# EFFECT OF REAL ESTATE INVESTMENT MANAGEMENT ON FINANCIAL PERFORMANCE OF INVESTMENT BANKS IN NAIROBI COUNTY, KENYA

PERIS WANJIKU MUIGAI

A Thesis Submitted in the School of Business and Economics in Partial Fulfillment of the Requirement for the Conferment of Degree of Masters of Business Administration (Finance) of Kenya Methodist University

JULY, 2022

## **DECLARATION AND RECOMMENDATION**

## Declaration

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

SignDate
----------

Peris Wanjiku Muigai

Bus-3-1273-2/2019

## Recommendation

This thesis has been recommended to the university panel by the university supervisors.

Sign	Date
Fredrick Mutea	
School of Business and Economics	
Kenya Methodist University	
Sign	Date
Dr. Nancy Rintari, Ph.D.	
School of Business and Economics	
Kenya Methodist University	

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## **DEDICATION**

I dedicate this thesis to my father Bernard Muigai, My mother Sarah Mungai and my sister, Ashley Muigai.

#### ACKNOWLEDGEMENT

I thank my supervisors Fredrick Mutea and Dr. Nancy Rintari, PhD for guiding me in this research process. I would also like to acknowledge and appreciate the input made by Abel Moguche who reviewed the thesis document. I am also grateful to the respondents who took part to answer various questions such as investment managers, investment officers, risk officers and quality assurance officers. Further, forever grateful to my parents Bernard Muigai and Sarah Mungai for being my role models in education and providing the financial resources during this study. My sister provided the love and companionship that was dearly needed especially when the going got tough. Am grateful to Bishop Patrick Kariuki who is my spiritual father and the entire Great Gospel Visioners family for always being there for me during my studies. Special recognition is also accorded to various parties that took part in any stage of this research such as course mates, friends and also relatives. The efforts of the university panel that provided their constructive feedback in proposal presentation and thesis defense is also highly appreciated. My sincere appreciations go to the Kenya Methodist University for providing resources needed in ensuring that my master's and particularly research was a success. The KeMU library staff are also included in my acknowledgement due to their immense contribution in ensuring that my document adhered fully to APA 7<sup>th</sup> edition in-text abbreviations, citations, table and figures labelling, and referencing.

#### ABSTRACT

The financial performance of investment banks has been on the rise globally. This is due to incorporation of diverse portfolios in various sectors such as real estate, manufacturing, and mining among others. Nevertheless, there has been a low profitability in the Kenyan investment banks. This low profitability has been partly caused by decline in value of investments made through banks by investors. This study investigated the effect of real estate investment management on financial performance of investment banks in Nairobi County, Kenya. Specifically, it examined the effect of rental property investment management, real estate mutual funds management, real estate investment trusts management, and real estate investment bonds management on financial performance of investment banks in Nairobi County, Kenya. The three theories that guided the study were Modern Portfolio Theory, Duesenberry's Accelerator Theory of Investment and segmented markets theory. The study used descriptive research design. The target population was 22 investment banks in Nairobi Kenya whose respondents were 657. Simple random sampling method was used to obtain a sample 30 percent of all categories respondents resulting to 204 respondents. This study used a questionnaire and secondary data collection form to gather data. The research conducted a pre-test at Kenya Commercial Bank and Consolidated bank in Meru County which was 10 percent of the sampled population of the study. Validity was measured through three types which were content, criterion and face validity. It analyzed both quantitative and qualitative data collected. Under the quantitative data, the study analysis provided descriptive statistics such as frequencies, percentages and mean. Inferential analysis generated included model summary to test the level of effect, analysis of variance to test hypothesis and regression coefficients to test the study's model. It was found out that there were few policies in place to ensure that investment banks made commission payments to various involved parties in a short-duration of time; Investment officers in the bank also lacked in depth knowledge on what real estate equity funds or how they worked; The available information provided by the bank through the brochures and their websites was so shallow and did not provide details such as rules and regulations of investments, income patterns for a specific time and hence did not help much. The study concluded that real estate investments had an effect on financial performance of investment banks in Nairobi County. The study recommends that banks' management should introduce policies that would give precise details on what the expected turn-around for allocation of returns would be to the investor's accounts. In addition, the bank management should provide orientation training programs to investors on what and where exactly they should invest in as far as real estate investing is concerned.

## **TABLE OF CONTENTS**

DECLARATION AND RECOMMENDATION i
COPYRIGHTii
DEDICATIONiii
ACKNOWLEDGEMENTiv
ABSTRACTv
LIST OF TABLES ix
LIST OF FIGURES x
ABBREVIATIONS AND ACRONYMS xi
CHAPTER ONE
INTRODUCTION1
1.1 Background of the Study1
1.2 Statement of the Problem
1.3 General Objective
1.4 Specific Objectives
1.5 Research Hypotheses
1.6 Significance of the Study
1.7 Scope of Study
1.8 Limitations of the Study15
1.9 Assumptions of the Study
1.10 Definition of Terms
CHAPTER TWO 19
LITERATURE REVIEW 19
2.1 Introduction
2.2 Theoretical Framework
2.3 Rental Property Investment Management and Financial Performance
2.4 Real Estate Mutual Funds Investment Management and Financial Performance 27
2.5 Real Estate Investment Trusts (REITs) Management and Financial Performance. 31
2.6 Real Estate Investment Bond Management and Financial Performance

2.7 Research Gaps	38
2.8 Conceptual Framework	40
2.9 Operationalized Framework	42
CHAPTER THREE	44
RESEARCH METHODOLOGY	44
3.1 Introduction	44
3.2 Research Design	44
3.3 Location of Study	45
3.4 Target Population	46
3.5 Sample Techniques and Sample Size	47
3.6 Research Instruments	49
3.7 Data Collection Procedure	49
3.8 Pre-testing	51
3.9 Data Analysis Procedure	52
3.10 Ethical Considerations	54
CHAPTER FOUR	55
CHAPTER FOUR RESULTS AND DISCUSISON	55 55
CHAPTER FOUR RESULTS AND DISCUSISON 4.1 Introduction	<b> 55</b> <b> 55</b> 55
CHAPTER FOUR RESULTS AND DISCUSISON 4.1 Introduction 4.2 Response Rate	55 55 55 55
CHAPTER FOUR RESULTS AND DISCUSISON	55 55 55 55 56
CHAPTER FOUR RESULTS AND DISCUSISON 4.1 Introduction 4.2 Response Rate 4.3 Reliability Tests 4.4 General Information	55 55 55 55 56 57
CHAPTER FOUR RESULTS AND DISCUSISON 4.1 Introduction 4.2 Response Rate 4.3 Reliability Tests 4.4 General Information 4.5 Diagnostic Tests	55 55 55 55 56 57 60
CHAPTER FOUR RESULTS AND DISCUSISON 4.1 Introduction 4.2 Response Rate 4.3 Reliability Tests 4.4 General Information 4.5 Diagnostic Tests 4.6 Descriptive Statistics of Financial Performance	55 55 55 56 57 60 66
CHAPTER FOUR	55 55 55 56 57 60 66 68
CHAPTER FOUR	55 55 55 56 57 60 66 68 72
CHAPTER FOUR	55 55 55 56 57 60 66 68 72 76
CHAPTER FOUR   RESULTS AND DISCUSISON	55 55 55 56 56 57 60 66 68 72 76 80
CHAPTER FOUR	55 55 55 56 57 60 66 68 72 76 80 84
CHAPTER FOUR	55 55 55 56 57 60 66 68 72 76 80 84 84 89

APPENDICES	
REFERENCES	
5.5 Suggestion for Future Studies	
5.4 Recommendations of the Study	
5.3 Conclusions of the Study	
5.2 Summary of the Results	
5.1 Introduction	89

## LIST OF TABLES

Table 3.1: Sampled Population	48
Table 4.1: Reliability Results	56
Table 4.2: General Information	58
Table 4.3: Multicollinearity Test	61
Table 4.4: Auto-correlation Test	62
Table 4.5: Normality Test	63
Table 4.6: Linearity Test	65
Table 4.7: Descriptive Statistics of Financial Performance	67
Table 4.8: Descriptive Statistics of Rental Property Investments	69
Table 4.9: Model Summary of Rental Property Investment	71
Table 4.10: ANOVA of Rental Property Investment	72
Table 4.11: Descriptive Statistics of Real Estate Mutual Funds	73
Table 4.12: Model Summary of Real Estate Mutual Funds	75
Table 4.13: ANOVA of Real Estate Mutual Funds	76
Table 4.14: Descriptive Statistics of Real Estate Investments Trusts	77
Table 4.15: Model Summary of Real Estate Investment Trusts	79
Table 4.16: ANOVA of Real Estate Investment Trusts	80
Table 4.17: Descriptive Statistics of Real Estate Bonds	81
Table 4.18: Model Summary of Real Estate Bonds	83
Table 4.19: ANOVA of Real Estate Bonds	84
Table 4.20: Model Summary of Real Estate Investment and Financial Performance	85
Table 4.21: ANOVA of Real Estate Investment and Financial Performance	86
Table 4.22: Regression Coefficients	87

## LIST OF FIGURES

Figure 2.1: Conceptual framework	41
Figure 2.2: Operational framework	42

## ABBREVIATIONS AND ACRONYMS

BIS Bank for International Settlements CBI **Climate Bonds Initiative** CBK Central Bank of Kenya CMA Capital Market Authority CRE Commercial Real Estate DATI Duesenberry's Accelerator Theory of Investment ECB European Central Bank EU European Union IFC International Finance Corporation IMF International Monetary Fund IPOs Initial Public Offerings KBA Kenya Bankers Associations KeMU Kenya Methodist University **KPDA** Kenya Property Developers Association MPT Modern Portfolio Theory NSE Nairobi Securities Exchange Real Estate Exchange-traded Funds REETFs REIBs Real estate investment bonds

- **REITs** Real Estate Investment Trusts
- **REMF** Real Estate Mutual Funds
- **GRESB** Green Real Estate Sustainability Benchmark
- **RRE** Residential Real Estate
- **WPR** World Population Review

## **CHAPTER ONE**

#### **INTRODUCTION**

#### 1.1 Background of the Study

An investment bank is a banking department or a financial corporate that offers financial services to clients through giving investment advice to clients and also performing various investments related transactions on behalf of a person, another corporate or government (Bah et al., 2018). Investment banks are different from commercial banks in the sense that they are not involved in receiving bank deposit or issuing loans but simply acting as an intermediary between clients and various investments services. Investment management services range from registered trading of securities, amalgamation and acquisition advices, and offering leverage funding to firms among others.

Investment banks are very critical in the economy through ensuring that financial markets widen their scope by matching investors and originators of securities hence enhancing liquidity of various financial markets (Balfoussia & Gibson, 2016). Notably, the purpose of any investment is ensuring that the finances multiplied considerably for future endeavors. Therefore, as more clients engage the services of investment banks, they get assurance of safe investment management platforms that ensure their money is not exposed to volatile fluctuations experienced in other investment firms (Hussein, 2017).

The financial relevance of investment management banking is experienced globally, regionally and locally. In global perspectives, American government has been able to raise capital through selling of stocks and bonds. This capital has been used in ensuring that various government processes such as the 2020 presidential elections were successful through provision of resources (Bustamante & Fresard, 2017). In Europe, investment banking has enabled a body such as European Union [EU] execute its purpose of enhancing peace, developing a cohesive financial system, removing limitations to trade, and enhancing ICT growth among European nations. Individual investors are able to enjoy private wealth growth structure through the consultation of investment management banking (Masron & Kepili, 2016).

In Asia, investment management banking has restructured various traditional investment avenues to modern ones that clients could invest. For example, clients have gotten options of investing in real estate companies, block chain technology, cryptocurrencies, and space technology companies among others (Guru & Yadav, 2019). Clients are now more knowledgeable on investment matters that are not limited to traditional investment methods only. This gives them more choices on how to diversify their wealth and avoid massive losses.

Regionally in African nations, management of investment banking is a growing phenomenon that has greatly improved the way clients choose various investment vehicles. In South Africa, investment banks are great issuers of Initial Public Offerings [IPO's], merging of companies' services, connecting investors with housing firms to buy real estate stock and shares; block chain technology; and connecting investors with mineral markets such as in gold (Bah et al., 2018). In Nigeria, investment banking has enabled growth of more investment in oil products market. Investors are now sure of reliable channels they could use to buy and sell their shares from Nigerian oil companies and real estate firms (Ugherughe & Jisike, 2019). In Congo, proper managing investment banking has caused growth of investment demand on minerals such as diamond, gold and silver (Commonwealth Diaspora Investor Survey [CDIS], 2018). Coffee beans investment in a nation such as Ethiopia has been made possible by allowing international and local investors buy shares, bonds and stocks on coffee products market (Guru & Yadav, 2019).

Locally in Kenya, management of investment banking has expanded the capital market to a point that its liquidity stability is well recognized in East and Central Africa (CMA, 2019). Investors are now empowered to distinguish trading signals on when to sell or buy shares, stocks or bonds from the Nairobi Securities Exchange [NSE] (Mwangi, 2019). Investment banks have enabled clients inject their finances into various giant real estate firms such as centum through purchase of shares and stocks. Clients are more informed on various prices of their shares, stocks or bonds through emails from their banks hence expansion of awareness (Cytonn, 2019). Investors who have a taste and preference in agricultural products markets investments, are able to do so without having to travel to NSE so as to buy or sell stocks. Investment banking has also facilitated advice from experienced and qualified banking staff that offered guidance to clients who did not know how to begin making investments especially in Kenyan real estate companies (Cytonn, 2019). These banking staff provide valuable information on various registered and stable real estate firms that would guarantee the return of their investment margins.

These developments instigated through investment banking ensure that the financial performance of investment banks remain appealing due to substantive growth in investors' transactions. Financial performance is a very critical aspect in measuring the health of investments made through the banks and in which potential investors consider. The higher the performance, the stronger the health and the lower the performance, the weaker the health of investments.

#### **1.1.1 Financial Performance**

Financial performance is defined as the measure of how an organization used its assets in revenue generation (Central Bank of Kenya [CBK], 2020; Nuhiu et al., 2017). The general activities undertaken by any organization has a purpose of boosting the performance and keeping it as a going concern. This 'going concern' goal ensure that the financial performance is measured at end of every financial year via different ways. For example, insurance firms measure through use of net premium earned, returns on investment and return on equity (Iregi & Okeyo, 2017). Agricultural firms measure performance using gross profit, return on assets and return on equity. Retail firms measure performance through quick ratio, total sales, and current ratio. Real estate firms measure profit using cash yield and rate of return. In this study, financial performance of investment banks was

measured using return on investment, return on asset, return on equity, operating ratio and rate of return (Rop et al., 2016). This is because they are acknowledged as metrics key in determining investment operations (Capital Market Authority [CMA], 2019).

Subsequently, constant measuring the performances of the firms' operations is important in giving various clues on the status of their financial health and challenges encountering them globally, regionally and locally. This enable the challenges noted so that amicable solutions are provided early enough. Globally, American investment banks' performances have been experiencing problems related to market risk, low equity rate; inexperienced investment officers; competition from other investment banks and firms; inflation concerns; liquidity risks; tough regulations from the government and capital market authority (Guru & Yadav, 2019; Hamouri, 2020).

In Europe, there have been real-time analysis of investments challenges; low returns on investments due to low demand on housing needs; low number of investors, unattractive interest on investment portfolios; rapid change of taste and preference of the clients on various investment choices; and over diversification of investments causing very low profit margins on underlying portfolios (Balfoussia & Gibson, 2016). In Asia, investment banks' performances have been experiencing issues related to political interference with real estate investments; high government taxes on returns generated on investments; poor marketing activities by the bank on investment opportunities present; low number of investment portfolios varieties that investors could make decision to invest; and cultural restrictions

whereby women are restricted from making any investments without consent of their male relatives (Bustamante & Fresard, 2017; Islam et al., 2017)

Regionally, in African nations such as South Africa, there have been downtime on bank's systems; complication in investment placement process; high management charges; poor investor relations; discouraging turn-around time on investment profits payments (Commonwealth Diaspora Investor Survey, 2018; Mukarushema et al., 2016). In Nigeria, there have been lack of timely dissemination of relevant information to clients hence missing out on investment opportunities (Ezeanyeji & Ifeako, 2019; Ugherughe & Jisike, 2019). Locally in Kenya, investment banks have been experiencing challenges related to language barriers to clients who are unable to communicate using Kenyan national languages; too much documentation when registering for investment prospects; and lack of proper orientation of clients on investment rules which make them loose huge volumes of money when they over or under traded (Cytonn, 2019; Mwangi et al., 2016).

These problems have pushed investment bank's management to restructure their investment processes so as to remain under profitability margin (CMA, 2019). Constant review, enactment of policies and procedures on investments, remain a vital precept of any investment bank.

#### **1.1.2 Effect of Real Estate Investment Management on Financial Performance**

A real estate investment management in a bank includes the decisions made by banking leaders on the quantity of funds to invest in diverse real estate opportunities with investors' profit maximization goal in mind (International Finance Corporation [IFC], 2020). A healthy real estate portfolio is one of an example of a financial goal as far as real estate investment was concerned. There are different types of investment management applied by investment banks based on the originating real estate firms. These investments are rental property investment management, real estate mutual funds investment management, Real Estate Investment Trusts [REITs] management, and Real estate investment bond management (IFC, 2020).

According to CMA (2019), a bank's investment management process is mainly involved in rental property investment management, real estate mutual fund management, REIT management and real estate investment bond management. Rental property investment management is the process into which a bank links investors to real estate companies that intends to build houses in a specific region (IFC, 2020). If the project prospects are good to the investors, they buy the issued bonds from the companies to pay commissions generated through rental income after the project completed. Real estate mutual fund management are processes that involve professional administration on pooled investments into which the managers buy stocks and bonds (IFC, 2020). Real estate investment trust management are processes involved on pooled investments through which managers invest client's money into trusts unlike the mutual funds which are invested in stocks and bonds (NSE, 2021a). Real estate investment bond management are processes that involve a bank guiding investor to inject their capital in which have fixed income securities that enable investors receive interest at end of a particular agreed period (Bah et al., 2018). Further on, there have been various developments done in investments both globally, regionally and locally. Globally, these developments have been strengthening competition among investment firms and banks; low entry barriers to investors; reliable price signals, implementation of investment policies and frameworks among EU and member nations; there have been more private-public partnership; diversification of government interventions to regulate investment operations; improvement of market friendly incentives and opportunity in investments; support to strategic investments; cooperation between promotion banks and investors; refining openness and risk administration in derivatives markets (Masron & Kepili, 2016).

In developing nations, there have been establishment of venture capital companies; tax incentives to investors and their banks; monetary policy framework enactment; improved facilitation of financial intermediation of the investment banks; initiatives made on fintech industries; Financial service board act that discreetly supervises on the registration and operations of investment banks (IFC, 2020; Puatwoe & Piabuo, 2017). In Kenya, CMA authority have instilled capital market unity; CBK has put up policies for integrated banking system, and allocation of annual investment allowance to investment banks (Mungai, 2016).

However, these developments in Kenyan investment banks have been encountered with challenges such as increment of investment charges due to inflation risks which has caused investors to cancel and withdraw their investments prematurely due to poor returns derived from real estate portfolios. CBK (2020) reports further that increase of non-performing loans in the real estate sector from 24.01% to 25.22 in June 2019 and 2020 respectively is to blame. This is because, in as much as investment banks have been directing clients on investing in real estate projects, their portfolios have been accruing losses since the underlying real estate units' holders have not been paying monthly, quarterly, semi-annual or annual mortgage interests promptly. This has resulted to low incomes which are the sources used to pay back investors on their periodical interests on investments. This problem has been experienced in several investment banks in Kenya.

The choice to make an investment in real estate sector was affected by prices of real estate investment, mortgage interest rates, availability of funding, investor's disposable revenue and their risk tolerance. Therefore, the banks have provided advice to investors on how to go about these factors. The bank then charges management fee on the services it offers to the clients. The fee charged by the bank becomes one of the income avenues of the bank which in turn boosts its financial performance. On the one hand, when the management fees decline as a result of low business use to missed opportunities, the bank's income level is negatively affected which leads to low performance of its financial operations. On the other hand, when the management fees increase as a result of new opportunities, the bank's income level is positively affected which in turn translates to increased financial performance. This means that real estate investment is a major source of income to the bank and its significance cannot not be dismissed.

#### 1.1.3 Investment Banks in Kenya

There are twenty-two investment banks in Kenya that are regulated by both CBK and CMA as indicated in appendix VI (NSE, 2021c). The investment banks are battling out with negative publicity due to closure of several brokerage firms and very low number of investment professionals who undertake the investment operations (Njoroge et al., 2019). In addition, there has been rapid change in technological shift from traditional methods of placing investments by investors to digitalization (Suley & Moranga, 2020). Many investment banks have been upgrading their ICT infrastructures to fit in the new era of conducting investment business. Further on, investment banks purpose in the investment process is declining due to direct access of capital markets such as NSE through their website portals to purchase of shares, stocks and bonds by investors (Njoroge et al., 2019).

The stated reasons gave this study the need to investigate the effect of real estate investment management on financial performance of investment banks in Nairobi County, Kenya.

#### **1.2 Statement of the Problem**

The financial performance of investment banks has been on the rise globally. This is due to incorporation of diverse portfolios in various sectors such as real estate, manufacturing, and mining among others. In America, investment banks have incorporated real estate service delivery around a connected flow model and processes among various partners. In Asia, investment banks have boosted their performances by enhancing the utilization of financial technology, information, and analysis systems to generate differentiated insights among real estate investors. In Africa, investment banks have developed robustness by being giants in marketing various securities traded in capital markets that are linked to real estate sector. These developments significantly enhance profitability of these investment banks.

Nevertheless, according to CBK (2020), there was a low profitability of Kshs 134.1 billion in June 2020 which was a 17.2% decline from the previous year of the Kenyan investment banks. This low profitability was partly caused by decline of 8.67% value of investments made through banks by investors from Kshs 70.02 billion in June 2019 to Kshs 63.95 billion June 2020 (CBK, 2020, page 22 of the report). The investment banks forfeited investment income from charges such as management fees charged on investment units.

The decline in profitability could be as a result of various factors such as low business volumes. However, the management processes, systems, and policies through which the bank staff operate within have had a share of challenges. These challenges include unclear financial policies from the bank, financial information leakage from the bank processes, and unstable chain of financial commands when placing investments (CBK, 2020; Njoroge et al., 2019). The challenges have forced various real estate investment such as rental property investment, real estate mutual funds, real estate investment trusts and real estate bonds have a decline in performance.

Past studies such as Hussein (2017), Iregi and Okeyo (2017) and Mbogo (2016) did not investigate the relationship between real estate investments and financial performance of selected investment banks in Nairobi County, Kenya. This therefore gives the need for this study to investigate from the perspective of how various financial management processes, systems, and policies among other reasons, have been causing banks to make various decisions that affect real estate investment management and financial performance of investment banks in Nairobi County, Kenya

## **1.3 General Objective**

The general objective of the study was to investigate the effect of real estate investment management on financial performance of investment banks in Nairobi County, Kenya.

## **1.4 Specific Objectives**

- i. To examine the effect of rental property investment management on financial performance of investment banks in Nairobi County, Kenya.
- To investigate the effect of real estate mutual fund investment management on financial performance of investment banks in Nairobi County, Kenya.
- iii. To assess the effect of Real Estate Investment Trust management on financial performance of investment banks in Nairobi County, Kenya.

iv. To explore the effect of real estate investment bond management on financial performance of investment banks in Nairobi County, Kenya.

#### **1.5 Research Hypotheses**

The following were the research hypotheses;

H<sub>0</sub>1: There was no effect of rental property investment management on financial performance of investment banks in Nairobi County, Kenya.

H<sub>0</sub>2: There was no effect of real estate mutual fund management on financial performance of investment banks in Nairobi County, Kenya.

H<sub>0</sub>3: There was no effect of real estate investment trust management on financial performance of investment banks in Nairobi County, Kenya.

H<sub>0</sub>4: There was no effect of real estate investment bond management on financial performance of investment banks in Nairobi County, Kenya.

#### **1.6 Significance of the Study**

The main beneficiaries of this study would be the investment banks. This study would inform the bank management on various developments that other banks have put into place globally, regionally and locally so that they could have a market advantage in investment business. The management therefore could use this study as a reference source when putting up new policies, procedures and rules that governed their investment banks to expand their business. The study would benefit investors in the sense that it would equip them on other avenues that could be used such as buying shares, stocks and bonds from real estate sector. This would aid them develop an appetite for real estate which in turn would provide to them stable sources of income.

The government of Kenya through the treasury would find this study relevant in putting it into practice of various policies and recommendations issued on the main reasons of the decline in value of investments made through banks by investors from Kshs 70.02 billion in June 2019 to Kshs 63.95 billion June 2020. The main concerns gathered from the investment banks would be documented under the conclusion section. Financial regulators would also use this study results in enacting policies that would guide investment banks towards safe investment practices which will safeguard investors wealth.

The study would also provide future studies with information on the various investment that investment banks use during investment operations apart from the commonly known ones such as buy and hold approaches among others. This study would consider investments from the perspectives of the investment department.

#### 1.7 Scope of Study

This study was conducted in Kenya for a period of 3 months. Data related with rental property investment management, real estate mutual fund management, real estate

investment trust management, real estate investment bond management and financial performance was collected from investment banks in the Nairobi County. The key participants of the study were investment managers, investment officers, risk officers and quality assurance officers. Various financial statements such as income statements for 3 years (2018-2020) was consulted to give information on return on balance sheets, profit and loss statements, cash flow statements and policy statements. This study took 5 months to complete.

#### 1.8 Limitations of the Study

The main limitation of the study was that during the data collection process, most bank staff's attention was divided between answering the questionnaires and serving clients visiting the banks for purposes of placing the investments. The nature of their work had policies that customer service came first before any other activities. To minimize this limitation, the researcher in company of the research assistant would allow the staff to serve the clients and come to pick the questionnaire after work hours (after 5pm).

#### **1.9 Assumptions of the Study**

The study assumed that the selected respondents were knowledgeable with the investments such as with rental property investing, real estate mutual funds, real estate investment trusts, exchange-traded funds that are under investigation in this study. The study also assumed that the investment banks had established an investment financial system that enabled the bank to link investors to various real estate companies so as to buy shares, bonds and stocks. Additionally, it was assumed that the banks dealt before with real estate market investment as it provided a clear guideline on the process used when placing an investment.

## 1.10 Definition of Terms

#### **Financial performance**

It is the measure of how an organization has used its assets in revenue generation (CBK, 2020; Nuhiu et al., 2017).

#### **Investment bank**

An investment bank is a banking department or a financial corporate that offers financial services to clients through giving investment advice to clients and also performing various investments related transactions on behalf of an entity (Bah et al., 2018).

## Real estate investment bond management

Real estate investment bond management are processes that involve a bank guiding investor to inject their capital in which have fixed income securities that enable investors receive interest at end of a particular agreed period (Bah et al., 2018).

## Real estate mutual fund management

Real estate mutual fund management are processes that involve professional administration on pooled investments into which the managers buy stocks and bonds (IFC, 2020).

#### **Real estate investment trust management**

Real estate investment trust management are processes involved on pooled investments through which managers invest client's money into trusts unlike the mutual funds which are invested in stocks and bonds (NSE, 2021a).

## **Rental property investments Management**

This is the process into which a bank links investors to real estate companies that intend to build houses in a specific region. If the project prospects are good to the investors, they buy the issued bonds from the companies to be paid periodic interest generated through rental income after the project completes (IFC, 2020).

#### **CHAPTER TWO**

### LITERATURE REVIEW

#### **2.1 Introduction**

This chapter gave the literature review done on the study. The chapter examined the theoretical review and later on reviewed past studies that were done according to the four key objectives of the study. This chapter concluded by indicating the conceptual and operationalized frameworks.

#### **2.2 Theoretical Framework**

The study was guided by three theories. These three theories were Modern Portfolio Theory, Dusenbery's Accelerator Theory of Investment and Segmented markets theory. Modern portfolio theory guided rental property investment management and real estate mutual funds investment management variables. Dusenbery's Accelerator Theory of Investment guided Real Estate Investment Trust management. Segmented markets theory guided real estate investment bond management.

#### 2.2.1 Modern Portfolio Theory (MPT)

Modern Portfolio Theory [MPT] was instituted by Markowitz (1950s). It guided rental property investment management and real estate mutual funds Investment management variables. MPT stated that portfolio of assets should be combined in a way that the expected

rate of return was maximized in specific level of risk. This meant that when making investments, the portfolio manager should always ensure that they had diversified the available assets in different types of investments so as generate profits with very low levels of risk. In lay man language MPT indicated that one should not invest all their assets only in one category of investments but rather invest in different areas so that in case there is a risk of loss, it would not have great impact on other assets invested in different areas.

MPT theory was used in this study because as investment banks' fund managers thought of options available on them, they could always maximize returns and minimize risks. The plan they employed in real estate investment options, should be well though off and diversified. This was because, real estate investment baskets were easily impacted by factors such as inflation, political effect, and policies among others. The higher the value of investment in a specific portfolio, the larger the impact of resultant risk. Fund managers should think of investing small combined portions of investors' funds on rental property such as residential real estate, commercial real estate, industrial real estate and land real estate investments among others. In terms of real estate mutual funds investment, they should think broadly on how they could combine portion of money market fund, equity fund, fixed income fund and balanced fund with priority being on the return verse risk involved. According to MPT theory, investors were risk averse in the sense that when given two options of investments, they would always pick the less risky one to invest their resources. This should also be replicated to investment banks managers since they acted as representatives of the investors when placing investments (Markowitz, 1950).

Mahdavi (2013) and Wigglesworth (2018) criticized MPT theory that there was a mismatch in its model of financial markets and real-world activities hence this theory was not ideal tool for investments. This meant that in real world, investment decisions were mainly pegged on different factors such as insider information, emotions and experience among others. This critic did not affect this study since investment banks had robust policies that restricted their investors on the percentage value of investment that they could place in a portfolio to minimize investment catastrophes due to actualized risk.

#### 2.2.2 Dusenbery's Accelerator Theory of Investment (DATI)

Dusenbery's Accelerator Theory of Investment (DATI) which was instituted by Dusenbery (1960) was more of an extension of accelerator theory of investment. DATI guided real estate investment trust management. DATI stated that when capital grew, investment value surpassed depreciation and any increase of income resulted to investment value which was higher than the savings. This meant that the principal value that investors were willing to risk through buying different types of investments expanded, the resultant investment would be more than its deprecation value and total savings. For example, if an investor had a way to ensure that their initial capital kept on growing, the value of their investments would be more than the rates at which they lost their value and more than overall savings.

When an investor bought real estate investment trusts, they were bound to increase in value with time since the underlying real estate assets increased their value. Once the assets increased their values, the initial capital value had a positive margin as compared to the rate at which it was losing its worth. Investors could expound their capital through considering trusts like Development Real Estate Investment Trust (D-REITs), Islamic real estate investment trusts and property funds. In addition, they could expound and ensure their capital adds value by considering venturing into various types of bonds such as government real estate bonds, commercial real estate bonds, crowdfunding real estate bonds and corporate bonds.

#### 2.2.3 Segmented Markets Theory

Segmented markets theory guided real estate investment bond management. Culbertson (1957) came up with this theory. It stated that investors had clear preferences on the maturity dates of their investments hence when making any form investment, they were very intentional towards achieving this goal whether short or long-term periods. Therefore, due to these preferences, securities exchanges were divided into micro markets that worked on the basis of how their demand supply of securities was performing visa vis the profitability of these specific markets.

In relation to this study, the theory was adopted since when making various forms of real estate investment bonds, investors were very keen to place them through channels (banks) that offered the best directions on which market had the best supply and demand of the bonds. That is to say, investors knew that through engaging the various professionals and bank's systems, they were sure that they would purchase real estate investment bonds at

low prices and after specific period of time sell them at a profit not easily affected by other types of securities.

#### 2.3 Rental Property Investment Management and Financial Performance

Rental property investing management occurs when a bank links its investors to real estate companies that intended to build houses in a specific region (IFC, 2020). If the project prospects are good to the investors, they buy the issued bonds from the companies to be paid periodic interest generated through rental income after the project completed. There are different types of rental property investments that investors could purchase their shares through investment banks which are residential, commercial, industrial, and land real estate investments (European Systematic Risk Board, 2015). Residential real estate is a property that involve mainly houses and homes built for purposes of settlement by people (Nyachwaya & Nyanga'u, 2020). Commercial real estate includes flats, shops, hotel buildings built for purposes of selling to clients. Industrial real estates are constructed for manufacturing of goods (Onyang'o, 2019). Land real estate is land bought for purposes of development uses so as to increase its value over a period of time ((Mbogo, 2016). There have been studies done particularly on the various rental property investment management both in advanced and advancing nations.

According to International Monetary Fund [IMF] (2021), Commercial Real Estate [CREs] was excessively hit by losses due covid-19 pandemic as compared to other real estate property investments. IMF (2021) while reporting on the risks incurred in Europe's real
estate sector during covid-19 era, revealed that the main cause of this massive loss was due to overvaluations of CREs leading to large price misalignments. Despite that, a report by Bank for International Settlements [BIS] (2020) documented on how international commercial real estate investments were surviving in Asia-Pacific in the midst of covid-19 pandemic. According to BIS (2020), real estate made of up to 60 percent of worlds single largest class of assets. Therefore, since clients often used real estate assets such as residential houses, commercial houses and land to secure loans from financial institutions, their profitability affected the direction of the banking system.

This is because the management of real estate process got hampered leading to halt of further services. For example, Australian and Japan's banking systems were negatively affected by losses incurred in commercial real estate in 1990's. This meant that commercial real estate prices and interest rates affected investors in diverse nations. BIS (2020) indicated further that globally between 2014 to 2019, the value of real estate portfolios which were managed professionally grew by 37 percent from 9 trillion to 9.6 trillion US Dollars.

Nevertheless, international intermediaries such as investment banks indicated that due to covid-19, their investment activities in real estate declined by 13 percent to 61 percent which was \$11 billion decline from initial \$29 billion between first half of 2019 and that of 2020. Notably, the number of investors grew with 18% in 2020 from 2% in 2019. These results indicated that though the number of investors grew, the value of their investments

significantly declined due to considerably low profits generated by various real estate investments in commercial sector. The report by BIS (2020) was only inclined to commercial real estate and overlooking at other real estate investments such as residential, industrial and land investments performances.

Additionally, European Systematic Risk Board [ESRB] (2015) gave an account of Commercial Real Estates [CREs] in European nations. The report confirmed that information related to CREs performance was few and inconsistent in Europe as compared to Residential Real Estate [RRE]. This therefore made it hard to assess risk on CREs globally. Indeed ESRB (2015) revealed that it was a challenge in tracking investment volumes and dynamic of supply and demands of CRE. In the midst of these issues, CRE suffered high capital risk weights hence making them unattractive. Therefore, since this information was not easily available, the current study combined both questionnaires and secondary data to get as much information as possible on not only CRE but also residential, industrial and land real estates.

Further on, Nyachwaya and Nyanga'u (2020) examined the relationship that property investment had with financial performance of listed banks in Kenya. The study used descriptive research design to conduct a study from the purposely sampled 10 listed banks. The study utilized secondary data to collect data of the study. It was established that many banks mainly focused on high wage earners when deciding who should come abroad and also when diversifying the portfolios on property investments. They therefore failed to develop investment products for the middle-and lower-class clients. According to Nyachwaya and Nyanga'u (2020), this resulted to low property investments operations by banks making it expensive over long-run. Nevertheless, the choice of Nyachwaya and Nyanga'u (2020) to use ROA as the only financial performance indicator could be criticized since there were other ways of measuring financial performance such as return on investment, equity growth on cash flow, operating ratio and rate of return. The current would measure using these indicators for inclusivity.

In addition, Onyang'o (2019) examined how financing real estate factored in commercial property growth. The study narrowed down to twelve Kenya Property Developers Association [KPDA] institutional members. Through the use of secondary data, Onyang'o (2019) found out that poor management and inconsistency of investor's funds were main contributors to prolonged completion rate of the projects. However, Onyang'o (2019) made this conclusion through use of secondary data which was normally prone to biasness. In addition, the results were not exhaustive since Onyang'o (2019) did not include developers' opinion on choice of financing their projects such as incorporating investment banks' investors through rental investments platforms. Further on, Onyang'o (2019) concentrated on only one type of real estate which was commercial real estate failing to include other types such residential real estate, industrial real estate and land real estate investments. The current study paid attention to commercial, residential, industrial and land real estate investments.

Further, Mbogo (2016) explored on the effect that approaches affiliated to real estate investments had on 90 investment groups' financial performances. The study used questionnaires to gather data from the 50 members of investment groups who had invested in real estate. Interestingly, Mbogo (2016) found out that buying and holding, own and operate approaches had a significant effect on financial performance. However, since Mbogo (2016) was general in terms of investment groups, the current study narrowed down to investment banks whose investments were more different. Further on, Mbogo (2016) did not substantiate who these 50 members were as far as investment groups were concerned. The conclusion from Mbogo (2016)' remarks indicated that these members could have been employees of these investment groups. In addition, Mbogo (2016) did not factor in the challenges that investment groups were facing in administering these approaches. Therefore, the current study would concentrate more on challenges that investment group face in real estate investments.

#### 2.4 Real Estate Mutual Funds Investment Management and Financial Performance

Real estate mutual funds [REMF] are pooled investments that are managed professionally into which managers buy real estate stocks and bonds (IFC, 2020). There are different types of REMFs such as money market fund, equity fund, fixed income fund, and balanced funds (Viktoriya & Edward, 2020). Real Estate Mutual Funds [REMF] have been steadily growing globally. A report by European Central Bank [ECB] (2021) documented the investment fund figures in Europe. Outstandingly, ECB (2021) revealed that in the first quarter of 2021, shares issued by investment funds apart from money market funds grew from  $\notin 13,737$  to  $\notin 14,447$  billion in 2020 and 2021 respectively. However, shares issued by money market funds fell from  $\notin 1,416$  in 2020 to  $\notin 1,367$  in 2021. Equity funds share issuance was  $\notin 155$  in 2021. Exchange traded funds issued  $\notin 50$  billion shares with an outstanding value of  $\notin 1,073$  billion. The outcome ascertained that categories of REMF grew with only money market fund declining. The cause of decline was attributed to covid-19 pandemic, price volatility, reduced investor's participation in the mutual fund pool and post-Brexit effects.

Further, Gunes (2020) explored the performance of REMFs in Turkey's stock exchange. The study admitted that REMFs was relatively new in Turkey where it began in 2014, hence few studies done on it. However, Gunes (2020) proclaimed that as a result of growing demand for real estate, the need to establish how REMFs were performing was key to both current and potential investors. The study paid attention to Batışehir, Dükkân and One Tower GYF REMFs listed in Turkey's stock exchange. Gunes (2020) used Sharpe, Treynor and Jensen's Alpha method to measure their performances within five hundred and nine days of transactions. As reviewed, Gunes (2020) discovered that real estate international funds performed poorly because of poor investment choices, lack of diversification, restrictions of the funds to only qualified investors.

Additionally, Viktoriya and Edward (2020) documented on the canons of REMFs active management. The study explained reasons for the sharp decline on REMFs after global crisis. Critical review by Viktoriya and Edward (2020) examined REMFs management

factors such as Fund R2, active share, property-type concentration index, and return gap. The study found out that fund manager's activeness in REMFs had steadily deteriorated as compared to other funds such as Equity funds. According to Viktoriya and Edward (2020), the portfolio performance of REMFs was not dictated by location of the underlying real estates but by the number of REMFs transactions. However, Viktoriya and Edward (2020) did not look into government regulations as a management factor dictating the performance of REMFs. This created a gap to investigate the effect of government regulations towards REMFs performance in investment banks.

In addition, Ilo et al. (2018) explored on how Nigerian's mutual funds were performing. Further on, Ilo et al. (2018) relied on 37 mutual funds in 6 broad categories of Nigerian stock exchange. The study assessed their monthly reports for period beginning from 2012-2015. In line with the topic, Ilo et al. (2018) posited that the mutual funds had negative rate of returns hence not paying back investors who had invested in risky assets such as exchange traded funds and equity funds. Suggestively, Ilo et al. (2018) was able to come to this conclusion by measuring rates of return through use of Sharpe, Treynor and Jensen's Alpha method hence forfeiting various fees such as management fees due to lack of skillful diversification by fund managers to diverse mutual funds such as money market and fixed income fund. In revelation to this, there was need to critically examine the various diversification techniques used by fund managers in investment banks when investing on real estate mutual funds located in Kenya. According to Mburugu (2019), he examined the elements that caused development of real estate investment firms in Kenya with specificity to Premier Realty firm. Adopting a descriptive research design, the study sampled 336 issued with questionnaires, administered interviews and also analyzed reports. Interestingly Mburugu (2019) found out that investor confidence played a significant role on active demand on housing market. That is, investment firms real estate housing products provided a platform that investors could confidently place their investments such as buying shares in the real estate firm in form of mutual funds or simply buying a house. However, these views were gathered from one real estate firm which was Premier Realty firm. These results could be criticized that collecting data from one firm in research was biased and could have replicability problems since the discoveries could be specifically attached to the institution where data was collected and no any other institution. The current study collected data from the targeted 22 investment banks located in diverse area in Nairobi County.

Taking a different perspective, Kuria (2019) considered the behavioral patterns of real estate investors and how that affected investment performance in Kenya. A sample of 426 real estate investors in Nairobi was issued questionnaires to take part in the study. The study had an 83 percent return rate (353 questionnaires). Additionally, Kuria (2019) found out that investors such as in REMFs, had an illusion that they were knowledgeable and had control on their investments but in reality, they just generally looked at risk and return foregoing other important factors such as investment policies and performance rates of real estate markets. Investors had problems related to too much confidence, herding behavior

and market biasness. There was therefore need to assess some of the challenges that investors face when investing in real estate mutual funds.

# 2.5 Real Estate Investment Trusts (REITs) Management and Financial Performance Real estate investment trusts are also pooled investments which are invested into real estate trusts unlike the mutual funds which invested in real estate stocks and bonds by fund managers on behalf of their clients (NSE, 2021a). There are different types of REITs which are Income Real Estate Investment Trusts (I-REITs), Development Real Estate Investment Trust (D-REITs), Islamic Real Estate Investment Trusts and Property funds (NSE, 2021a). The performance of REITs has been of great concern both in advanced and advancing nations. Morri et al. (2021) evaluated how REITs in Europe had performed financially. To achieve this, Morri et al. (2021) included 50 REITs in Europe. Ordinal least squares model was adopted in this study to measure Green Real Estate Sustainability Benchmark (GRESB) rating on ROA, ROE. Morri et al. (2021) found out that GRESB had a positive effect on ROA and ROE. However, according to Morri et al. (2021), investors had limited information from the managers about how GRESB worked and their effect on ROA and ROE. Morri et al. (2021) used secondary data to come to this conclusion which was not enough to substantiate. It would be more realistic to get feedback from respondents such as REITs managers who would be better positioned to provide more information on why they believed the investors did not have adequate knowledge on REITs and their recommendations on how to solve the problem.

Additionally, Capellán et al. (2021) examined the effects of REITs in Costa del Sol-Spain's real estate sector. To collect data, the study used reports such as statement of affairs, income and loss reports, and cashflow statements from real estate firms' websites. The real estate firms included were Idealista and Fotocasa y Obranuevaenmalaga. In addition, e-questionnaires were sent to leaders of the sale of real estate via online means. Capellán et al. (2021) found out that REITs have been leading in capital markets since they were able to market and generate huge volumes of businesses through close communication of managers and clients.

Furthermore, Chiu et al. (2020) assessed how Mexican Real Estate Investment Trusts (REITs) prices were affected by covid-19. After Mexico introduced REITs in 2011 in its capital markets, the reception was warm among investors. There were 15 REITs firms registered in Mexico stock markets and had above 2,000 real estate worth \$25 billion. According to Chiu et al. (2020), covid-19 significantly reduced the revenue generated by REITs. This was because of cessation of movement and huge gatherings of people. This meant that by May 2020, 72.1 percent of construction declined which was a factor that caused REIT index to decline by 36.7 percent. By June 2020 4 REITs had negatively performed an index of 19.5 percent. Since this study was conducted in Mexico, there was need to consider local Kenyan perspectives whereby REITs performances would evaluate from the management perspectives especially during this covid-19 pandemic era.

A study by Menges and Moranga (2020) investigated the effect that indirect investments such as investment trusts had on Nairobi County's real estate sector performance. The study sample population was 69 real estate firms but managed to collect secondary data from 45 real estate firms due to availability of data. This secondary data was gotten from the firm's websites or directly from these firms. As planned, Menges and Moranga (2020) found out that investment trusts affected financial performance of real estate sector. Nevertheless, the level of significance was limited on the type of real estate in question. However, Menges and Moranga (2020) did not substantiate and include the firm's officers who issued the secondary data in the procedure. This would make the study hard to replicate for future studies.

Further on, Nyoro (2017) conducted a study on factors that determine the Real Estate Investment Trusts (REITs) firms' performance in Kenya. The study targeted 6 REITs firms in Nairobi whose 36-management staff were selected using census technique. Questionnaires were used to collect data that were pre-tested at REITs in Nakuru County. In addition, Nyoro (2017) found out factors such as government policies, economy, interest rates and demographics of the respondents determined REITs firms' financial performances. However, Nyoro (2017) did not consider a factor such as inflation rate which has great effect on total cost of REITs. The current study would shift focus and expand to investment banks that offered REITs instead of only REITs firms. This would thus enable the study incorporate the effect that inflation rates affect the prices of REITs in these banks. According to Njenga (2017), he explored what characterized the acceptance of REITs by real estate developers in Kenya. Through the help of census method, Njenga (2017) selected 67 firms. Thereafter, the 87 respondents who were top management officials responded to the questionnaires. Suggestively, Njenga (2017) found out that REITs revenue system, regulations and operations attracted real estate developers. Njenga (2017) did not provide information on the location of the pre-test, the respondents of the pre-tests and their sampling method. Further on, Njenga (2017) included only real estate developers in the study as respondents and did not include investment banks who were also actively engaged in REITs development.

Additionally, Sada (2016) reviewed the state of Kenyan REITs. The study assessed the benefits and risks associated with REITs to enable their existence thrive better in Kenya. The sampled population included 20 REIT portfolio managers. As per the findings, Sada (2016) indicated benefits to include more avenues for diversification paybacks on investor's wealth in real estate; liquidity and increased revenues; tax exemptions; and professional services in managing the REITs. However, the risks included uncertainty in valuation; political interference; low growth rate; uncertain investment durations. In addition, investors were not knowledgeable on REITs generally, and their valuation. The number of sampled REITs managers was twenty which was very low. This number was below the 30 limits for purposes of effective results in a study. However, Sada (2016) did not explore various policies and regulations that were in place to facilitate further development of REITs.

#### 2.6 Real Estate Investment Bond Management and Financial Performance

Real estate investment bonds [REIBs] are real estate fixed income securities that enable investors receive interest at end of a particular agreed period (Bah et al., 2018). There are different types of REIBs such as government REIBs, commercial REIBs, crowdfunding REIBs and corporate REIBs (Climate Bonds Initiative [CBI] (2019). The performance of REIBs has been of great concern both in advanced and advancing nations. A study by Hilbrandt and Grubbauer (2020) explored how various green municipal/government bonds standards and organizations responsible for setting these standards had expanded financial markets in Mexico City. Additionally, Hilbrandt and Grubbauer (2020) revealed that municipal green bonds were green instruments that cities used to borrow debts used for purposes of expansion of projects labelled and certified as sustainable. The study established that green bonds standards hardly affected the building projects accomplishment but when emphasized by various organizations empowered to guide the standards, they provided a financial market that was legal and secured. As per the findings, Hilbrandt and Grubbauer (2020) indicated that municipal green bonds had a challenge such as long-term maintenance of green bonds market and unstable political support towards environmentally friendly buildings.

In addition, Climate Bonds Initiative [CBI] (2019) documented on how green commercial bond market were enhanced through funding low-carbon buildings in Japan. The report began by proclaiming that buildings were a major source of 28 percent of carbon dioxide emanation which contributed a lot to depletion of ozone layer. As a result, green bonds to promote monetary leverage was accepted and became popular globally (Climate Bonds Initiative, 2019). The common parties involved in issuing low carbon green bonds were banks, central banks, local government, real estate firms/property firms and other nonfinancial firms. These bond leverages were used to build hospitals, offices, schools, universities, houses and airport buildings.

Property firms that had already issued low carbon buildings green bonds included Vasakronan in Sweden which issued green bonds worth united states dollar [USD] 2.3billion in 2013; Svensk Fastighets Finansiering in Sweden which issued green bonds worth USD747million in 2015; Dutch property firm in United Kingdom [UK] which issued green bonds worth USD15.5 billion in 2016; Prologis in California which issued green bonds worth USD763million in 2018; Monash university in Australia issued green bonds worth Australian dollar [AUD] 400million in 2018 (Climate Bonds Initiative, 2019). These examples proved that there was issuance of green bonds leverage by fund managers that aimed to promote low carbon buildings in various developed nations.

Further on, Obiero (2018) investigated how diversifying portfolios played part in boosting financial performance of investment companies listed at NSE. Suggestively, Obiero (2018) used secondary data inform of financial statements for the financial period between 2010-2017 for five investment companies. The study used census technique to select these five companies. Obiero (2018) established that when investment companies invested in corporate bonds and real estate, their ROA became 85.3 percent. Adding to that, Obiero (2018) also found out most investment companies did not invest in international bonds but

rather local bonds. However, Obiero (2018) indicated that the study assessed secondary data such as balance sheets, profit and loss, cashflow and annual financial report notes. That notwithstanding, Obiero (2018) did not include secondary data on nature and number of investment policy statements which were key in ascertaining the guidelines that directed portfolio managers and their clients on how and where to invest in terms of bonds. It could be, the approaches employed considered venturing into local bonds since it was cheaper, had more profit margins and the underlying real estate project was known.

A study by Hussein (2017) investigated how Kenyan commercial banks performance related with investments. Forty-two commercial banks' secondary data was used in this study. While adopting descriptive research design, Hussein (2017) found a negative relationship between real estate investments and ROA as an indicator of financial performance. Nevertheless, Hussein (2017) also discovered that corporate bonds had a positive relationship with ROA. What these results meant was that the banks that considered investing in corporate bonds from firms such as real estate affiliated stood a chance of higher profitability as compared to investing directly to real estate investments. This was because, most banks were structured to be intermediaries between clients and investment firms. However, Hussein (2017) gathered data from secondary sources such as balance sheets and income statements while not including cashflow statements which could have provided significant data especially related to ROA.

#### 2.7 Research Gaps

From the studies reviewed on rental property investment management, the study discovered that Commercial Real Estate [CREs] were hit by losses due covid-19 pandemic as compared to other real estate property investments. This was because of overvaluations of CREs leading to large price misalignments. These results indicated that though the number of investors had grown, the value of their investments had significantly declined due to considerably low profits generated by various real estate investments in commercial sector. The studies further revealed that it had been a challenge in tracking investment volumes and dynamic of supply and demands of CRE. In the midst of these issues, CRE suffered high capital risk weights hence making them unattractive. The banks were also partly to blame because many of them focused on high wage earners when deciding who should come abroad and also when diversifying the portfolios on property investments. They therefore failed to develop investment products for the middle-and lower-class clients.

The studies reviewed on real estate mutual fund investments management, indicated that almost all categories of REMF had grown with only money market fund declining. The cause of decline was attributed to covid-19 pandemic, price volatility, reduced investor's participation in the mutual fund pool and post-Brexit effects. In addition, real estate international funds performed poorly because of poor investment choices, lack of diversification, restrictions of the funds to only qualified investors, and lack of fund manager's activeness in REMFs which had steadily deteriorated as compared to other funds such as Equity funds. Further on, studies found out that investors such as in REMFs, had an illusion that they were knowledgeable and had control on their investments but in reality, they just generally looked at risk and return foregoing other important factors such as investment policies and performance rates of real estate markets. Investors had problems related to too much confidence, herding behavior and market biasness.

Studies reviewed on REIT management, established elements like government policies, economy, interest rates and employee staffs determined REITs firms' financial performances. Nevertheless, REITs risks included uncertainty in valuation; political interference; low growth rate; uncertain investment durations. In addition, investors were not knowledgeable on REITs generally, and their valuation. In addition, covid-19 significantly reduced the revenue generated by REITs. For example, in nations such as Mexico had 72.1 percent of construction declined which was a factor that caused REIT index to decline by 36.7 percent.

The previous studies related to real estate investment bond management, established that many firms invested a lot in various bonds inclusive of even green bonds. However, most investment companies did not invest in international bonds but rather local real estate bonds. For example, the studies indicated that municipal green bonds had a challenge such as long-term maintenance of green bonds market and unstable political support towards environmentally friendly buildings. The study noticed several gaps such as authors avoiding investment policy statements which were key in ascertaining the guidelines that directed portfolio managers and their clients on how and where to invest in terms of bonds. It could be, the approaches employed considered venturing into local bonds since it was cheaper, had more profit margins and the underlying real estate project was known.

#### **2.8** Conceptual Framework

Conceptual framework was a figurative representation showing the relationships between the study's variables. Figure 2.1 gives the conceptual framework. According to Figure 2.1, the variables located on the left side were the independent variable while on the right was the dependent variable. The independent variables were rental property investment management, real estate mutual funds investment management, real estate investment trust management, and real estate investment bonds management. The dependent variable was the financial performance.

# Figure 2.1

Conceptual framework



Independent variables

Dependent variable

#### **2.9 Operationalized Framework**

#### Figure 2.2

**Operationalized Framework** 



#### **Independent variables**

Figure 2.2 indicated that the dependent variable which was the financial performance had indicators such as return on investment, equity growth on cash flow, operating ratio, rate of return and cash yield. The first independent variable which was rental property investment management, had indicators such as residential real estate, commercial real estate, industrial real estate and land real estate investments (Bah et al., 2018; NSE, 2021c). The second independent variable which was real estate mutual fund investment management, had indicators such as money market fund, equity fund, fixed income fund, and exchange traded funds (Mburugu, 2019; NSE, 2021b). The third independent variable which was real estate investment trust management, had indicators such as Income Real Estate Investment Trusts (I-REITs), Development Real Estate Investment Trust (D-REITs), Islamic real estate investment trusts and property funds (NSE, 2021a). The fourth independent variable which was Real Estate Investment, had indicators such as government real estate bonds, commercial real estate bonds, crowd funding real estate bonds and corporate bonds (NSE, 2021b).

#### **CHAPTER THREE**

#### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

The methodology involved in the study was examined in this section. The design used, location, target population and its sampling method were evaluated. Thereafter, the instruments used, data collection process, pre-test which also showed validity and reliability were given. Lastly, data analysis techniques on both qualitative and quantitative data were shown and as well as ethical concerns.

#### 3.2 Research Design

A research design is a plan used in a study to collect, analyse and report the findings so as to be able to tackle the study's main problem (Schoonenboom & Johnson, 2017). In this study, descriptive research design was used. This research design was used due to the nature of quantitative and qualitative data that was collected. To examine this relationship, the study examined how investment banks managed different real estate investments to their advantage and their effect to its performance. Therefore, the study did not interfere with the processes, structures and systems that investment banks had put into place in relation with real estate investments but rather examined why profitability was low despite the presence of these approaches.

#### 3.3 Location of Study

A location is the physical place where the study intended to collect data (Sileyew, 2019). The location of this study was in Nairobi County, Kenya. This is the capital city of Kenya which hosted almost all financial institutions in the country (World Factbook, 2021). These financial institutions ranged from commercial banks, investment banks, microfinance, Sacco's and companies. Nairobi county has the presence of Central Bank of Kenya [CBK] head office which regulates all the banking operations such as deposit taking, savings, loan issuance and investment in Kenya (CBK, 2020). Further on, the region has a Capital Market Authority [CMA], Nairobi Securities Exchange [NSE] which provide safe platforms that investors could place their money through the guidance of their investment banks in a well governed real estate stocks, shares and bonds system (CMA, 2019, NSE, 2021c).

Nairobi County is Kenya's capital with the highest population (World Population Review [WPR], 2021). The high population provided demand for real estate such as residential, commercial and industrial houses which gave assurance of return on investments to investors due to reliable rental income (Cytonn, 2021). According to a report by Kenya Properties Developers Association [KPDA], (2021), there were 55 real estate corporates in Nairobi County with good standing which is the highest number in Kenya. This number indicated that the county had highest number of real estate firms and banks that provided platforms for investment banks to invest in mutual funds, bonds, and trusts related to real estate sector (CMA, 2021).

#### **3.4 Target Population**

A target population is the institution that the study intended to collect the data (Martínez-Mesa et al., 2016). In this study, the target population was 22 investment banks in Nairobi Kenya (see appendix I). The respondents were 75 investment managers, 297 investment officers, 124 risk officers, and 161 quality assurance officers. This formed a total of 657 respondents (see appendix I). An investment manager was any senior management staff in an investment bank whose role was to provide leadership and direction on investments.

They had depth experience and information on the detailed processes in investments. An investment officer was any junior staff of the lower caliber than that of investment manager. They were directly involved in investment processes and mainly interacted with investors as they bought or sold their investments. A risk officer was any staff in charge of managing risk within an investment bank. They were relevant in providing information regarding measures investment banks followed to conduct their businesses in a manner that the bank was not exposed to losses. Quality assurance officer were any staff of an investment bank whose role was to ensure that all investment operations followed the set banking policies, government regulations and was safe for investors.

#### 3.5 Sample Techniques and Sample Size

#### **3.5.1 Sample Technique**

Sampling technique includes the method that the study uses so as to select a smaller group gotten from the available target population (Martínez-Mesa et al., 2016). This study used simple random technique to sample the respondents.

#### 3.5.2 Sample Size

A sample size is the actual subgroup that represents the entire populations. According to Mugenda and Mugenda (2003) and Taherdoost (2016), a sample of between 10 to 30 percent is reliable enough to act as a sample size of population. This study used simple random sampling method to sample 30 percent of all categories of the respondents. Table 3.1 gives the sample population.

# Table 3.1

# Sample Population

Investment	Investment	Investment	Risk	Quality	Total
banks	Managers	Officers	officers	e officers	
ABC Capital	2	4	2	2	10
African Alliance Kenya Investment Bank	1	4	2	3	10
Afrika Investment Bank	1	3	2	2	8
Apex Africa Capital	1	5	1	3	10
CBA Capital	2	5	2	4	13
<b>Discount Securities</b>	1	4	2	2	9
Dyer & Blair Investment Bank	2	5	2	2	11
Equity Investment Bank	2	5	5	2	14
Faida Investment Bank	1	3	2	2	8
Hakuna Ventures	1	3	1	1	6
Francis Drummond &	1	5	1	1	Q
Company					0
Genghis Capital	1	5	2	2	10
Kestrel Capital	1	4	1	2	8
Kingdom Securities	1	5	2	2	10
Ngenye Kariuki & Co	1	2	1	2	6
NIC Securities	1	3	4	3	11
Old Mutual Securities	1	6	1	2	10
Renaissance Capital	1	5	1	2	9
(Kenya)					- -
SBG Securities	1	4	l	2	8
Standard Investment Bank		5	2	2	10
Sterling Capital Limited	1	4	1	2	8
Suntra Investment Bank	1	3	1	Z	7
Total	26	92	39	47	204

#### **3.6 Research Instruments**

A research instrument is a tool that a study used to collect data (Canals, 2017). This study used questionnaire and secondary data collection form to collect data from the respondents in investment banks. The questionnaire was used to collect data from the categories of respondents who were investment managers, investment officers, risk officers and quality assurance officers (appendix IV). The questionnaire was a closed-ended using a tabular Ordinal Likert Scale. The questionnaire was partitioned into six segments which were demographic, rental property investment, real estate mutual funds investment management, real estate investment trust management, real estate investment bond management and financial performance. The questions asked were closely directed from the gaps identified from past studies reviewed and the indicating aspects of each variable. The secondary data collection sheet was used to gather information related to return on investment, return on asset, return on equity, operating ratio and rate of return (appendix V). The information was gotten from balance sheets, profit and loss statements, cash flow statements and policy statements. The various reports were for the accounting years 2018 to 2020.

#### **3.7 Data Collection Procedure**

Data collection procedure is the process that the study intended to use to distribute research instruments and collect them later once filled (Canals, 2017). The procedure for collecting data began from getting approvals from Kenya Methodist University [KeMU] through introductory letter. The approvals were required for applying research permit from

NACOSTI. The study sought further approvals from investment banks' management (appendix II). This provided permission to collect data from specific respondents sampled as indicated in section 3.5. The researcher hired one research assistant who worked hand in hand with the researcher. The research assistant was qualified and experienced in data collection procedures in Nairobi County. The assistant was trained and oriented for 3 hours on the study's purpose and objectives.

On the data collection day, the researcher began by requesting the authorizing manager to help them identify the investment managers, investment officers, risk officers and quality assurance officers. Once identified, the researcher introduced themselves and issued them with an introduction letter (appendix III). The respondents had a choice to take part in the study or not. When they agreed, the researcher issued them with the questionnaires (appendix IV). They then waited for them to fill in the questionnaires. In case they were busy at their offices; the researcher then gave them a week after which they went and collect all the answered questionnaires. The researcher then forwarded the questionnaire to the data analyst to begin analysis immediately. Later on, the researcher stored the questionnaires in a safe place after the analysis.

The researcher collected secondary data by searching the name of the investment bank over the internet portal. The researcher then searched for the report portal in the investment bank's website. Once identified, the researcher then began to download various reports such as profit and loss statements, cash flow statements and policy statements. Later on, the researcher checked and saw the various values indicated on return on investment, return on asset, return on equity, operating ratio and rate of return. The various reports were for the accounting years 2018 to 2020 (see appendix V).

#### **3.8 Pre-testing**

Pre-testing is the process whereby the study's instruments are issued to a different group of respondents who were supposed to answer them and provide information on any ambiguous questions (Hurst et al., 2018). According to Mugenda and Mugenda (2003), pre-test should be 10% of the sampled study population. This study conducted a pre-test at one randomly selected commercial bank branch in Meru County. The bank was the Kenya Commercial Bank [KCB] and Consolidated bank. These banks were actively engaged in real estate sector with issuance of construction loans and home financing. The respondents were 3 investment managers, 9 investment officers, 4 risk officers, and 5 quality assurance officers equally distributed between the two banks. They were selected using purposive sampling method.

#### 3.8.1 Reliability

Reliability is the ability of research instruments to measure the objectives of the study as purposed (Cooper & Schindler, 2014). This study ensured reliability by subjecting the pretest results to Cronbach Alpha Coefficients. According to Cooper and Schindler (2014), values of Cronbach Alpha Coefficients ranged from 0 to 1 with 0.7 being the minimum points which were most suitable for the instruments to be termed as reliable.

#### 3.8.2 Validity

Validity is measured through three forms which were content, criterion and face validity. Face validity was ascertained when there was comparison of the results derived with results that had ever been derived by other previous authors (Connell et al., 2018). Any difference noticed was further explained in depth. Content validity was ensured when the study confined to the boundaries and asked questions regarding rental property investment management, real estate mutual fund investment management, real estate investment trust management, real estate investment bond management and financial performance. Criterion validity was guaranteed when the study examined the effect of the variables (Connell et al., 2018). That is the effect of rental property investment management, real estate mutual funds investment management, real estate investment, real estate mutual funds investment management, on financial performance of selected investment banks in Nairobi County, Kenya.

#### **3.9 Data Analysis Procedure**

This study first sorted and cleaned collected data so as to eliminate any incomplete questionnaires. Thereafter, the study input the cleaned data into SPSS software (version 24) for reports generation. It analyzed both quantitative and qualitative data collected. Under the quantitative data, the study analysis provided descriptive statistics such as frequencies, percentages and median. These statistics were accompanied with explanation on what they meant and how they were related to the study's problem. Inferential analysis to be generated included model summary to test the level of effect, analysis of variance to

test hypothesis and regression coefficients to test the study's model. Diagnostic tests such as normality, linearity, multicollinearity, heteroscedasticity, and autocorrelation were tested. The study used multiple regression analysis in order to determine the effect of real estate investment management on financial performance of selected investment banks in Nairobi County, Kenya. The following regression models were used:

 $Y = C + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \hat{e}$ 

#### Where:

- Y = Financial performance
- $\beta i$  = Coefficients to be estimated

C= Constant

- XI= rental property investment management
- X2 = real estate mutual fund investment management
- X3 = real estate investment trust management
- X4 = real estate investment bond management
- $\hat{\mathbf{e}} = \text{Error}$

#### **3.9.1 Document Analysis**

The reports were analyzed using horizontal analysis technique. This was an analysis method that related two or more years of an individual organization's financial information which was articulated in percentage form. Horizontal analysis technique was used for 3

years beginning from the year 2018 to 2020 of investment banks. The study used profit and loss statements, cash flow statements and policy statements.

#### **3.10 Ethical Considerations**

The study maintained utmost ethical standard by first getting approval from Kenya Methodist University [KeMU] through issuance of an introductory letter. The approvals were required for applying research permit from NACOSTI. The study sought further authorization from investment banks' management (appendix II). The study-maintained confidentiality whereby the identity of respondents was not revealed. The respondents were also at liberty to make a choice of voluntary participation in the study. This was done by introducing the study through issuance of the study's introduction letter. The study gave due credit to all the sources of information through appropriate citation and references in full adherence to APA 7<sup>th</sup> edition. The study also maintained privacy of information by ensuring that the answered questionnaires were stored under lock and key once analysis was complete. The results of this study were displayed at public domains such university repository for institutions and future studies to greatly benefit from the outcome of the study.

#### **CHAPTER FOUR**

#### **RESULTS AND DISCUSISON**

#### 4.1 Introduction

This chapter presented the results and discussions on the data collected. It was organized as follows, response rate, reliability and demographic information. Later on, the chapter gave diagnostics tests which included multicollinearity, autocorrelation, normality and linearity. Descriptive statistics followed with their respective model summary, ANOVA for each independent variable. Lastly, multiple regression analysis was given on the combined independent variables.

#### 4.2 Response Rate

The study issued questionnaires to the sampled 26 investment managers, 92 investment officers, 39 risk officers, 47 quality assurance officers hence making a total of 204 respondents. Nevertheless, the returned questionnaires were 146 which was 72% response rate. This rate was achieved due to close follow-up by the research assistants and immediate help in clarifying the complicated questions to the respondents. Additionally, the researcher liaised with the bank administration to understand the banking operation programs so as to facilitate issuance and collection of the questionnaires. According to Fincham (2008), when a study's response rate is above 70%, it is considered excellent and it can be relied upon to answer the study's problem.

#### 4.3 Reliability Tests

This study conducted a pre-test at Kenya Commercial Bank (KCB) and Consolidated bank which was randomly selected in Meru County. The bank was actively engaged in real estate sector with issuance of construction loans and home financing. The respondents were 2 investment managers, 9 investment officers, 4 risk officers, and 5 quality assurance officers equally distributed between the two banks. The results are shown on Table 4.1.

#### Table 4.1

#### *Reliability Results*

Instrument	Cronbach's N of Items	
	Alpha	
Questionnaire	.841	20

Table 4.1 indicates that questionnaires had a Cronbach Alpha coefficient of 0.841. According to Cooper and Schindler (2014), values of Cronbach Alpha Coefficients ranged from 0 to 1 with 0.7 being the minimum points which were most suitable for the instruments to be termed as reliable. Therefore, since 0.841 was above 0.7, it meant that the questionnaires were very suitable in underpinning the problem of the study and as well as providing guidance of how, when and where to develop solutions to the study. It was intriguing to find out that 20 respondents understood the questions asked in the questionnaires which was enough evidence that the larger sampled population would understand the questions as well.

### 4.4 General Information

General information was collected by the study. The study inquired questions related to job position, educational qualifications and years of working experience in the investment bank. This information would be suitable in providing an understanding on academic and professional backgrounds of the respondents. Table 4.2 gives the findings.

# Table 4.2

## General Information

Job position	Frequency	Percent	Cumulative Percent
Investment managers	13	9	9
Investment officers	67	46	55
Risk officers	26	18	73
Quality Assurance officers	40	27	100
Total	146	100	
Education qualification	Frequency	Percent	Cumulative Percent
PhD	3	2	2
Masters	12	9	11
Degree	110	75	86
Diploma	19	13	99
Certificate	2	1	100
Total	146	100	
Working experience	Frequency	Percent	Cumulative Percent
Less than 5 years	47	32	32
5-10 years	62	42	74
10-15 years	23	16	90
Above 15 years	14	10	100
Total	146	100	

Table 4.2 indicates that 67(46%) investment officers and 40(27%) quality assurance officers took part in large numbers. However, 13(9%) investment managers were least respondents to have participated in the study. Investment managers were in few numbers

since most of them were involved in restructuring real estate investment products and planning for another financial year 2021/2022. The meetings were put into place to plan how the investment banks could recover from the decline of 8.67% value experienced in investments made through banks by investors from Kshs 70.02 billion in June 2019 to Kshs 63.95 billion June 2020 (CBK, 2020). Cytonn (2019) added that the planning that investment managers accord towards a financial year, plays a significant contribution towards winning the investors' confidence to subject their income towards the investment venture.

According to Table 4.2, 110(75%) respondents had a degree qualification. Despite that, very few of them possessed a post graduate qualification such as masters who were 12 (9%) and PhD who were 3(2%). In addition, 62(42%) of the respondents had 5-10 years of working experience. Despite that, 23(16%) of the respondents had 10-15 years of experience and above 15 years, there were just 14(10%) of them. These results indicated that most of investment banks did not keep their staff for long without either dismissing them or transferring them to another department. This left the department with few staff who had withheld test of time of over 10 years to provide solutions in investment department. Laws of Kenya had changed over time, policies of various regulatory institutions such as CMA and CBA had changed over time, hence need to have experienced staff to notice these changes.
These experienced staff would then use the positively changed laws and policies to convince investors to place their investment through the bank. However, the investment banks were losing investors since they lacked a staff who had been in the department for long to explain the changes in investment world. In agreement, Kuria (2019) emphasized that lack of consistency in trailing investment cycles over extended periods of time had caused misguided directions on when to invest hence behavioral biases of real estate investors.

#### **4.5 Diagnostic Tests**

A diagnostic test was an examination of collected data to ensure that it conformed to analysis standards hence being able to provide results that could be relied upon to make exhaustive conclusion. This study conducted four tests which were multicollinearity, autocorrelation, normality and linearity.

# 4.5.1 Multicollinearity Test

This was a test done to validate results through tolerance and VIF level. For a study to rule out that a set of data does not contain multicollinearity issue, tolerance level has to be over 0.2 while the VIF has to be below 5 (Vatcheva et al., 2016). Table 4.3 gives the findings.

## *Multicollinearity test*

Model	Collinearity Statistics		
	Tolerance	VIF	
(Constant)			
Rental Property Investment Mgt	.422	2.368	
Real Estate Mutual Fund Mgt	.641	1.560	
Real Estate Investment Trust Mgt	.975	1.026	
Real Estate Investment Bond Mgt	.399	2.505	

From Table 4.3, rental property investment management tolerance value of 0.422 and VIF of 2.368; real estate mutual fund management tolerance value was 0.422 and VIF 1.560; real estate investment trust management tolerance value was 0.975 and VIF 1.026; real estate investment bond management tolerance value was 0.399 and VIF of 2.505. These results indicated that the four variables did not have multicollinearity issue. Therefore, this meant that the confidence intervals were within the required margins with reliable probabilities as far as the effect of real estate investment management variables were concerned. In other words, the inter-relationship between the real estate investment management, and bonds maintained their independence.

#### **4.5.2** Correlation Test

There was need to tests whether the variables were interrelated with each other. To achieve this, the study used Durbin- Watson test. Table 4.4 gives the findings.

# Table 4.4

Auto-correlation Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.787ª	.619	.594	2.853	1.990
D 11	(0	$\rightarrow$ <b>D</b> 1 <b>D</b>	I D	137	

a. Predictors: (Constant), Real Estate Investment Bond Management, Real Estate Investment Trust Management, Real Estate Mutual Fund Management, Rental Property Investment Management

b. Dependent Variable: Financial Performance

According to Table 4.4, the Durbin- Watson value was 1.990. Chen (2015) stated that when the Durbin- Watson value is between 0-2, there is a positive correlation. Above 2-4 showed that there was a negative correlation. Based on this guidance, it was factual to indicate that there was a positive correlation among the variables of this study. This meant that real estate investments variables such as rental property management, mutual fund management, trust management, and bond management collectively had a positive effect on financial performance.

#### 4.5.3 Normality Test

The study examined whether the data collected was normal. To achieve this, the study used Kolmogorov-Smirnov normality test. Radford et al. (2016) indicated that for a set of data to be normal, the Asymp. Sig. (2-tailed) value needed to be above 0.05. If they were lower than 0.05, it indicated that the data was not normal. Table 4.5 gives the findings.

# Table 4.5

#### Normality Test

		Rental	Real	Real	Real	Financial
		Property	Estate	Estate	Estate	Performa
		Investme	Mutual	Investme	Investme	nce
		nt Mgt	Funds	nt Trust	nt Bond	
			Mgt	Mgt	Mgt	
Ν		146	146	146	146	146
Normal	Mean	20.55	21.05	13.21	20.33	19.90
Parameters <sup>a,b</sup>	Std. Deviation	2.535	2.319	2.952	2.538	2.997
Most Extrama	Absolute	.120	.229	.103	.128	.169
Differences	Positive	.107	.229	.103	.079	.089
	Negative	120	182	099	128	169
Kolmogorov-Smirnov Z		1.453	2.762	1.250	1.552	2.039
Asymp. Sig. (2-ta	uiled)	.093	.060	.088	.061	.054

a. Test distribution is Normal.

b. Calculated from data.

According to Table 4.5, the Asymp. Sig. (2-tailed) values were 0.093, 0.060, 0.088, 0.061, and 0.054 for rental property investment management, mutual fund management,

investment trust management, investment bond management and financial performance respectively. Therefore, these results indicated that the data collected adhered to the rule hence was normal. Being normal meant that the data set portrayed a recognizable aspect of being closely linked to each other without having data that is too extreme on both ends.

# 4.5.4 Linearity Test

The last test done was linearity test which tested the linear relationship of the variables. Kim (2021) stated that for a study to be considered as linear, its deviation significance value should be above 0.05. Table 4.6 gives the findings.

# Linearity Test

			Sum of	Df	Mean	F	Sig.
			Squares		Square		
Financial		(Combined)	208.837	12	17.403	2.116	.020
Performance *	Between	Linearity	64.804	1	64.804	7.880	.006
Rental Property	Groups	Deviation from Linearity	144.033	11	13.094	1.592	.108
Investment	Within Grou	ups	1093.820	134	8.224		
Management	Total		1302.658	146			
		(Combined)	256.328	9	28.481	3.702	.000
Real Estate	Between	Linearity	105.489	1	105.489	13.71 1	.000
Mutual Funds	Groups	Deviation from Linearity	150.839	8	18.855	1.951	.216
B	Within Gro	ups	1046.329	137	7.694		
	Total		1302.658	146			
		(Combined)	203.516	11	18.501	2.256	.015
<b>D</b> 1 <b>D</b>	Between	Linearity	60.657	1	60.657	7.395	.007
Real Estate Investment Trust	Groups	Deviation from Linearity	142.859	10	14.286	1.742	.078
Management	Within Gro	ups	1099.141	135	8.203		
	Total		1302.658	146			
		(Combined)	161.356	11	14.669	1.722	.075
	Between	Linearity	42.220	1	42.220	4.957	.028
Real Estate Investment Bond	Groups	Deviation from Linearity	119.135	10	11.914	1.399	.187
wanagement	Within Gro	ups	1141.302	135	8.517		
	Total		1302.658	146			

According to Table 4.6, the deviation from linearity significance values were 0.108, 0.216, 0.078 and 0.187 for rental property investment, mutual funds, investment trusts, investment bonds respectively. This enabled the study prove that the variables had a linear relationship between each other. That is, if financial performance and real estate investments variables such as rental property management, mutual fund management, trust management, and bond management were drawn they would form a straight line. This meant that they were articulately related towards the problem in question.

# **4.6 Descriptive Statistics of Financial Performance**

The dependent variable which was the financial performance had indicators such as return on investment, equity growth on cash flow, operating ratio, rate of return and cash yield. The study analyzed various reports such as profit and loss statements, cash flow statements and policy statements. Later on, the study derived the mean on each indicator as shown in Table 4.7.

Ľ	<i>Descriptive</i>	<i>Statistics</i>	of Find	incial Pet	rformance
---	--------------------	-------------------	---------	------------	-----------

Mean
2.11
3.67
3.88
4.12
4.42

Table 4.7 shows that rate of return and operation ratio had a mean of 4.42 and 4.12 respectively. Despite that, return on investment had a low mean of 2.11. These results pointed out that generally investments had generally made substantial profits, however, real estate investors' portfolios failed to register any significance growth at the end of the financial years 2018-2020. This demotivated investors hence many of them withholding further investments prospects due to high loss risk. Withholding investments led to decline on investment's value. According to Commonwealth Diaspora Investor Survey (2018), Nigerian investors in diaspora withheld too much of their wealth and avoided investing in areas such as real estate due to poor returns and risk of loss. This definitely played a deconstruction role towards building investment portfolios in financial institutions.

# 4.7 Descriptive Statistics of Rental Property Investment Management

This was the first independent variable which had indicators such as residential real estate, commercial real estate, industrial real estate and land real estate investments. The study used Ordinal Likert Scale of 1-5.

Statements N=146	1	2	3	4	5	Mean
Incorporation of rental investment platforms such as residential real estate	0(0%)	10(7%)	4(3%)	26(18%)	106(72%)	4.56
Qualified staff who guide investors on commercial real estate	0(0%)	10(7%)	4(3%)	27(19%)	105(71%)	4.55
Policies on short turn- around time needed to make viable industrial real estate	47(32%)	16(11%)	4(3%)	52(36%)	27(18%)	2.97
Presence of diverse options to make such as land real estate investments	0(0%)	7(5%)	0(0%)	19(13%)	120(82%)	4.73
State of art technological infrastructure	0(0%)	29(20%)	8(6%)	81(55%)	28(19%)	3.74

Descriptive Statistics of Rental Property Investments

Table 4.8 shows respondents agreed that the investors had diverse options to make such as land real estate investments which increased the rate of return on their investments (mean-4.73). In addition, banks had incorporated rental investment platforms such as residential real estate investments (mean-4.56). Despite that the respondents disagreed that investment departments had put up policies on short turn-around time needed to make viable industrial real estate (mean-2.97). This meant that there were no policies in place to ensure that investors were able to get their returns in a short-deration of time. Interestingly, when receiving the principal amount on investments, the banks did not have a problem with placing the investments.

However, when the investors made profits and wanted to withdraw their returns, the whole procedure was delayed to a period between 1-2 weeks which was not realistic. From the point of investment bank's view, the problem was caused by lack of policies to limit the amount of time that investors had to wait before receiving their due profits. In agreement with the findings, Nyachwaya and Nyanga'u (2020) posited that property investments in areas such as industrial real estate was not highly attractive to investors due to delayed incomes. This in turn affected negatively the overall performance of listed banks.

# 4.7.1 Model Summary of Rental Property Investment Management

The study conducted a model summary to examine the effect of rental property investment management on financial performance as indicated in Table 4.9.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.741 <sup>a</sup>	.549	.543	2.932	1.958
. D. 11.4	(C	D	)	· · · • <b>N</b> / · · · · · · · · · • • • • • •	

Model Summary of Rental Property Investment Management

a. Predictors: (Constant), Rental Property Investment Management

b. Dependent Variable: Financial Performance

The model summary on Table 4.9 indicates that rental property investment management had an R-0.741 and an R-square of 0.549. This indicated that rental property investment management had a 55% effect on financial performance. Durbin Watson's value of 1.958 indicated a positive correlation. Ezeanyeji and Ifeako (2019) also discovered that when Investors in Nigeria put effort to invest on foreign portfolios such as rental property investment, this had over 50% effect on economic growth.

## 4.7.2 Analysis of Variance (ANOVA) of Rental Property Investment Management

The study conducted an analysis of variance to validate the status of the null hypothesis that rental property investment management had no effect on financial performance as indicated in Table 4.10.

Model		Sum of	Df	Mean Square	F	Sig.
		Squares				
	Regression	64.804	1	64.804	7.539	.007 <sup>b</sup>
	Residual	1237.853	145	8.596		
	Total	1302.658	146			

ANOVA of Rental Property Investment Management

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Rental Property Investment Management

The ANOVA analysis on Table 4.10 indicates that rental property investment management had an F-statistic of 7.539 and significance level of 0.07 which was below 0.05. The study thus rejected the null hypothesis. The study thus discovered that rental property investment management had impactful returns but the returns were to some extent limited by poor policies put into place on when investors should receive their rightful incomes. According to Gunes (2020), these policies were so much disgraceful to a point that investors chose to seek investment services in other firms apart from the banks which reduced the profitability of the banks extensively.

#### **4.8 Descriptive Statistics of Real Estate Mutual Funds Management**

This was the second independent variable which had indicators such as money market fund, equity fund, fixed income fund, and exchange traded funds.

Statements N=146	1	2	3	4	5	Mean
Higher rate of return on real estate money market fund	0(0%)	6(4%)	0(0%)	22(15%)	118(81%)	4.73
Improvement in real estate equity fund due to increased subscriptions	34(23%)	33(23%)	0(0%)	79(54%)	0(0%)	2.78
Managers in this bank have high negotiating skills hence larger profit margin on real estate fixed income fund	0(0%)	23(16%)	0(0%)	75(51%)	48(33%)	4.01
Trading in balanced funds has reduced losses	0(0%)	1(1%)	0(0%)	77(53%)	68(46%)	4.45
Refresher trainings are offered to fund managers	0(0%)	17(12%)	0(0%)	83(57%)	46(31%)	4.08

Descriptive Statistics of Real Estate Mutual Funds Management

Table 4.11 shows respondents agreed that the rate of return on money market fund affiliated to real estate sector is higher as compared to other sectors (mean-4.73). Further on, trading in balanced funds had reduced the significant risk linked to losses due to diversification advantage (mean-4.45). Despite that the respondents disagreed that there had been an improvement in real estate equity fund due to increased subscription by investors (mean-2.78). This meant that investors lacked in depth knowledge on what real estate equity funds or how they worked. The available information provided by the bank through the brochures and their websites was so shallow and did not help much.

The banks mainly concentrated on other mutual fund investment products that clients seem to understand. Even when there were marketing drives, the general public was not extensively explained on the whereabouts of equity funds. Thus, it definitely made investors avoid placing their wealth in a product that was not familiar hence low subscriptions. CMA (2019) also advised that financial institutions in general had a role to play towards educating the public on several products such as equity funds and trusts among others. This calling came about due to worrying trends of low subscription.

## 4.8.1 Model Summary of Real Estate Mutual Fund Management

The study conducted a model summary to examine the effect of real estate mutual fund management on financial performance as indicated in Table 4.12.

Model Summary of Real Estate Mutual Funds Management

Model	R	R Square	Adjusted R	Std. Error of the	Durbin-Watson
			Square	Estimate	
1	.905 <sup>a</sup>	.821	.815	2.883	1.056

a. Predictors: (Constant), Real Estate Mutual Funds Management

b. Dependent Variable: Financial Performance

The model summary on Table 4.12 indicates that real estate mutual fund management had an R-0.905 and an R-square of 0.821. This indicated that real estate mutual fund management had an 82% effect on financial performance. Durbin Watson's value of 1.056 indicated a positive correlation. Hussein (2017) also established that when commercial banks invested and managed funds such as real estate mutual fund, their performance significantly grew to 92% due to significant incomes.

## 4.8.2 ANOVA of Real Estate Mutual Funds Management

The study conducted an analysis of variance to validate the status of the null hypothesis that real estate mutual fund management had no effect on financial performance as indicated in Table 4.13.

Mode	el	Sum of	Df	Mean Square	F	Sig.
		Squares				
	Regression	105.489	1	105.489	12.689	.000 <sup>b</sup>
1	Residual	1197.168	145	8.314		
	Total	1302.658	146			

ANOVA of Real Estate Mutual Funds Management

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Real Estate Mutual Funds Management

The ANOVA analysis on Table 4.13 indicates that real estate mutual fund management had an F-statistic of 12.689 and significance level of 0.00 which was below 0.05. The study thus rejected the null hypothesis. This meant that real estate mutual fund management had potential towards addressing investor's consistent in returns but they were affected by poor knowledge by investors on whether they existed. According to Ilo et al. (2018), little was known on how they operated and the pushing force towards boosting more investor's wealth.

#### 4.9 Descriptive Statistics of Real Estate Investment Trust Management

This was the third independent variable which had indicators such as Income Real Estate Investment Trusts (I-REITs), Development Real Estate Investment Trust (D-REITs), Islamic real estate investment trusts and property funds. The study used Ordinal Likert Scale of 1-5 whereby there were responses such as 1-Strongly disagree, 2-disagree, 3-Neither agree or disagree, 4-Agree, 5-Strongly agree. Table 4.14 gives the findings.

Statements N=146	1	2	3	4	5	Mean
Presence of income, development and Islamic real estate investment trusts.	27(19%)	59(40%)	0(0%)	60(41%)	0(0%)	2.64
Frequent marketing initiatives made on how REITs work	26(18%)	59(40%)	5(3%)	52(36%)	4(3%)	2.65
Growth of investor's wealth due to profitable returns	66(45%)	28(19%)	22(15%)	12(8%)	18(13%)	2.23
Promotion of cultural and religion inclusivity by including products such as Islamic real estate investment trusts	61(42%)	28(19%)	6(4%)	32(22%)	19(13%)	2.45
Reliable customer services	4(3%)	55(38%)	0(0%)	77(53%)	10(6%)	3.23

Descriptive Statistics of Real Estate Investments Trust Management

Table 4.14 shows respondents agreed that there were reliable customer service services that boost client-bank relations which increases the confidence in investing even higher amounts of income towards REITs. (Mean-3.23). Despite that, respondents disagreed that investor's wealth was able to grow especially due to profitable returns they generate as a result of engaging in real estate investment trusts (mean-2.23). In addition, the respondents disagreed that banks promoted cultural and religion inclusivity by including products such as Islamic real estate investment trusts to incorporate Islams (mean-2.45). The results indicate that REIT's rate of return was low due to high price volatility.

Investor' high demand as compared to the supply of REITs by real estate sector played a significant effect on its prices. In addition, the study found out most real estate companies had not set out much REITs which made it tricky for investors to reap maximum returns on them. Gaps were established on how real estate investment banks would incorporate diversity in their products. For example, according to Njenga (2017), the presence of Islamic real estate investment trusts was found to be missing in investment banks due to complicated Sharia laws on how interest should be accrued so that no party loses in the deal (both the banks and the investor).

# 4.9.1 Model Summary of Real Estate Investment Trust Management

The study conducted a model summary to examine the effect of real estate investment trust management on financial performance as indicated in Table 4.15.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	
1	.589ª	.347	.340	2.937	1.980	

Model Summary of Real Estate Investment Trust Management

a. Predictors: (Constant), Real Estate Investment Trust Management

b. Dependent Variable: Financial Performance

The model summary on Table 4.15 indicates that real estate investment trust management had an R-0.589 and an R-square of 0.347. This indicated that real estate investment trust management had a 35% effect on financial performance. Durbin Watson's value of 1.980 indicated a positive correlation. Sada (2016) also established that investment trusts' effect was less than 50% in bank's performance.

#### 4.9.2 ANOVA of Real Estate Investment Trust Management

The study conducted an analysis of variance to validate the status of the null hypothesis that real estate investment trust management had no effect on financial performance as indicated in Table 4.16.

Model		Sum of Squares	Df	Mean Square	F	Sig.	
	Regression	60.657	1	60.657	7.033	.009 <sup>b</sup>	
1	Residual	1242.000	145	8.625			
	Total	1302.658	146				

ANOVA of Real Estate Investment Trust Management

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Real Estate Investment Trust Management

The ANOVA analysis on Table 4.16 indicates that real estate investment trust management had an F-statistic of 7.033 and significance level of 0.009 which was below 0.05. The study thus rejected the null hypothesis. There was a discovery that REITs were not common among investment banks hence their profitability was affected. According to Sada (2016), banks had not made efforts to include REITs such as Islamic ones in their portfolios which did not augur well in diversifying tastes and preferences of their clients such as those from Islamic religion.

#### 4.10 Descriptive Statistics of Real Estate Bond Management

This was the fourth independent variable which had indicators such as government real estate bonds, commercial real estate bonds, crowdfunding real estate bonds and corporate bonds. The study used Ordinal Likert Scale of 1-5. Table 4.17 gives the findings.

Statements N=146	1	2	3	4	5	Mean
Platforms for government, commercial, crowdfunding, and corporate real estate bonds	3(2%)	17(12%)	4(3%)	33(23%)	89(60%)	4.29
Knowledgeabl e banking staff on investments	0(0%)	10(7%)	4(3%)	30(21%)	102(69%)	4.53
This bank has various reliable sources of investment information	0(0%)	3(2%)	0(0%)	21(14%)	122(84%)	4.79
Short duration for investors to withdraw their returns from government real estate bonds	47(32%	16(11%)	4(3%)	52(36%)	27(18%)	2.97
Maturity dates of the real estate bonds are communicated early	0(0%)	29(20%)	8(6%)	81(55%)	28(19%)	3.74

Descriptive Statistics of Real Estate Bonds Management

Table 4.17 shows respondents agreed that their banks had various reliable sources of information that enabled them to be one step ahead of other investment firms to reap maximum benefits (Mean-4.79). In addition, investment banking staffs were knowledgeable on pitfall to avoid when making investments on bonds so as to avoid losses. (Mean-4.53). Despite that, respondents disagreed that there was a short duration through which investors could withdraw their returns from government real estate bonds (mean-2.97). These results indicate that investors were finding it hard to actualize their incomes since when investment banks linked investors to government bonds, they had no more authority on when and how investors would receive their accrued interests.

It was left out to be a personal initiative by the investors to follow up with the government agencies on when their incomes would be derived. The best an investment bank would do is just ensuring that investors received information as processed by government institutions such as the central bank of Kenya. Thus, made it hard for investors who had limited time in their busy schedules to make phone calls, emails or avail themselves in person in government agencies. According to Viktoriya and Edward (2020), investors gave up and avoided any government related real estate bonds which in turn reduced the income the investment banks would generate from the process of assisting them.

## 4.10.1 Model Summary of Real Estate Bond Management

The study conducted a model summary to examine the effect of real estate bond management on financial performance as indicated in Table 4.18.

Model	R	R Square	Adjusted R	Std. Error of the	Durbin-Watson
			Square	Estimate	
1	.796 <sup>a</sup>	.633	.626	2.959	1.943

Model Summary of Real Estate Bond Management

a. Predictors: (Constant), Real Estate Investment Bond Management

b. Dependent Variable: Financial Performance

The model summary on Table 4.18 indicates that real estate bond management had an R-0.796 and an R-square of 0.633. This indicated that real estate investment bond management had a 63% effect on financial performance. Durbin Watson's value of 1.943 indicated a positive correlation.

# 4.10.2 ANOVA of Real Estate Bonds Management

The study conducted an analysis of variance to validate the status of the null hypothesis that real estate bond management had no effect on financial performance as indicated in Table 4.19.

Model		Sum of	Df	Mean Square	F	Sig.
		Squares				
	Regression	42.220	1	42.220	4.824	.030 <sup>b</sup>
1	Residual	1260.437	145	8.753		
	Total	1302.658	146			

ANOVA of Real Estate Bond Management

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Real Estate Investment Bonds Management

The ANOVA analysis on Table 4.19 indicates that real estate investment trust management had an F-statistic of 4.824 and significance level of 0.03 which was below 0.05. The study thus rejected the null hypothesis thus real estate bond management had an effect on financial performance. According to Iregi and Okeyo (2017), real estate investment trusts were a part of building blocks of improving financial performance.

# 4.11 Multiple Regression of Real Estate Investment Management and Financial Performance

Once the study completed analyzing separate effect of each real estate investment management variable and financial performance, the study conducted multiple regression of all the four independent variables. The study conducted a model summary, ANOVA and regression coefficients.

# 4.11.1 Model Summary of Real Estate Investment Management and Financial Performance

The study conducted a model summary to examine the effect of real estate investment management on financial performance as indicated in Table 4.20

## **Table 4.20**

Model Summary of Real Estate Investment Management and Financial Performance

Model	R	R Square	Adjusted R Square	ljusted R Std. Error of the Square Estimate	
1	.787 <sup>a</sup>	.619	.594	2.853	1.990

a. Predictors: (Constant), Real Estate Investment Bond Management, Real Estate Investment Trust Management, Real Estate Mutual Fund Management, Rental Property Investment Management

b. Dependent Variable: Financial Performance

The model summary on Table 4.20 indicates that real estate investment management had an R-0.787 and an R-square of 0.619. This indicated that real estate investments management had a 62% effect on financial performance. Durbin Watson's value of 1.990 indicated a positive correlation.

#### 4.11.2 ANOVA of Real Estate Investment Management and Financial Performance

The study conducted an analysis of variance to validate whether real estate investment management had any effect on financial performance as indicated in Table 4.21.

Model	Sum of	Df	Mean Square	F	Sig.
	Squares				
Regression	155.262	4	38.815	4.770	.001 <sup>b</sup>
Residual	1147.396	142	8.138		
Total	1302.658	146			

ANOVA of Real Estate Investment Management and Financial Performance

a. Dependent Variable: Financial Performance

b. Predictors: (Constant), Real Estate Investment Bonds Management, Real Estate Investment Trust Management, Real Estate Mutual Fund Management, Rental Property Investment Management

The ANOVA analysis on Table 4.21 indicates that real estate investment management had an F-statistic of 4.770 and significance level of 0.001 which was below 0.05. The study thus established that real estate investments management had an effect on financial performance of investment banks in Nairobi County. According to Kuria (2019), when an investment bank included and investors utilized real estate investment products, its financial performance improved significantly.

# 4.11.3 Regression Coefficients of Real Estate Investment Management and Financial Performance

The study conducted regression coefficients to elaborate and develop further the general model of the study as indicated in Table 4.22.

# Regression Coefficients of Real Estate Investment Management and Financial

# Performance

Model	Unstand	lardized	Standardize	t	Sig.
	Coeff	icients	d		
-			Coefficients		
	В	Std. Error	Beta		
(Constant)	9.841	2.468		7.412	.178
Rental Property Investment Mgt	.159	.144	.135	2.293	.233
Mutual Funds Mgt	.292	.128	.226	4.466	.319
Investment Trusts Mgt	.177	.081	.174	2.998	.303
Investment Bonds Mgt	083	.148	070	2.440	.105

a. Dependent Variable: Financial Performance

Table 4.22 indicates that rental property investment management'  $\beta$  was 0.159 with a p-value of 0.233; Mutual fund management'  $\beta$  was 0.292 with a p-value of 0.319; Investment trust management'  $\beta$  was 0.177 with a p-value of 0.303; Investment bond management'  $\beta$  was -0.083 with a p-value of 0.105. The model of the study was:

 $Y = C + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \hat{e}$ 

Where: Y was financial performance;  $\beta i$  was Coefficients to be estimated; C was constant; XI was rental property investment management; X2 was real estate mutual funds

investment management; X3 was real estate investment trust management; X4 was real estate investment bond management; and ê was error.

When equated with the coefficients, financial performance = 9.841C+0.159X1+0.292X2+0.177X3-0.083X4+2.468e. This meant that by adding one unit of X1, X2, X3, and X4 financial performance increased or decreased by 9.841+0.159+0.292+0.177-0.083. What these results meant was that, separately rental property investment management, mutual fund management, investment trust management, and real estate investment bond management were significant. However, when combined, mutual fund management became statistically insignificant meaning signifying its relevance as a building block when an investment bank would wish to improve its financial performance which are also similar to the one Keli (2021) established. According to the study, Keli (2021) found out that mutual funds were a great performance booster and reliable enough to sustain profitability over a certain period of time.

#### **CHAPTER FIVE**

# SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### **5.1 Introduction**

The study's general objective was to investigate the effect of real estate investment on financial performance of investment banks in Nairobi County, Kenya. The specific objectives were to examine the effect of rental property investment management, real estate mutual fund management, real estate investment trust management, real estate investment bond management on financial performance of investment banks in Nairobi County, Kenya. The three theories that guided the study were Modern Portfolio Theory, Duesenberry's Accelerator Theory of Investment and segmented markets theory. The study used descriptive research design. The target population was 22 investment banks in Nairobi Kenya whose respondents were 75 investment managers, 297 investment officers, 124 risk officers, and 161 quality assurance officers.

Simple random sampling method was used to obtain a sample of 7 investment banks whose 22 investment managers, 89 investment officers, 38 risk officers, 48 quality assurance officers were included. Validity was measured through three types which were content, criterion and face validity. It analyzed both quantitative and qualitative data collected. Under the quantitative data, the study analysis provided descriptive statistics such as frequencies, percentages and median. Inferential analysis generated included model summary to test the level of effect, analysis of variance to test hypothesis and regression coefficients to test the study's model.

#### **5.2 Summary of the Results**

The study examined rental property investment management, mutual fund management, investment trust management, and real estate investment bond management. Their results are indicated in sub-sections 5.2.1 to 5.2.4.

#### 5.2.1 Summary of Rental Property Investments Management

The respondents agreed that the investors had diverse options to make such as land real estate investments which increased the rate of return on their investments (mean-4.73). In addition, banks had incorporated rental investment platforms such as residential real estate investments (mean-4.56). Despite that the respondents disagreed that investment departments had put up policies on short turn-around time needed to make viable industrial real estate (mean-2.97). The model summary indicated that rental property investment had an R-0.741 and an R-square of 0.549. This indicated that rental property investment management affected 55% of financial performance. The ANOVA analysis indicated that rental property investment management had an F-statistic of 7.539 and significance level of 0.07 which was below 0.05 hence rejecting the null hypothesis.

## 5.2.2 Summary of Real Estate Mutual Funds Management

The respondents agreed that the rate of return on money market fund affiliated to real estate sector is higher as compared to other sectors (mean-4.73). Further on, trading in balanced

funds had reduced the significant risk linked to losses due to diversification advantage (mean-4.45). Despite that the respondents disagreed that there had been an improvement in real estate equity fund due to increased subscription by investors (mean-2.78). The model summary indicated that real estate mutual fund management had an R-0.905 and an R-square of 0.821. This indicated that real estate mutual fund management had an 82% effect on financial performance. The ANOVA analysis on Table 4.13 indicates that real estate mutual fund management had an F-statistic of 12.689 and significance level of 0.00 which was below 0.05 hence rejecting the null hypothesis.

#### 5.2.3 Summary of Real Estate Investment Trust Management

The respondents agreed that there are reliable customer service services that boost clientbank relations which increases the confidence in investing even higher amounts of income towards REITs. (Mean-3.23). Despite that, respondents disagreed that investor's wealth is able to grow especially due to profitable returns they generate as a result of engaging in real estate investment trusts (mean-2.23). In addition, the respondents disagreed that banks promote cultural and religion inclusivity by including products such as Islamic real estate investment trusts to incorporate Islams (mean-2.45). The model summary indicated that real estate investment trust management had an R-0.589 and an R-square of 0.347. This indicated that real estate investment trust management had a 35% effect on financial performance. The ANOVA analysis indicated that real estate investment trust management had an F-statistic of 7.033 and significance level of 0.009 which was below 0.05. The study thus rejected the null hypothesis hence rejecting the null hypothesis.

#### 5.2.4 Summary of Real Estate Bond Management

The respondents agreed that this bank had various reliable sources of information that enabled them to be one step ahead of other investment firms to reap maximum benefits (Mean-4.79). In addition, investment banking staffs were knowledgeable on pitfall to avoid when making investments on bonds so as to avoid losses. (Mean-4.53). Despite that, respondents disagreed that there was a short duration through which investors could withdraw their returns from government real estate bond management (mean-2.97). The model summary indicated that real estate bond management had an R-0.796 and an R-square of 0.633. This indicated that real estate investment bond management had a 63% effect on financial performance. The ANOVA analysis indicated that real estate investment trust management had an F-statistic of 4.824 and significance level of 0.03 which was below 0.05 hence rejecting the null hypothesis.

#### 5.3 Conclusions of the Study

The conclusion made on rental property investment management, was that there were few policies in place to ensure that investment banks made commission payments to various involved parties in a short-duration of time. Interestingly, when receiving the principal amount on investments, the banks did not have a problem with placing the investments. However, when the investors made profits and wanted to withdraw their returns, the whole procedure was delayed to a period between 1-2 weeks which was not realistic. From the point of investment bank's view, the problem was caused by lack of policies to limit the amount of time that investors had to wait before receiving their due profits. These policies

were so much disgraceful to a point that investors chose to seek investment services in other firms apart from the banks which reduced the profitability of the banks extensively.

The conclusion made on real estate mutual fund management, was that investment stakeholders involved in funding the investment process, lacked in depth knowledge on what real estate equity funds or how they worked. The available information provided by the bank through the brochures and their websites was so shallow and did not help much. The banks mainly concentrated on other mutual fund investment products that clients seem to understand. Even when there were marketing drives, the general public was not extensively explained on the whereabouts of equity funds. Thus, it definitely made investors avoid placing their wealth in a product that was not familiar hence low subscriptions. Real estate mutual funds had potential towards addressing investor's consistency returns but they were affected by poor knowledge by investors on whether they existed. Little was known on how they operated and the pushing force towards boosting more investor's wealth.

The conclusion made on real estate investment trust management, was that their rate of return was low due to high price volatility. Investor' high demand as compared to the supply of REITs by real estate sector played a significant effect on its prices. In addition, the study found out most real estate companies had not set out much REITs which made it tricky for investors to reap maximum returns on them. Gaps were established on how real estate investment banks would incorporate diversity in their products. For example, the

presence of Islamic real estate investment trusts was found to be missing in investment banks due to complicated Sharia laws on how interest should be accrued so that no party loses in the deal (both the banks and the investor).

The conclusion made on real estate bond management was that investment banks were finding it hard to actualize their incomes. This was because when investment banks bought government bonds on behalf of investors, they had no more authority on following up on late interests. It was left out to the management and owners of the bank to follow up with the government agencies on when their incomes would be derived. The best an investment bank would do is just ensuring that it received information as processed by government institutions such as the central bank of Kenya. Thus, made it hard for banks to convince investors who had limited time and resources that government bonds are good investment vehicles in attempts of boosting more clientele portfolio. At the end, investors gave up and avoided any government related real estate bonds which in turn reduced the income the investment banks would generate from the process of assisting them.

## 5.4 Recommendations of the Study

The study's recommendation on rental property investment management was that banks' management should introduce policies that would give precise details on what the expected turn-around for allocation of returns would be to the investor's accounts. The management should also orient and offer training to the bank staff on how to process the investor's income to avoid delays during the investment procedures. CMA should regulate and offer

strict penalties on banks that delay submitting the due incomes to the investors without any substantive reasons given.

The study's recommendation on real estate mutual fund management, was that the bank management should provide orientation training programs to investors on what and where exactly they should invest in as far as real estate investing is concerned. The bank should also recruit more competent and experienced investment staffs to aid in disseminating extensive knowledge to investors on various types of real estate investments. CMA should periodically generate various informational reports on real estate investment products so as to equip banks with in depth knowledge on various investment platforms at their disposal. Investment department should work hand in hand with the marketing department so as to have creative marketing initiatives on various real estate investment products the banks has and how they work.

The study's recommendation on REIT management, was that banks management should develop various REITs products which incorporates diversity such as introducing Islamic products. The banks should develop partnership opportunities for real estate companies so that they are able to increase their investment products baskets. CMA should extend a hand to banks and firms so that they get appropriate prices on various REITs.

The recommendations on real estate bond management, banks should work hand in hand with government agencies to ensure that their investors get a smooth sail especially when following up on their income from government real estate bonds returns. CBK should
provide amicable portals in their website in which investment banks could use to follow up on deeper analysis on performances of various real estate investment options without necessarily much hustle. CMA should partner with banks to ensure that investor's interests are handled well from the onset without getting abandoned midway the process.

#### **5.5 Suggestion for Future Studies**

This study considered investments from the perspectives of the investment department hence included rental property investment management, real estate mutual fund management, real estate investment trust management, and exchange-traded fund management. Future studies should examine management strategies commonly used in the investment banks such as buy and hold approaches among others.

#### REFERENCES

- Bah, E. M., Faye, I., & Geh, Z. F. (2018). The housing sector in Africa: Setting the scene. In: Housing market dynamics in Africa. Palgrave Macmillan. https://doi.org/10.1057/978-1-137-59792-2\_1
- Balfoussia, H., & Gibson, H. D. (2016). Firm investment and financial conditions in the Euro area: Evidence from firm-level data. *Working Paper, No 208.* Bank of Greece. https://www.bankofgreece.gr/Publications/Paper2016208.pdf
- Bank for International Settlements (2020). Cross-border commercial real estate investment in Asia-Pacific. https://www.bis.org/publ/qtrpdf/r\_qt2009b.pdf
- Bustamante, M.C., & Fresard, L. (2017). *Does firm investment respond to pees' investment*? University of Maryland. https://scripties.uba.uva.nl/document/669709
- Canals, S. (2017). *Instruments for gathering data*. https://files.eric.ed.gov/fulltext/ED573582.pdf
- Capellán, R.U., Ollero, J. S., & Pozo, A.G. (2021). The effect of the real estate investment trust in the real estate sector on the Costa del Sol. *European Research* on Management and Business Economics, 27(1), 1-10. https://doi.org/10.1016/j.iedeen.2020.10.003
- Capital Market Authority (2021). *The Capital Markets Authority handbook*. https://www.cma.or.ke/index.php?option=com\_phocadownload&view=category& download=619:capital-markets-handbook&id=45:information-forinvestors&Itemid=222
- Capital Market Authority (2019). Annual report and financial statement. https://www.cma.or.ke/index.php?option=com\_phocadownload&view=category& download=623:cma-annual-report-2019-2020&id=13:annual-reports&Itemid=191

- Central Bank of Kenya (2020). Annual report and financial statements 2019/2020. https://www.centralbank.go.ke/uploads/cbk\_annual\_reports/1456103982\_annual% 20report%202020%20posted%20on%20website.pdf
- Chen, Y. (2015). Spatial autocorrelation approaches to testing residuals from least squares regression. https://arxiv.org/ftp/arxiv/papers/1503/1503.04407.pdf
- Chiu, L. R., Rubio, A. P., Argüelles, V. J., & Poó, V. L. (2020). The impact of COVID-19 on the price performance of Real Estate Investment Trusts (REITs) in Mexico. *International Journal of Real Estate Studies INTREST, 14*(2), 177-194. https://www.utm.my/intrest/files/2021/01/7\_Final\_MS\_CRES-Covid-028\_Latest.pdf
- Climate Bonds Initiative (2019). Financing low-carbon buildings and energy efficiency in the green bond market. http://greenbondplatform.env.go.jp/pdf/CBI\_%20LowCarbonBuilding\_final.pdf
- Commonwealth Diaspora Investor Survey (2018). Understanding the investment potential of the Nigerian diaspora. Results of the commonwealth diaspora investor survey.

https://thecommonwealth.org/sites/default/files/inline/Understanding%20the%20In vestment%20Potential%20of%20the%20Commonwealth%20Diaspora.pdf

Connell, J., Carlton, J., Grundy, A., Taylor Buck, E., Keetharuth, A. D., Ricketts, T., Barkham, M., Robotham, D., Rose, D., & Brazier, J. (2018). The importance of content and face validity in instrument development: lessons learnt from service users when developing the Recovering Quality of Life measure (ReQoL). *Quality* of life research: An international journal of quality-of-life aspects of treatment, care and rehabilitation, 27(7), 1893–1902. https://doi.org/10.1007/s11136-018-1847-y Cooper, D. R., & Schindler, P. S. (2014). Business research methods, (12th Ed.). McGraw-Hill/Irwin.

Culbertson, J. M. (1957). The term structure of interest rates. *Quarterly Journal of Economics*, 71(4), 485-517.
https://econpapers.repec.org/scripts/redir.pf?u=http%3A%2F%2Fhdl.handle.net%2
F10.2307%2F1885708;h=repec:oup:qjecon:v:71:y:1957:i:4:p:485-517.

Cytonn (2019). Current real estate trends in Kenya & how they affect investors. https://cytonn.com/blog/article/current-real-estate-trends-in-kenya-and-how-theyaffect-investors

Cytonn (2021). Reasons why real estate is a great investment. https://cytonn.com/blog/article/reasons-why-real-estate-is-a-great-investment

 Duesenberry, M. T. J. S. (1960). Business cycles and economic growth. Pp. xi, 341.
 McGraw-Hill Book Company. *The ANNALS of the American Academy of Political and Social Science*, 328(1), 200-200.
 https://doi.org/10.1177/000271626032800158

European Central Bank (2021). *Euro area investment fund statistics: First quarter of 2021*. https://www.ecb.europa.eu/press/pr/stats/if/html/ecb.ofi2021q1~7b9ab12593.en.ht ml

European Systematic Risk Board (2015). Report on commercial real estate and financial stability in the EU. https://www.esrb.europa.eu/pub/pdf/other/2015-12-28\_ESRB\_report\_on\_commercial\_real\_estate\_and\_financial\_stability.pdf

- Ezeanyeji, C. I., & Ifeako, M. (2019). Foreign portfolio investment on economic growth of Nigeria: An impact analysis. *International Journal of Academic Management Science Research IJAMSR*, 3(3), 24-36.
  https://www.researchgate.net/publication/332061303\_Foreign\_Portfolio\_Investme nt\_on\_Economic\_Growth\_of\_Nigeria\_An\_Impact\_Analysis
- Fincham J. E. (2008). Response rates and responsiveness for surveys, standards, and the Journal. American journal of pharmaceutical education, 72(2), 43-53. https://doi.org/10.5688/aj720243
- Gunes, G.S. (2020). Performance analysis of real estate investment fund trading on the stock exchange market in Turkey. *Business & Management Studies: An International Journal, 8*(5), 4438-4462. https://doi.org/10.15295/bmij.v8i5.1669
- Guru, B. K., & Yadav, I. S. (2019). Financial development and economic growth: Panel evidence from BRICS. *Journal of Economics, Finance and Administrative Science*, 24(47), 113-126. https://doi.org/10.1108/JEFAS-12-2017-0125.
- Hamouri, Q. (2020). The effect of remittances on the real estate market in Jordan. International Journal of Recent Technology and Engineering IJRTE, 8(5), 426-435. https://doi.org/10.24941/ijcr.40354.12.2020
- Hilbrandt, H., & Grubbauer, M. (2020). Standards and SSOs in the contested widening and deepening of financial markets: The arrival of Green Municipal Bonds in Mexico City. *Environment and Planning A: Economy and Space, 52*(7), 1415-1433. https://doi.org/10.1177/0308518X20909391
- Hurst, S., Arulogun, O. S., Owolabi, A. O., Akinyemi, R., Uvere, E., Warth, S., & Ovbiagele, B. (2015). Pretesting qualitative data collection procedures to facilitate methodological adherence and team building in Nigeria. *International journal of qualitative methods*, 14(3), 53–64. https://doi.org/10.1177/160940691501400106

- Hussein, A. A. (2017). The relationship between investments and financial performance of commercial banks in Kenya [Master's Thesis]. University of Nairobi, Kenya. http://erepository.uonbi.ac.ke/bitstream/handle/11295/102735/fuad0723%20edited. pdf?sequence=1&isallowed=y
- International Finance Corporation (2020). *In Rwanda, an investment market at home*. https://www.ifc.org/wps/wcm/connect/news\_ext\_content/ifc\_external\_corporate\_si te/news+and+events/news/insights/rwanda-investment-market
- Ilo, B. M., Yinusa, O. G., & Elumah, L. O. (2018). Performance of mutual funds in Nigeria. *The IEB International Journal of Finance*, 17(1), 8-25. https://doi.org/10.5605/IEB.17.1
- International Monetary Fund (2021). *Financial stability risks during the covid-19 crisis and beyond*. https://www.elibrary.imf.org/downloadpdf/books/082/29631-9781513569673-en/ch03.xml
- Iregi, R. N., & Okeyo, J. (2017). The relationship between investment strategies and profitability in the insurance industry in Kenya. *International Journal of Finance*, 2(5), 51-74.
  https://carijournals.org/journals/index.php/IJF/article/download/140/246
- Islam, M. A., Sarker, M. N. I., Rahman, M., Sultana, A., & Prodhan, A. S. (2017). Determinants of profitability of commercial banks in Bangladesh. *International Journal of Banking and Financial Law*, 1(1), 1-11. https://www.researchgate.net/publication/317561088\_Determinants\_of\_Profitability\_of\_Commercial\_Banks\_in\_Bangladesh
- Kenya Properties Developers Association (2021). PDA directory of members in good standing as at 27th October 2021.

https://www.kpda.or.ke/documents/KPDA%20Directory%20of%20Members%20i n%20Good%20Standing,%2027th%20October%202021.pdf

Kim, J. H., & Choi, I. (2021). Choosing the level of significance: A Decision-theoretic approach. A Journal of Accounting, Finance and Business Studies, 57(1), 27-72. https://doi.org/10.1111/abac.12172

Kuria, A. M. (2019). Behavioral biases of real estate investors and investment performance in Kenya [PhD Thesis]. Dedan Kimathi University of Technology, Kenya. http://repository.dkut.ac.ke:8080/xmlui/bitstream/handle/123456789/4644/Allan% 20Kuria.pdf?sequence=1&isAllowed=y

- Mahdavi, D. B. (2013). The non-misleading value of inferred correlation: An introduction to the Cointelation Model. *Wilmott Magazine*, 1(67), 50– 61. https://doi.org/10.1002/wilm.10252.
- Martínez-Mesa, J., González-Chica, D. A., Duquia, R. P., Bonamigo, R. R., & Bastos, J. L. (2016). Sampling: how to select participants in my research study. *Anais brasileiros de dermatologia*, *91*(3), 326–330. https://doi.org/10.1590/abd1806-4841.20165254
- Masron, T. A., & Kepili, E. I. (2016). Can foreign investment in real estate improve host country's affordability? http://web.usm.my/journal/aamjaf/aamjaf12022016/aamjaf12022016\_1.pdf

Mburugu, C. N. (2019). Factors affecting the growth of real estate investment companies in Kenya: A case of Premier Realty Limited [Master's Thesis]. United States International University-Africa, Kenya. http://erepo.usiu.ac.ke/bitstream/handle/11732/6106/catherine%20nkirote%20mbu rugu%20mba%202020.pdf?sequence=1&isallowed=y

- Mbogo, P.W. (2016). Effect of real estate investment strategies on financial performance of investment groups in Kenya [Master's Thesis]. University of Nairobi, Kenya. http://erepository.uonbi.ac.ke/bitstream/handle/11295/99377/purity%20w%20mbo go%20msc%20finance%20final%20project.pdf?sequence=1&isallowed=y
- Menges, W. S., & Moranga, K. G. (2020). Indirect investment and financial performance of the real estate sector in Nairobi County Kenya. *Bussecon Review of Finance & Banking (2687-2501): Bussecon International, 2*(1), 25-34. https://ideas.repec.org/a/adi/bsrfbs/v2y2020i1p25-34.html#download
- Morri, G., Anconetani, R., & Benfari, L. (2021). Greenness and financial performance of European REITs. *Journal of European Real Estate Research*, 14(1), 40-61. https://doi.org/10.1108/JERER-05-2020-0030
- Mugenda, O. M., & Mugenda, A. G. (2003). *Research methods: Quantitative and qualitative approaches*. ACT Press.
- Mukarushema, M., Kule, W. J. & Mbabazize, M. (2016). Effect of financial statement analysis on investment decision making. A case of bank of Kigali. *European Journal of Business and Social Sciences*, 5(6), 279-303.
  https://pdfslide.net/download/link/effect-of-financial-statement-analysis-on-statements-analysis-effect-of-financial

Mungai, D. K. (2016). Role of financing options on the growth of real estate in Kenya: A survey of real estate developers in Nairobi Metropolis [Master's Thesis]. KCA University, Kenya.
http://41.89.49.13:8080/xmlui/bitstream/handle/123456789/799/Mungai-Role%200f%20Financing%20Options%20On%20The%20Growth%20Of%20Rea 1%20Estate%20In%20Kenya%3A%20A%20Survey%20Of%20Real%20Estate%2
ODevelopers%20In%20Nairobi%20Metropolis?sequence=1&isAllowed=y

- Mwangi, J. K., Muathe, S. M., & Mugambi, G. K. (2016). Effect of firm activities on performance: Case of commercial banks sector in Kenya. *The International Journal of Business & Management, 4*(6), 110-117.
  http://internationaljournalcorner.com/index.php/theijbm/article/view/126584
- Nairobi Securities Exchange (2021a). *Equity securities: Real Estate Investment Trusts* (*REITs*). https://www.nse.co.ke/products-services/equity-securities.html
- Nairobi Securities Exchange (2021b). *Exchange traded funds*. https://www.nse.co.ke/products-services/equitysecurities/etf.html?download=10580%3Aexchange-traded-funds-brochure
- Nairobi Securities Exchange (2021c). *List of trading participants*. https://www.nse.co.ke/member-firms/firms.html
- Njenga, I. (2017). Effect of real estate investment trusts characteristics on uptake by real estate developers in Nairobi, Kenya [Master's Thesis]. KCA University, Kenya. http://41.89.49.13:8080/xmlui/bitstream/handle/123456789/1368/Njenga-Effect%20Of%20Real%20Estate%20Investment%20Trusts%20Characteristics%2 0On%20Uptake%20By%20Real%20Estate%20Developers%20In%20Nairobi%2C %20Kenya.pdf?sequence=1&isAllowed=y
- Njoroge, C., Muturi, W., & Oluoch, O. (2019). Exchange rate and performance of the residential property market in Kenya. *International Journal of Finance & Banking Studies, 2147-4486* (83), 88-100. https://doi.org/10.20525/jfbs.v8i3.507
- Nuhiu, A., Hoti, A., & Bektashi, M. (2017). Determinants of commercial banks profitability through analysis of financial performance indicators: Evidence from Kosovo. Business: *Theory and Practice*, 18(1), 160-170. https://doi.org/10.3846/btp.2017.017

- Nyachwaya, Z. O., & Nyanga'u, A. S. (2020). The relationship between property investment and financial performance of commercial banks listed on the Nairobi Securities Exchange in Kenya. *International Journals of Academics & Research (IJARKE Business & Management Journal)*, 3(1), 75-83. https://doi.org/10.32898/ibmj.01/3.1article09
- Nyoro, M. P. (2017). Determinants of financial performance of real estate investment trusts in Kenya [Master's Thesis]. Kenyatta University, Kenya. https://irlibrary.ku.ac.ke/bitstream/handle/123456789/19172/determinants%20of%20financ ial.pdf?sequence=1&isallowed=y
- Obiero, C. O. (2018). Effects of portfolio diversification on the financial performance of investment companies listed at the Nairobi Securities Exchange [Master's Thesis]. United States International University- Africa, Kenya. http://erepo.usiu.ac.ke/xmlui/bitstream/handle/11732/4724/COLLINS%20OUMA %20OBIERO%20MBA%202019.pdf?sequence=1&isAllowed=y
- Onyang'o, G. (2019). Effect of real estate financing on performance of commercial properties in Kenya [Master's Thesis]. Maseno University, Kenya. https://repository.maseno.ac.ke/bitstream/handle/123456789/3604/onyango%20ge orge%20%20222.pdf?sequence=1&isAllowed=y
- Puatwoe, J. T., & Piabuo, S. M. (2017). Financial sector development and economic growth: Evidence from Cameroon. *Financial Innovation*, 3(25), 1-14. https://doi.org/10.1186/s40854-017-0073-x
- Radford, L., Freeman, J. V., & Walters, S. J. (2016). Use of statistical tables. https://www.sheffield.ac.uk/polopoly\_fs/1.43999!/file/tutorial-10-readingtables.pdf

- Ranganathan, P., & Aggarwal, R. (2018). Study designs: Part 1 An overview and classification. *Perspectives in clinical research*, 9(4), 184–186. https://doi.org/10.4103/picr.PICR\_124\_18
- Rop, M. K., Kibet, Y. & Bokongo, J. (2016). Effect of investment diversification on the financial performance of commercial banks in Kenya. *IOSR Journal of Business* and Management, 18(11), 102-115. http://www.iosrjournals.org/iosrjbm/papers/Vol18-issue11/Version-1/O181101102115.pdf
- Sada, K. T. (2016). Review of real estate investment trusts in Kenya [Master's Thesis]. United States International University-Africa, Kenya. http://erepo.usiu.ac.ke/bitstream/handle/11732/3106/Sada%20Project%20Final%2 0Final.pdf?sequence=1&isAllowed=y
- Schoonenboom, J., & Johnson, R. B. (2017). How to construct a mixed methods research design. Kolner Zeitschrift fur Soziologie und Sozialpsychologie, 69(2), 107–131. https://doi.org/10.1007/s11577-017-0454-1
- Sileyew, K. J. (2019). *Research design and methodology*. https://www.intechopen.com/books/cyberspace/research-design-and-methodology
- Suley, W., & Moranga, K. G. (2020). Indirect investment and financial performance of the real estate sector in Nairobi County Kenya. *Bussecon Review of Finance & Banking*, 2687-2501(21), 25-34. https://www.bussecon.com/ojs/index.php/brfb/article/view/145/50
- Ugherughe, J. E., & Jisike, J. O. (2019). Diaspora remittances and the Nigerian economy: An empirical analysis 1977–2017 sahel analyst: *Journal of Management Sciences*, 17(2), 1-16. https://www.econstor.eu/bitstream/10419/200990/1/full-4.pdf

- Vatcheva, K. P., Lee, M., McCormick, J. B., & Rahbar, M. H. (2016). Multicollinearity in Regression Analyses Conducted in Epidemiologic Studies. *Epidemiology* (Sunnyvale, Calif.), 6(2), 227-237. https://doi.org/10.4172/2161-1165.1000227
- Viktoriya, L., & Edward, N. (2020). Active management in real estate mutual funds. *The Journal of Real Estate Finance and Economics*, 61(2), 247-274. https://doi.org/10.1007/s11146-019-09722-y
- Wigglesworth, R. (2018). *How a volatility virus infected Wall Street*. https://www.ft.com/content/be68aac6-3d13-11e8-b9f9-de94fa33a81e
- World Factbook (2021). *Explore all countries: Kenya*. https://www.cia.gov/the-world-factbook/countries/kenya/
- World Population Review (2021). *Population of cities in Kenya (2021)*. https://worldpopulationreview.com/countries/cities/kenya

## APPENDICES

Investment	Investme nt	Investment	Risk officers	Quality assuranc	Total
banks		Officers		e officers	
	Manager s				
ABC Capital	6	14	8	7	35
African Alliance Kenya Investment Bank	4	14	6	10	34
Afrika Investment Bank	3	10	6	8	27
Apex Africa Capital	2	16	4	9	31
CBA Capital	7	15	8	12	42
Discount Securities	4	12	6	5	27
Dyer & Blair Investment Bank	5	15	6	8	34
Equity Investment Bank	7	18	17	8	50
Faida Investment Bank	4	11	7	7	29
Hakuna Ventures	2	10	4	4	20
Francis Drummond & Company	2	18	2	2	24
Genghis Capital	4	15	6	6	31
Kestrel Capital	2	12	4	7	25
Kingdom Securities	3	15	7	7	32
Ngenye Kariuki & Co	3	8	3	7	21
NIC Securities	2	10	13	9	34
Old Mutual Securities	2	19	2	8	31
Renaissance Capital (Kenya)	3	15	2	5	25
SBG Securities	4	12	3	5	24
Standard Investment Bank	2	15	6	13	36
Sterling Capital Limited	2	13	2	8	25
Suntra Investment Bank	2	10	2	6	20
Total	75	297	124	161	657

## Appendix I: List of Investment banks and the target respondents

 $\frac{10000}{\text{NSE}(2021c)}$ 

#### **Appendix II: Authorization Letter**

Peris Wanjiku Muigai P.O. Box 267– 60200 Meru Mobile no: 0704862950 Email: shikumiugai48@gmail.com

23<sup>rd</sup> August, 2021

To the Manager, Name of the Bank..... P.O. Box ..... NAIROBI

### Dear sir/ madam, **RE: AUTHORIZATION TO CONDUCT A STUDY IN YOUR INSTITUTION**

I am a student at Kenya Methodist University) pursuing Masters of Business Administration (MBA)-Finance option. I am conducting research on the effect of real estate investment management on financial performance of investment banks in Nairobi County, Kenya

I am collecting data from all the investment banks in Nairobi, County. I would therefore request to be authorized to interact and collect data from investment managers, investment officers, risk officers, and quality assurance officers. Any information obtained for this study will be kept strictly confidential and will only be used for academic purposes. The management could therefore use this study as a reference source when putting up new policies, procedures and rules that will govern their investment banks to expand their business.

Yours faithfully,

Peris Wanjku Muigai Reg no: Bus-3-1273-2/2019

#### **Appendix III: Introduction Letter**

Dear Respondent,

I am a student at Kenya Methodist University (KeMU) pursuing Masters of Business Administration (MBA)-Finance option. Am required to undertake research in fulfillment of my course requirement and I am investigating on the effect of real estate investment management on financial performance of investment banks in Nairobi County, Kenya. You have been selected as a key respondent in this study. The researcher is kindly requesting you to accurately answer the following questions. Your response will be used for research purposes and identity will be kept confidential.

Thank you in advance

Yours faithfully,

Peris Wanjku Muigai Reg no: Bus-3-1273-2/2019 Telephone number: 0704862950

### **Appendix IV: Questionnaire**

The general objective of this questionnaire is to investigate on the effect of real estate investment management on financial performance of selected investment banks in Nairobi County, Kenya

### Instructions

1. Kindly tick as appropriate in the boxes of each question

### SECTION A: GENERAL INFORMATION

Kindly answer the following by ticking in the appropriate box as provided below: i. Please indicate your job position:

i.	Please indicate your job	pos	itio	n:
	Investment manager	[	]	
	Investment officer	[	]	
	Risk officer	[	]	
	Quality Assurance office	er [	]	

i. Kindly provide your education qualification:

Certificate	[ ]	Masters	[]
Diploma	[ ]	PhD	[ ]
Degree	[ ]		

ii. Kindly indicate for how long you have been working in this Investment Bank:

Less than 5 years	[	]	
10 - 15 years	Γ	1	

5 – 10 years [ ] Above 15 years [ ]

## SECTION B: EFFECT OF RENTAL PROPERTY INVESTMENT MANAGEMENT ON FINANCIAL PERFORMANCE

Please tick on the most appropriate answer in relation to the statements asked.

		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
No	Statement	1	2	3	4	5
1.	This bank has incorporated rental investment management platforms such as from investors when investing into residential real estate investments					
2.	There are qualified staff who guide investors on the intricacies of commercial real estate investments.					
3.	Investment department has put up policies on short turn-around time needed to make viable industrial real estate					
4.	Investors have diverse options to make such as land real estate investments which increases the rate of return on their investments					
5.	There is state of art technological infrastructure that has sustained smooth					

	investment transactions in this bank						
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## SECTION C: EFFECT OF REAL ESTATE MUTUAL FUNDS INVESTMENT MANAGEMENT ON FINANCIAL PERFORMANCE

Please tick on the most appropriate answer in relation to the statements asked.

		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
No	Statement	1	2	3	4	5
1.	The rate of return on money market fund affiliated to real estate sector is higher as compared to other sectors					
2.	There has been an improvement in real estate equity fund due to increased subscription by investors					
3.	Fund managers in this bank have high negotiating skills so as to get a larger profit margin on real estate fixed income fund from the capital market authority on behalf of investors.					
4.	Trading in balanced funds has reduced the significant risk linked to losses due to diversification advantage					
5.	This bank offers refresher training to its fund					

ma the and	anagers so as to equip em with required skills d as well as update them			
on opj	new investment portunities and methods			

## SECTION D: EFFECT OF REAL ESTATE INVESTMENT TRUSTS (REITS) MANAGEMENT ON FINANCIAL PERFORMANCE

Please tick on the most appropriate answer in relation to the statements asked

		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
No	Statement	1	2	3	4	5
1.	This bank offers variety of real estate investment trusts products such as income, development and Islamic real estate investment trusts.					
2.	There are frequent marketing initiatives made to educate the bank's clients and general public on how REITs work so as to incorporate more of them to this investment					
3.	Investor's wealth is able to grow especially due to profitable returns they generate as a result of engaging in real estate investment trusts					

4.	This bank promotes cultural and religion inclusivity by including products such as Islamic real estate investment trusts to incorporate Islams			
5.	There are reliable customer service services that boost client-bank relations which increases the confidence in investing even higher amounts of income towards REITs.			

## SECTION E: EFFECT OF REAL ESTATE INVESTMENT BOND MANAGEMENT ON FINANCIAL PERFORMANCE

Please tick on the most appropriate answer in relation to the statements asked

		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
No	Statement	1	2	3	4	5
1.	This bank offers one stop platform for investors who are interested in diverse real estate bonds such as government, commercial, crowdfunding, and corporate real estate bonds					
2.	Investment banking staffs are knowledgeable on pitfall to avoid when making investments on bonds so as to avoid losses.					

3.	This bank has various reliable sources of information that enable them to be one step ahead of other investment firms to reap maximum benefits			
4.	There is a short duration through which investors can withdraw their returns from government real estate bonds			
5.	The maturity dates of the real estate bonds are communicated early enough to investors for planning purposes			

# Thank you for your feedback

## Appendix V: Secondary data collection instrument

Secondary data collection form from 2018- 2020:

Name of the investment bank.....

Variable				
_	2018	2019	2020	
Return on investment				
Return on asset				
Return on equity				
Operating ratio				
Rate of return				

#### **Appendix VI: Investment Banks in Kenya**

- 1. ABC Capital,
- 2. African Alliance Kenya Investment Bank,
- 3. Afrika Investment Bank,
- 4. Apex Africa Capital,
- 5. CBA Capital,
- 6. Discount Securities,
- 7. Dyer & Blair Investment Bank,
- 8. Equity Investment Bank,
- 9. Faida Investment Bank,
- 10. Hakuna Ventures,
- 11. Francis Drummond & Company,
- 12. Genghis Capital,
- 13. Kestrel Capital,
- 14. Kingdom Securities,
- 15. Ngenye Kariuki & Co,
- 16. NIC Securities,
- 17. Old Mutual Securities,
- 18. Renaissance Capital (Kenya),
- 19. SBG Securities,
- 20. Standard Investment Bank,
- 21. Sterling Capital Limited,
- 22. Suntra Investment Bank

# Appendix VII: Introduction Letter from KeMU

Allower and Con	
KENYA METHODIST	UNIVERSITY
P. O. Box 267 Meru - 60200, Kenya Tel: 254.064.30301/31229/30367/31171	Fax: 254-64-30162 Fmail: deanrd@kemu.ac.k
10. 2510015050,5122,5050,511	
DIRECTORATE OF POSTG	RADUATE STUDIES
July 30, 2021	
Commission Secretary,	
National Commission for Science, Technology an	d Innovations,
P.O. Box 30623-00100.	
NAIROBI.	
Dear sir/ Madam,	
PERIS WANJIKU MUIGAI (BUS-3-1273-2/2019)	
This is to confirm that the above named is a	hone fide student of Konus Methodia
University, Department of Business Administrat	ion, undertaking a Degree of master of
Business Administration. She is conducting resear	ch on, 'Relationship between Real Estat
Investments and Financial Performance of Select	ted Investment Banks in Nairobi Count
Kenya".	
We confirm that her research proposal has been d	efended and approved by the University
In this regard, we are requesting your office to iss	ue a permit to enable her collect data for
her research.	
Any assistance accorded to her will be appreciate	d.
30	
Thank you	
Dr. John Muchid. Ph.D.	
Director Postgraduate Studies	
Cc: Dean SBUE	
COD, Business Administration	
Postgraduate Co-ordinator	
Supervisors	

## Appendix VIII: NACOSTI Research Permit

NACOST NATIONAL COMMISSION FOR REPUBLIC OF KENVA SCIENCE, TECHNOLOGY & INNOVATION Ref No: 783107 Date of Issue: 19/August/2021 RESEARCH LICENSE This is to Certify that Miss.. PERIS WANJIKU MUIGAI of Kenya Methodist University, has been licensed to conduct research in Nairobi on the topic: RELATIONSHIP BETWEEN REAL ESTATE INVESTMENT AND FINANCIAL PERFORMANCE OF SELECTED INVESTMENT BANKS IN NAIROBI COUNTY, KENYA for the period ending : 19/August/2022. License No: NACOSTI/P/21/12379 783107 Director General NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & Applicant Identification Number INNOVATION Verification QR Code NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.

120