capacities for additional research to be done.

5.2 Summary

The overall purpose of this study was to examine the influence of risk management on performance of real estate firms in Kenya with special focus on firms operating within Nairobi County, Kenya. The study had to adopt a descriptive survey research design, in which the target population comprised of the 80 licensed firms by the Nairobi County Government which had been in business for over three years with focus on real estate agent officers. From the population of 80 real estate firms, samples of 66 firms were selected. The particular researcher developed and used a comprehensive questionnaire as the key data collection instrument. Data collected were quantitative in nature. Quantitative data were analyzed by descriptive analysis. Statistical Package tool among many statistical tools for the Social Sciences (SPSS) Version 26 helped the researcher to analyze and define the data. Further, inferential statistics such as Pearson correlation analysis for independence as well as ANOVA was conducted. The following key findings were made from the analysis;

Operational Risk Management on Performance of Real Estate Firms

Majority of respondents were on average highly in agreement with regard to how operational risk management influences performance of real estate ($\overline{x}$=4.04838; 70.32%). With reference to whether the firms had reduced possibility of deferred maintenance, a majority of respondents ($\overline{x}$=4.2097; 79.0%) were highly in agreement. Majority of respondents were also in agreement that that firm reduces risk of rising expenses to keep the real estate operational ($\overline{x}$=4.1290; 75.8%); that firm reduces health and safety related incident performance risk ($\overline{x}$=4.0645; 71.0%); the firm reduces the possibility that there will installation technology negatively influencing the core business process ($\overline{x}$=3.9355; 67.7%); and that firm reduces the possibility that a low occupancy rate may cause real estate costs per square feet to rise ($\overline{x}$=3.9032; 58.1%).

Liquidity Risk Management on Performance of Real Estate Firms

Majority of respondents were in high agreement with all the statements posed with regard to the influence of liquidity risk management on real estate firms' performance ($\overline{x}$=4.1175; 73.5%). Majority of respondents particularly agreed that finance manager makes financial decision to allocate limited financial resources to real estate ($\overline{x}$=4.2097; 79.0%); that the firms ensure it manages budget risk by ensuring the budget is sufficient ($\overline{x}$=4.2258; 77.4%); that the respective firms manage risk related to ability to fulfill its long term financial obligations ($\overline{x}$=4.2258; 77.4%); the firm manages cost of capital risk which include all risks associated with how the company finances Real estate ($\overline{x}$=4.2258; 76.2%); that risk related to capital allocation and constraints liquidity risk ($\overline{x}$=4.1290; 75.8%); and that the respective firms manage investment risk by ensuring there is a return on investment ($\overline{x}$=3.7742; 56.5%).

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Currency Risk Management on Performance of Real Estate Firms

On average, majority of respondents ($\bar{x}$=3; 32.3%) were found to only moderate affirm to currency risk management as a common practice in their respective real estate firms. Majority particularly moderately agreed that the firm uses local financing (local leverage) to reduce currency exposure ($\bar{x}$=3.0645; 33.9%); that international diversification is used as a natural hedge against currency fluctuations ($\bar{x}$=3.0968; 35.5%); financial derivatives are used more extensively when the firm is facing tighter financial constraints ($\bar{x}$=3.2419; 37.1%); and that the firm borrows locally to reduce the influence of currency movements on earnings ($\bar{x}$=2.7742; 41.9%).

Market Risk Management on Performance of Real Estate Firms

On average, majority of respondents highly affirmed to the influence of market risk management on performance of real estate firms in the country ($\bar{x}$=4; 72.9%). Majority of respondents particularly highly agreed that tasks associated with marketing is allocated to third parties, including brokerage organizations to reduce cost ($\bar{x}$=4.2097; 79.0%); that the respective firm avoids spoiling the popularity of a project through an unappealing tenant mix ($\bar{x}$=4.2258; 77.4%); that cooperative agreements with brokers are developed and managed to ensure there is compliance with government regulations during transactions ($\bar{x}$=3.9516; 77.4%); marketing and prospecting provide promotional materials about property ($\bar{x}$=4.0645; 71.0%); and that the property is leased at the highest likely rent to tenants with credit risks that are low ($\bar{x}$=4.1935; 59.7%).

5.3 Conclusion

The study set out to test the first null hypothesis of the study (H_{01}) stating that there is no significant relationship between operational risk management and performance of real

estate firms in Nairobi County, Kenya. Results indicate that operational risk management is significantly associated with performance of real estate firms ($\beta = .122$, $p = .000 < .05$). The study thus concludes that there is a statistical important association between operational risk management and productivity of real estate firms. Most of the firm reduced the possibility of deferred maintenance, reduced possibility that there will installation technology negatively influencing the core business process, reduced health and safety related incident performance risk and lastly reduced the possibility that a low occupancy rate may cause real estate costs per square feet to rise.

The study also sought to test the second null hypothesis (H_{02}) that there is no significant relationship between liquidity risk management and performance of real estate firms in Nairobi County and liquidity risk management. Results from linear regression analysis indicated that liquidity risk management is significantly associated with performance of real estate firms ($\beta = .996$, $p = .000 < .05$). The study therefore concludes that liquidity risk management is statistically significantly associated with performance of real estate firms. Some of the firms' finance manager made financial decision to assign scarce financial resources to real estate, the firm manages risk related to ability to fulfill its long-term financial obligations, the firm manages cost of capital risk which include all risks associated with how the company finances Real estate and lastly the firm ensure it manages budget risk by ensuring the budget is sufficient.

The study further tested the third null hypothesis (H_{03}) that there is no significant relationship between currency risk management and performance of real estate firms found in Nairobi County, Kenya. Linear regression analysis revealed a significant association between currency risk management and performance of real estate firms with

a (β = .272, p = .000<.05). As such, the study concludes that currency risk management is statically associated with performance of real estate firms. Some corporations used local financing (local leverage) to reduce currency exposure, some firms borrowed locally to reduce the influence of currency movements on earnings.

The study finally tested the fourth null hypothesis (H_{04}) stating that there is no significant relationship between market risk management and performance of real estate firms in Nairobi County, Kenya. Results indicated that there is a significant association between market risk management and performance of real estate firms (β = .215, p = .000<.05).It is therefore concluded that market risk management has a statistical significance with the performance of real estate firms in Nairobi. Tasks associated with marketing is assigned to third parties such as, brokerage organizations to reduce cost and also marketing and prospecting provided promotional materials about property. Thus, from the results it can be concluded that operational risk management, liquidity risk management, currency risk management and market risk management were significantly associated with the overall productivity of real estate firms

5.4 Recommendations

Recommendations for Policy

This research proved that operational risk management influenced performance of real estate firms within Nairobi County in Kenya. The research study therefore recommends that for real estate firms to improve on performance, the firms should aim at reducing the possibility of deferred maintenance, reduce risk of rising expenses to keep the real estate operational, reduce the possibility that there the installed technology will not negatively influence the core business process and ensure that they reduce health and safety related

incident performance risk. Firms should ensure the possibility that a low occupancy rate that may cause real estate costs per square feet to rise is reduced.

Whereas the research established that liquidity risk management does not statistically significantly influence the efficiency of real estate corporations within Nairobi County in Kenya, most respondent firms highly affirmed to the practice. The study recommends in this regard that that for real estate firms to improve on performance firm managers should make financial decision to assign scarce financial resources to real estate, managers should manage risk related to ability to fulfill the firms' long term financial obligations and manage cost of capital risk which includes all risks connected to how the company finances real estate projects. Firms should ensure they have sufficient budget.

Furthermore, whereas the research found out that currency risk management affected the efficiency of real estate firms within Nairobi County in Kenya, a considerable number of respondents affirmed to practicing currency risk management. The case study also commends that for real estate firms to improve on performance, firm managers should use local financing to reduce currency exposure and borrows locally to reduce the influence of currency movements on earnings.

Lastly, the study confirmed that market risk management affects the productivity of real estate firms in Nairobi County in Kenya. This case study further commends that for real estate corporations to improve on performance, firm managers should assign tasks associated with marketing to third parties such as brokerage organizations to reduce cost.

Recommendation for Further Research

This research aimed to establish the influence of financial risk management on the performance of real estate firms in Nairobi County, Kenya. Financial risk management on performance of real estate firms is found to be very complex, and also quite hard to give answer on all the questions.

An increased sample size done in the future could increase the ability to generalize the findings. More researches on financial risk management factors that influence performance of real estate firms in Nairobi County in Kenya can be covered in the future. Also, researchers need more time to cover more financial risk management factors on a large scale than what was included in this research. Additionally, cities like Mombasa and Nakuru can aid generalization of results through future researches. A comparative study could also be undertaken with a view to compare the results from respondents in real estate firms across different time periods in order to ascertain whether financial risk management factors actually influence the performance of real estate firms.

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APPENDICES
Appendix I: Letter of Introduction

Jacinta Wanjohi

Kenya Methodist University,

P.O. Box 45240 - 00100,

Nairobi, Kenya

Date: 29th April, 2019

Dear Sir/Madam,

RE: REQUEST FOR COLLECTION OF RESEARCH DATA

I am a post graduate student (Masters of Business Administration) from Kenya Methodist University, undertaking a research on "Influence of financial risk management on performance of real estate firms operating within Nairobi County, Kenya". Your firm has been identified to participate in this study through your managers who would be requested to voluntarily fill the attached questionnaire.

I guarantee any information provided will be held in confidence and shall only be utilized for the purpose of this academic (thesis) study. No study firm or respondents will be named in the study, its findings or recommendation. The study will have direct benefit to the study firms and the researcher is will share the findings and recommendation to the firm that will wish to read the final report

Yours faithfully,

Jacinta Wanjohi

BUS-3-1709-2/2017

Appendix II: Questionnaire

General Direction:

• Please fill out and return the questionnaire properly

• Any confidential data obtained from you will only be used in aggregated form in any report or presentation concerning the survey and all data will be treated as highly confidential

SECTION A: DEMOGRAPHIC INFORMATION

1. Working Experience

Less than 1 year	[ ]
1 year to 3 years	[ ]
3 year to 5 years	[ ]
Over 5 years	[ ]

2. Highest level of Education

Undergraduate	[ ]
Master's degree	[ ]

SECTION B: FINANCIAL RISK MANAGEMENT

Part A: Operational Risk Management (ORM)

1. Please use the point scale below to indicate your level of agreement by ticking
each one of the given statement.

1	2	3	4	5
Strongly disagree	Disagree	Neutral	Agree	Strongly agree

	Opinion	1	2	3	4	5
ORM1	The firm reduces the possibility of deferred maintenance.					
ORM2	The firm reduces risk of rising expenses to keep the real estate operational					
ORM3	The firm reduces the possibility that there will installation technology negatively influencing the core business process.					
ORM4	The firm reduces health and safety related incident performance risk.					
ORM5	The firm reduces the possibility that a low occupancy rate may cause real estate costs per square feet to rise.					

Part B: Liquidity Risk Management (LRM)

2. Please use the point scale below to indicate the level of importance by ticking
each one of the given statement.

1	2	3	4	5
Strongly disagree	Disagree	Neutral	Agree	Strongly agree

	Opinion	1	2	3	4	5
LRM1	Risk related to capital allocation and constraints Liquidity risk					
LRM2	The finance manager makes financial decision to assign scarce financial resources to real estate					
LRM3	The liquidity risk is reduced by leasing					
LRM4	The firm manages risk related to ability to fulfill its long term financial obligations.					

LRM5	The firm manages cost of capital risk which includes all risks associated with how the company finances Real estate.				
LRM6	The firm ensure it manages budget risk by ensuring the budget is sufficient				
LRM7	The firm manages investment risk by ensuring there is a return on investment.				

Part C: Currency Risk Management (CRM)

3. Please use the point scale below to indicate your level of agreement by ticking each one of the methods in the given statements.

1	2	3	4	5				
Strongly disagree	Disagree	Neutral	Agree	Strongly agree				
	Opinion				1	2	3	4	5
CRM1	The firm uses local financing (local leverage) to reduce currency exposure								
CRM2	This firm borrows locally to reduce the influence of currency movements on earnings								
CRM3	Financial derivatives are used more extensively when the firm is facing tighter financial constraints								
CRM4	International diversification is used as a natural hedge against currency fluctuations								

Part D: Market Risk Management (MRM)

4. Please use the point scale below to indicate your level of agreement by ticking each one of the methods in the given statements.

1	2	3	4	5				
Strongly disagree	Disagree	Neutral	Agree	Strongly agree				
					1	2	3	4	5
MRM1	The assignments related with marketing is allocated to third parties, including brokerage firms to lessen reduce cost								
MRM2	Marketing and prospecting provide promotional materials about property.								
MRM3	Cooperative agreements with brokers are developed and managed to ensure there is compliance with government regulations during transactions								
MRM4	For low credit risk tenants, the property is rented out								

	leased at the highest possible rent.					
MRM5	The firm avoids spoiling the popularity of a project through an unappealing tenant mix.					

Section C: Measures of organizational performance (PER)

5. Please rank performance of your organization in the last 5 years, as indicated by both ROI and ROA. Use the scale: 1= Very Low; 2= Low; 3= Neutral; 4= High; 5= Very High.

Performance Metric	Year	1	2	3	4	5
ROI	2015					
	2016					
	2017					
	2018					
	2019					
ROA	2015					
	2016					
	2017					
	2018					
	2019					

Thank you for your feedback

Appendix III: List of Real Estate Firms in Nairobi

Author (2019)

1. VillaCare Kenya
2. Hass Consult
3. Lynex Holdings
4. East gate apartments Ltd
5. Llyod Masika Ltd
6. Jamia Valuers & Estate Agent mngt
7. Urban Bliss Realstore
8. Knight Frank Ltd
9. Milligan International Ltd
10. Regent Management Ltd
11. Neema Management Ltd
12. Cytonn Investment Ltd
13. Alliance Realtors Ltd
14. Paragan Property Ltd
15. Lowanjo Properties Ltd
16. Urban Properties Consultants & Development Ltd
17. Tysons Ltd
18. Norkan Investments Ltd
19. Masterways Properties Ltd
20. Cornerstone International Ltd
21. Dunhill Consulting Ltd
22. Suraya Ltd
23. Wesco Property Consultations Ltd
24. Acorn Properties Ltd
25. Canaan Properties Ltd
26. Pinnacle Properties Ltd
27. SEB Estate Ltd
28. Liberty Real Estate Ltd
29. Bluehills Real Estate Ltd
30. Guardian Properties Ltd
31. Sundown Valuers &Realters Ltd
32. Axis Real Estate
33. Homelands Holdings Ltd
34. Mudas Properties Services Ltd
35. Legend Valuers & Estate Agents
36. Diversity Property Ltd
37. Kimly Properties Ltd
38. Easy Properties Ltd (K)
39. Eackelberg& Co. Ltd
40. Silverrock Properties Ltd
41. Gampr Investments Ltd
42. Colburne Holdings Ltd
43. Savannah Consulting Ltd
44. Joskinyagat Ltd
45. Ryden International Ltd
46. Real Appraisal Ltd
47. Jeankins Investments Ltd
48. Realken International Ltd
49. Heri Properties Ltd
50. Valentine First Venture(K) Ltd
51. Frank Valuers & Properties Management Ltd
52. Wakama Estate Agency Ltd
53. Terestam Properties Management Ltd
54. Paradise Properties Ltd
55. Chapter Consultants Ltd
56. Perscale Properties Ltd
57. Property Point Ltd
58. ENA Properties Ltd
59. Menga Management Ltd
60. Nile Real Appraisee Ltd
61. Maestro Properties Ltd
62. Town House Agencies
63. Etion Property Consultants Add Property Consultants
64. Tuco Properties Ltd
65. Sortmaster Properties Ltd
66. Heritage Property Consultants
67. Value Build Management Ltd
68. Konaken Investment Ltd
69. Ngumo Properties Ltd
70. Elegant Investments Ltd
71. Arkpoint Properties Ltd
72. Karen Link Ltd
73. Vera Property Ltd
74. Beryt Properties Investments Ltd
75. Opus Property Ltd
76. Nairobi Homes Ltd
77. Rank Global Ltd
78. Landmark Realtors Ltd Property Ins Ltd
79. Property Ins ltd
80. Karen link ltd

Appendix IV: KEMU Permit

KENYA METHODIST UNIVERSITY

P. O. Box 267 Meru - 60200, Kenya
Tel: 254-064-30301/31229/30367/31171

Fax: 254-64-30162
Email: info@kemu.ac.ke

Our ref: NAC/MBA/2/2019/2

21st February, 2019

Commission Secretary,
National Commission for Science, Technology and Innovations,
P.O. Box 30623-00100,
NAIROBI.

Dear Sir/ Madam,

RE: WANJOHI JANCITA NYAGUTHII (BUS-3-1709-2/2017)

This is to confirm that the above named is a bona fide student of Kenya Methodist University, undertaking Masters in Business Administration. She is conducting a research titled **INFLUENCE OF FINANCIAL RISK MANAGEMENT ON PERFORMANCE OF REAL ESTATE FIRMS IN KENYA: A CASE OF NAIROBI COUNTY.**

We confirm that her thesis proposal has been defended and approved by the university.

In this regard, we are requesting your office to issue a permit to enable her collect data for her Masters dissertation.

Any assistance accorded to her will be appreciated.

Yours faithfully,

DR. Evangeline Gichunge, PhD,
ASS DIRECTOR POSTGRADUATE STUDIES

Encl.

Appendix V: NACOSTI Authorization

**NATIONAL COMMISSION FOR SCIENCE,
TECHNOLOGY AND INNOVATION**

Telephone:+254-20-2213471,
2241349,3310571,2219420
Fax:+254-20-318245,318249
Email: dg@nacosti.go.ke
Website : www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref. No. **NACOSTI/P/19/07651/29229**

Date: **24th April, 2019**

Jacinta Nyaguthii Wanjohi
Kenya Methodist University
P.O. Box 267-60200
MERU

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on *"Influence of financial risk management on performance of Real Estate Firms in Kenya (A Case of Nairobi County),"* I am pleased to inform you that you have been authorized to undertake research in **Nairobi County** for the period ending **23rd April, 2020.**

You are advised to report to **the County Commissioner and the County Director of Education, Nairobi County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

CHARITY MUSEMBI
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Nairobi County.

The County Director of Education
Nairobi County.

COUNTY COMMISSIONER
NAIROBI COUNTY
P. O. Box 30124-00100, NBI
TEL: 341666

National Commission for Science, Technology and Innovation is ISO9001.2008 Certified

Appendix VI: NACOSTI Permit

THIS IS TO CERTIFY THAT:
MISS. JACINTA NYAGUTHII WANJOHI
of KENYA METHODIST UNIVERSITY,
3029-200 NAIROBI, has been permitted
to conduct research in *Nairobi County*

on the topic: *INFLUENCE OF FINANCIAL
RISK MANAGEMENT ON PERFORMANCE
OF REAL ESTATE FIRMS IN KENYA (A
CASE OF NAIROBI COUNTY)*

for the period ending:
23rd April, 2020

Permit No : NACOSTI/P/19/07651/29229
Date Of Issue : 24th April, 2019
Fee Recieved : Ksh 1000

....
**Applicant's
Signature**

FOR : **Director General
National Commission for Science,
Technology & Innovation**

THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

The Grant of Research Licenses is guided by the Science,
Technology and Innovation (Research Licensing) Regulations, 2014.

CONDITIONS

1. The License is valid for the proposed research, location and specified period.
2. The License and any rights thereunder are non-transferable.
3. The Licensee shall inform the County Governor before commencement of the research.
4. Excavation, filming and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
5. The License does not give authority to transfer research materials.
6. NACOSTI may monitor and evaluate the licensed research project.
7. The Licensee shall submit one hard copy and upload a soft copy of their final report within one year of completion of the research.
8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice.

National Commission for Science, Technology and innovation
P.O. Box 30623 - 00100, Nairobi, Kenya
TEL: 020 400 7000, 0713 788787, 0735 404245
Email: dg@nacosti.go.ke, registry@nacosti.go.ke
Website: www.nacosti.go.ke

REPUBLIC OF KENYA

NACOSTI

**National Commission for Science,
Technology and Innovation**

RESEARCH LICENSE

Serial No.A 24214

CONDITIONS: see back page

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Appendix VII: Ministry Research Authorization

Republic of Kenya
MINISTRY OF EDUCATION
STATE DEPARTMENT OF EARLY LEARNING & BASIC EDUCATION

Telegrams: "SCHOOLING", Nairobi
Telephone; Nairobi 020 2453699
Email: rcenairobi@gmail.com
        cdenairobi@gmail.com

When replying please quote

REGIONAL DIRECTOR OF EDUCATION
NAIROBI REGION
NYAYO HOUSE
P.O. Box 74629 – 00200
NAIROBI

Ref: **RCE/NRB/GEN/1/VOL. 1**   DATE: **24ᵗʰ April, 2019**

Jacinta Nyaguthii Wanjohi
Kenya Methodist University
P O Box 267-60200
MERU

RE: RESEARCH AUTHORIZATION

We are in receipt of a letter from the National Commission for Science, Technology and Innovation regarding research authorization in Nairobi County on "**Influence of financial risk management on performance of Real Estate Firms in Kenya (A Case of Nairobi County)**".

This office has no objection and authority is hereby granted for a period ending **23ʳᵈ April, 2020** as indicated in the request letter.

Kindly inform the Sub County Director of Education of the Sub County you intend to visit.

2 3 APR 2019

SHINU SINTAYO
FOR: REGIONAL DIRECTOR OF EDUCATION
NAIROBI

C.C

Director General/CEO
National Commission for Science, Technology and Innovation
NAIROBI