# DETERMINANTS OF FINANCIAL PERFORMANCE OF REAL ESTATE INVESTMENT TRUSTS IN KENYA

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**FEBRUARY, 2017**

# DECLARATION

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

Name:                                                    Adm No:

Sign.........................                              Date..............................

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This project has been submitted for examination with my approval as the University supervisor.


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## DEDICATION

I wish to dedicate this work to my family and friends for their encouragement and above all to the almighty God for his care throughout my study.

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I am first of all grateful to God Almighty for the strength and wisdom He granted me to finish this research project. I am greatly indebted to my Supervisor, Mr. Ngaba, for patience and the professional guidance he gave me throughout the writing of the research project. I am equally thankful to all my lecturers for their contributions in making it possible for me to successfully pursue this course in Masters in Business Administration (Finance Option). I wish to express my gratitude to my wife Wanjiku, daughters Njeri and Wanjiru and my son Mburu for their prayers, moral and financial support which have been a source of encouragement in my study.

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# OPERATIONAL DEFINITION OF TERMS

**Demographics:** These are the characteristic of Kenyan population and how the characteristics influence the trading of REIT products especially the emergence of middle class.

**Financial Performance** of REIT refers to returns realized after trading of REITS as a stock.

**Government Policy:** This refers to the rules and regulations that influence the trading of real estate and REITS.

**Interest Rates:** These are the changes levied on REITS products by the firms to enable earning of profits

**Real Estate Investment Trust:** This refers to a real estate product marketer and sold like a stock.

**State of the Economy:** This refers to the performance of Kenya economy as indicated by economic growth indices, GDP, inflation and their influence on the financial performance of REITS.

# ABBREVIATIONS AND ACRONYMS

**ANOVA**      Analysis of Variance

**CBK**      Central bank of Kenya

**CMA**      Capital Market Authority

**DRIPS**      Dividend reinvestment plans

**GDP**      Gross Domestic Products

**IOSCO**      International Organization of Securities Commissions

**IRA**      Insurance Regulatory Authority

**IRR**      Internal rate of return

**KRA**      Kenya revenue Authority

**NAR**      National Association of Realtors

**NHC**      National Housing Corporation

**REITs**      Real Estate Investment Trusts

**RBS**      Retirement Benefit Schemes

**SPSS**      Statistical package for social sciences

**VIF**      Variance inflated factors

# ABSTRACT

In Kenya, the housing sector has been characterized by inadequacy of affordable and decent housing. There is a paucity of studies on the lack of growth and development of viable alternatives to the traditional real estate growth model despite incentives such as waiver of corporate tax on such products. Equally, there is a glaring lack of literature on enablers and constrains to the uptake of REIT in Kenyan market. The general objective of the study was to find out the determinants of financial performance of real estate investment trusts in Nairobi County. In particular, the study examined the influence of government policies, economy, interest rates and demographics on the aforesaid performance. The study was carried out in Nairobi County where the focus was on the REITs operating in this county. The study was guided by classical theory, price theory and interest rate theory. The researcher adopted descriptive research design. The study was also guided by an empirical model. The target population for the present study comprised of managers working with real estate investment trusts in Kenya. There were 36 managers who constituted the study population. The study adopted a census design. The instrument used to facilitate data collection was a structured questionnaire. The requisite permits and consents were sought prior to data collection. The instrument was pilot tested on randomly selected managers working with branches of REITs in Nakuru town. The purpose of the pilot study was to determine both the validity and reliability of the research instrument. The Statistical Package for Social Sciences software facilitated data analysis. Both descriptive and inferential statistics were used in the analysis. The results of the study were presented in tables. The study found that the relationship between government policies, economy and demographics on one hand and financial performance of REITs on the other was positive, strong and significant. It was established a positive, moderately strong and significant relationship between interest rates and financial performance of REITs. Moreover, it was noted that economic factors had the strongest relationship with performance of REITs while interest rates had the weakest relationship with the same. The study concluded that the government policies put in place were favourable towards enhancing the performance of REITs. The economic factors were concluded to have a great influence on performance of REITs in Nairobi County. Among the four determinants under investigation, interest rates were inferred to have the list implication on the performance of REITs. Demographics were inferred to be consequential to the performance of REITs. The real estate investment trusts are advised to pass on to their customers the financial benefits they get from the tax waivers offered by the government. The REITs are recommended to lay down and implement strategies that can initiate demand for housing. Real estate investment trusts are advised to ensure that their prices are not too exorbitant to attract customers as they factor in various factors when stipulating their interest rates. The study recommends that REITs should factor in the demographics of Kenyans when coming up with various housing products.

# CHAPTER ONE

# INTRODUCTION

## 1.1 Background of the Study

Real estate products have been diversified and real estate investment trusts are among the popular real estate products. This diversification creates the opportunity for the blended portfolio to earn higher returns while reducing the potential for negative or low returns. Additionally, Real Estate Investment Trusts (REITs) offer flexibility where investors can build portfolios of custom REIT portfolios based on capital size, sector and geographic exposures (Constantine, Loamnis & Magdlini, 2006). According to Ellison, Sternfied and Lampe (2007) REITs in developed capital markets have been in existence in their present format since the 1960s though their influence and adoption has remained constrained especially in the developing countries.

The idea of maximizing returns from real estate products was among the informing reasons for their adoption. Corporate tax exemption was a critical element in the development of the REIT industry. REITs are typically exempt from corporate tax as long as 90% of net income is distributed to shareholders REITs are commonly structured as close ended trusts due to the illiquid nature of property. A REIT is a security that sells like a stock on the stock exchange and invests in real estate directly, either through properties or mortgages (Agaba, Muvumba, Opio, Besigiroha & Mirembe., 2009).

**1.1.1 Financial Performance of Real Estate Investment Trusts in the World**

Chou, Ho and Lu (2010) focused on a global perspective of the diversification effects of real estate investment trusts. The interest was on REIT portfolios from the US and six other countries. An analysis of the same over a period of 8 years from 2000 to 2007 indicated that upon adding a REIT portfolio resulted in a statistically significant enlargement of the investment opportunities set for domestic investors in each of the 7 countries under investigation. However, Chou et al (2010) found that the US investors that included international REITs realized significant diversification benefits emanating from improvement in the Sharpe ratio and also overall reduction on risk. Sharpe ratio is a measure that shows the average return less the risk-free return divided by the standard deviation of return on investment (ROI).

As early as 1970s, REITs have played the role of liquid, transparent and low-cost vehicles for investors who want to access the commercial real estate market in the US (Philips, 2010). According to Philips (2009), the foregoing has in the recent past been bolstered by introduction of REIT index and exchange-traded funds (ETFs). This is due to the fact REIT index and ETFs have enhanced the REIT cost effectiveness and also eased the access to broadly diversified REIT portfolios. It is indicated that contrary to stock markets around the world experiencing negative financial shocks between 2000 and 2010, REITs were some of the few sectors that recorded massive financial returns. Over the same period of time, REITs Index returned an average of 11.73% as opposed to other stocks that returned an average 0.58% per year over the same time in the US (Philips, 2010).

A report by Ernst & Young (2014) on global perspective of real estate investment trusts was intended to enable REITs and other property investors to understand the market and its drivers, and as such make more informed decisions. According to the report, Initial Public Offers (IPOs) for REITs globally exceeded US$20 billion in 2013. The foregoing was 55% higher than how they were prior to financial crisis of 2005 and more than double compared to the preceding year (2012). The statistics further indicated improved financial performance of REITs particularly in respect to the securities exchange. Almost US$7 billion were further raised in the first half of 2014. This was mostly attributed to the high level of activity in capital markets in Spain.

Since the recent past, REIT IPOs have been predominant in the real estate IPO market due to the increased global expansion and growth of REIT brand. Ernst and Young's (2014) report further indicated that there were notable IPOs that were in pipeline in Spain, US, Japan and UK whereas India was also expected to become another active market for the REIT. The financial performance and growth of REITs is further underscored in the findings that the market grew by more than US$100 billion in a span of under four years ending 2014 to US$150 billion in the United States (Ernst & Young, 2014).

In Africa, South Africa is ever on the fore front in respect to securities exchange. Real estate investment trusts are not an exception. The REIT market in South Africa, however, is still in its infancy given that it commenced on May 1, 2013. The South African REIT regime strives to emulate global best practices (Miller, 2015). A report by Price-Waterhouse Coopers (PwC) indicated that in South Africa there are two types of REITs. These are Company REITs and Trust REITs. Each of these REITs has different characteristics that distinguish it from the

other. A key characteristic of Company REITs in respect to the present study is that the company directors are charged with ensuring its ongoing compliance with the securities exchange listings requirements. In the case of trust REITs, the interests of investors are protected by a trust deed and the trustee is supposed to safeguard assets of investors (PwC, 2015).

## 1.1.2 Financial Performance of Real Estate Investment Trusts in Kenya

An advantage of this investment vehicle is that individuals can invest in REITs by buying shares directly on an open exchange or by investing in a mutual fund that specializes in real estate. An additional benefit of REITs is that they may allow dividend reinvestment plans (DRIPS). They have tax advantages too (Amidu et al., 2008). Kenya's capital market can play a strong role in the further development of the real estate sector. The introduction of REITs is viable given the demand for real estate, and the need for additional financial instruments. The capital markets can help mobilize and allocate resources, as there is a strong demand and cultural bias among Kenyans towards property investments, among the Kenya's middle class investment in real estate is deemed the ultimate goal (Mugwe, 2011).

There has been increased investment in real estate and real estate trusts as vehicles for growth globally the investment trend has gained traction in Kenya. Kenya is the third African country to establish a real estate investment trust as an investment vehicle legal notice no 116 of 18 June 2013 capital markets (REIT's Collective Investment schemes regulations 2013). Investors are no longer shying away from the African real estate market, and are seeking opportunity to invest where there will be sheltered from the rest of the world's Economic troubles (Knight Frank & Citi Private Wealth, 2010).

## 1.2 Statement of the Problem

In Kenya, the housing sector has been characterized by inadequacy of affordable and decent housing, low level of urban home ownership, extensive and inappropriate dwelling units, including slums and squatter settlements (NHC, 2013). This is exacerbated by lack of comprehensive housing policies and programs and the growth of rental and mortgage housing developments do not match either population or economic growth largely because of few real estate products and investors (NHC, 2013). In the context of the Kenyan market, there is a paucity of studies on the lack of growth and development of viable alternatives to the traditional real estate growth model despite incentives such as waiver of corporate tax on such products as long as 90% of net income is distributed to shareholders (NSE, 2009). Equally, there is a glaring lack of literature on enablers and constrains to the uptake of REIT in Kenyan market apart from the fact that REITs are commonly structured as closed-ended trusts due to the illiquid nature of property which is documented in an empirical study by Fisher and Goetzmann (2005).

However, various studies point out at difficulties in the trading of real estate products at the bourse like Kanagwa (2008) and Mugwe (2011). The studies found out that the financial performance of REITs in capital markets authority has perennially been affected by internal and external factors in the Kenya market. Specifically, the studies found out that REITs face challenges of transferability of shares, regulations and lack of strategic partnerships. These findings seemed to counter the expectations that with the introduction of REITs the property developers would come to the capital markets to raise funds (Bienert & Brunauer, 2006). In light of these, this study sought to establish how external factors in the operating market

environment affect the financial performance of REITs in order to fill the research gap left out by previous studies on real estate in Kenya

## 1.3 Objectives of the Study

### 1.3.1 General Objective

The general objective of the study was to find out the determinants of financial performance of real estate investment trusts in Kenya.

### 1.3.2 Specific Objectives

The study was guided by the following specific objectives:

i.   To determine the influence of government policies on the financial performance of real estate investment trusts.

ii.  To establish the influence of the economy on the financial performance of real estate investment trusts.

iii. To assess the influence of interest rates on the financial performance of real estate investment trusts.

iv.  To examine the influence of demographic structure on the financial performance of real estate investment trusts.

## 1.4 Research Questions

The study was further guided by the following research questions

i.   What is the influence of government policies on the financial performance of real estate investment trusts?

ii.    What is the effect of the economy on the financial performance of real estate investment trusts?

iii.   How do interest rates influence the financial performance of real estate?

iv.   How do demographics impact on the financial performance of real estate investment trusts?

## 1.5 Significance of the Study

The study provided relevant information and knowledge that helped financial institutions; real estate developers and real estate investors identify factors that may affect financial performance of real estate investment trust in Kenyan capital market. Also the Government of Kenya will benefit and in particular Ministry of Lands, Housing and Development to identify factors that hinder REIT's Kenya.

The study was purposed to increase the knowledge of borrowers in real estate financing and thus providing an opportunity for them to expand their portfolios. They may learn the advantages of moving to the diaspora to borrow at low interest rates while at the same time increase their portfolios locally through arbitrage hence deciding between conventional and creative financing methods. They may also uncover real estate tax loopholes that increase cash flow.

The study benefited real estate agents who get a good understanding of the system used to funnel investment capital into the hands of mortgage borrowers. Real estate agents became more familiar with the residential financing process were able to close more transactions and

thus earn greater compensation. New entrants into the mortgage financing business (banks and financiers) may borrow a strategy on how to position themselves on the market, benefiting themselves as well as the client. The study also benefited future researchers and scholars in the area of real estate and its performance.

## 1.6 Scope of the study

The study was carried out among real estate investment trusts operating in Nairobi County. On focus were the investment managers working with the aforesaid REITs. The study was guided by a set of four independent variables and one dependent variable. Independent variables included government policies, economy, interest rates and demographics while performance of REITs was the dependent variable. The study was carried out over a period of about three months.

## 1.7 Limitations of the Study

Some of the real estate managers of the companies studied were not willing to provide certain information relevant to the study. Getting accurate information from the respondents was one of the major challenges since some of the workers threatened that the information may be used against them by the management in the terms of performance hence insecurity of their jobs. This limitation was addressed by assurance the respondents that the data being collected and the study in general was exclusively for academic purposes. They were further assured that their identity and that of their firms was to remain confidential. The target populations was usually very busy and therefore they required a lot of time in order to fill in

the questionnaires. The challenge was overcame by the researcher employing drop and pick later method of collecting questionnaires.

**1.8 Organization of the Study**

The study is divided into five chapters. Chapter one covers the background of the study, problem, study objectives, research questions, significance of the study, scope of the study and lastly, the limitations that were encountered while conducting the study and how they were addressed. Chapter two, basically focuses on a review of theories and empirical studies that have been conducted in the past and in tandem with determinants of real estate investment trusts. The chapter also summarizes the reviewed studies and further outlines the identified research gaps. A conceptual framework showing the perceived interaction between study variables completes this chapter. Chapter three focuses on the methodology that governed the conducting of the study. It covers the research design, empirical model, population, census design, research instrument, data collection procedure and also how the data collected were analyzed and resultant findings presented. Chapter four presents the findings emanating from the analyses of the collected data. The chapter shows the response rate and findings and discussions in tandem with background information and study variables. Findings are in both descriptive and inferential statistics. The final chapter, that is, chapter five covers the summary, conclusions and recommendations. The three sections are in line with the study objectives and research questions. The last part of this chapter is a presentation of the suggested areas for further research in line with the conclusions made from the present study.

# CHAPTER TWO

# LITERATURE REVIEW

## 2.1 Introduction

This chapter outlines a review of theories and empirical studies that have so far been carried out in respect to determinants of financial performance of real estate investment trusts.  It also outlines a summary of the reviewed literature and identified research gaps. In addition, the conceptual framework that shows the perceived relationship between study variables is outlined.

## 2.2 Theoretical Review

This section shows a review of theories touching on determinants of financial performance of real estate investment trusts. Each theory is also discussed in the context of the present study. The theories reviewed include classical theory, price theory and interest rate theory.

### 2.2.1 Classical Theory

The classical theory of interest rates was developed by Ambrose and Barlow in 1987. It is based on the understanding of the working of products guided by free market forces like interest rates and stocks like REITS. The theory compares the supply of savings with the demand for borrowing. Using supply and demand curves the equilibrium rate is calculated by determining the curves intersection point. Thus if savings are greater than investments the interest rate drops until they reach equilibrium and vice versa, if savings are less than

investment the interest rate increases until the reward for savings encourages increased savings rates causing the market to again reach equilibrium (Agaba  et al., 2009).

However the classical theory of interest rates fails to account for factors besides supply and demand that may affect interest rates such as the creation of funds, the importance of income and wealth and changes in the primary borrowers in an economy. Modern economic theory has stressed the key role that real interest rates play in economic behavior: real interest rates affect investment in a country, which, in turn, affects the aggregate level of economic activity in stock exchange markets (Macoloo, 1994).

Monetary policy is given a central role in controlling the level of economic investment activities through its role in controlling interest rates. Monetary authorities are hypothesized to change nominal interest rates in response to a change in expectations concerning inflation so that the real interest rate adjusts in the desired way (Amidu et al., 2008). This theory sets the fundamentals of demand and supply and guided the study in accessing how market dynamics of demand and supply affected real estate investment trusts.

**2.2.2 Price Theory**

The theory of price was proposed by Amidu, Giza and Joma in 2008. The theory provided a framework for settling on prices by proposing that there should be opposing propositions before settling on a price. The theory asserts that the market price reflects interaction between two opposing considerations. On one side are demand considerations based on marginal utility, while on the other side are supply considerations based on marginal cost. The two considerations almost invariably settle on an equilibrium state. An equilibrium price

is supposed to be at once equal to marginal utility from the buyer's side and marginal cost from the seller's side (Agaba et al., 2009).

Real estate is a business, not a profession. Real estate is sometimes inaccurately spoken of as a profession, but it is essentially a business. The principal divisions of the real estate business are investment, operation and agency. These differ from one another according to the aims of the persons engaging in them and the methods by which those persons expect to make their gains (Amidu et al., 2008). The theory guided the study in determining how the mix of government policies, state of the economy, interest rates and demographics influenced price set out by REITs and eventually performance of these firms.

### 2.2.3 Interest Rates Theory

Interest rates theory was developed by Avlonitis and Indounas in 2005. The theory states that interest rates affect the whole market just as they are affected by the market. The theory has it that changes in interest rates affect the overall expense of borrowing and thus expenditures undertaken with the borrowed funds. Higher interest rates tend to decrease expenditures and lower interest rates lead to an increase in expenditures. The expense of borrowing these funds depends on interest rates. Higher interest rates can add to the overall cost of these expenditures. Lower interest rates can reduce the overall cost of these expenditures. This means that changes in interest rates can induce changes in consumption and investment spending, and thus aggregate demand. Interest rates charged by commercial banks and housing companies influence investments directly or indirectly in the Nairobi Security Exchange (Bienert & Brunauer, 2006). The theory guided the study in linking the forces that influence the interest rates in free markets which also influence performance of REITs.

## 2.3 Empirical Review

This section covers a review of empirical studies that have been conducted in the past in respect to determinants of performance of real estate investment trusts in Kenya and beyond. In particular, empirical studies on government policies, economy, interest rates and demographics in tandem with financial performance of REITs are reviewed.

### 2.3.1 Government Policies and Financial Performance of Real Estate Investment Trusts

Government policies can have a significant impact on demand and prices thus affecting viability of REIT's in a country (Bienert & Brunauer, 2006). Tax credits, deductions and subsidies are some of the ways the government can temporarily boost demand for real estate for as long as they are in place. Being aware of current government incentives can help you determine changes in supply and demand and identify potentially false trends. For example, in 2009, the U.S. government introduced a first-time homebuyer's tax credit to homeowners in an attempt to jump-start home sales in a sluggish economy (Avlonitis &Indounas, 2005).

According to the National Association of Realtors (NAR), this tax incentive alone led to 900,000 homebuyers to buy homes. This was quite a sizable increase, although temporary, and without knowing the increase was a result of the tax incentive, you may have ended up concluding that the demand for housing was going up based on other factors (Bienert & Brunauer, 2006). During times of expansion, investors seek to purchase companies in technology, capital goods and basic energy. During times of contraction, investors will look to purchase companies such as utilities, financials and healthcare (Bernard & Messah, 2011).

Factors affecting the growth in real estate investment in Kenya found out monetary policy is the process by which the Central Bank influences the level of money supply credit in the economy in order to minimize excessive price fluctuations, and promote economic growth. Monetary policy guards against inflation and ensures stability of prices, interest rates and exchange rates. This protects the purchasing power of the Kenya shilling and promotes savings, investment and economic growth. Through the monetary policy, the Central Bank creates conditions that allow for increased output of goods and services in the economy, thereby improving the living standards of the people. The Central Bank through the monetary policy formulates a policy to expand or contract money supply in the economy after detailed analysis and estimation of the demand for money in the economy (Muli, 2012)

According to the Kenya National Land Policy (2009), inadequate environmental management of land and rapid urbanization have been cited as a key challenge of the land equation in Kenya which affects the quality of real estate in Kenya. Housing finance policy and practice influenced apartment property developers and should not overly rely on household demographic profiles in Nairobi County to influence their apartment construction decisions (Omagwa & Auda, 2012).

A study by Ambrose and Barlow (2000) found out factors such as interest rates, GDP and inflation rate had statistically significant influences on real estate investment. Policy measures geared toward improving the economic growth and curbing rising inflation rates and interest rates should be undertaken as they increased the investment levels. A study by Dange, (2000) found out that real estate brokers influence the construction activities. A study

by Waithaka and Ngugi (2013) found out that the factors influencing acquisition of stressed assets and asset securitization into the financial market in Kenya.

## 2.3.2 Economy and Financial Performance of Real Estate Investment Trusts

Factors that influenced economic growth in 2010 included improved weather conditions, low inflationary pressure, low interest rates, stable macroeconomic environment; increased credit to the private sector and higher investments. A productive economy positively affects the demand for real estate. Besides the growth in the gross domestic product, growth in inflation rate and unemployment significantly affect the growth in real estate (Muli, 2012). Factors such as gross domestic product (GDP), interest rates, levels of employment and consumer spending can help to determine the current stage of the economic cycle.

An economy is deemed to be in the expansion stage of the economic cycle when gross domestic product (GDP) is rapidly increasing (Avlonitis & Indounas, 2005). Another key factor that affects the value of real estate is the overall health of the economy. This is generally measured by economic indicators such as the GDP, employment data, manufacturing activity and the prices of goods. However, the cyclicality of the economy can have varying effects on different types of real estate (Constantine et al., 2006)

Chau, (2001) found that property price leads economic growth and drives inflation. An increase in residential investment will lead to economic growth this is in contrast to the "income effect," which suggests that people's demand for housing increases when their incomes increases. This explanation is confirmed by Coulson and Kim (2000). Economic indicators such as the Gross Domestic Product, employment data, manufacturing activity, the prices of goods, etc. Broadly speaking, when the economy is sluggish, so is real estate.

However, the cyclicality of the economy can have varying effects on different types of real estate. For example, if an REIT has a larger percentage of its investments in hotels, they would typically be more affected by an economic downturn than an REIT that had invested in office buildings. Productive economy also positively affects the demand for real estate (Ambrose & Barlow, 2011).

Empirical studies by Ziening and McIntosh (2000) and Tonto, Wheaton and Southard (2000) found out that the greater volatility in return in commercial real estate is not an appraisal problem but a structural problem of the property markets and real estate property as an investment vehicle. The most typical sources of investment properties include: market listing through multiple listing service or commercial information exchange, real estate agents, wholesale such as banks real estate owned department and public agencies, public auction foreclosure sales, estate sales and private sales. A study by Groves (2004) found out that descriptive technique gives accurate information of persons, events or situations. Descriptive research design was used to describe the relationship between the selected macro-economic factors and real estate investment.

A study by O'Sullivan and Sheffrin (2003) found out that income effects are more important in determining the current account than are price effects. A study by Blanchard (2000) found out that the effects of inflation on the economy are diverse and can be both positive and negative. The negative effects are however most pronounced and comprise a decrease in the real value of money as well as other monetary variables over time. A study by Muthee (2012) found out that there is a relationship between the variables (real estate prices and real estate

investment) revealing that a quarterly change in housing prices yields a quarterly change in GDP.

A study by Renigier-Bilozor and Wisniewski (2012) found out that total consumption expenditure, net income; unemployment and population growths are influential factors to the real estate investment. A study by Klimczak (2010) found out that familiarity with sources of value as well as factors of which determine the value and impact upon the attractiveness of a capital market segment in question, allows capital owners to make effective and rational investment decisions. Issues concerning economic and physical properties of the estate that constitute its value, are of great importance for prospective investors on the real estate market. A study by Lynn (2007) found out that the primary cause of investment failure for real estate is that the investor goes into negative cash flow for a period of time that is not sustainable, often forcing them to resell the property at a loss or go into insolvency.

### 2.3.3 Interest Rates and Financial Performance of Real Estate Investment Trusts

Economic conditions have an important influence on overall interest rates. Rates tend to increase during periods of strong economic activity when the demand for credit is high. A vital and healthy economy causes businesses to borrow funds in order to expand their output (Cummings, 2007). Changes in interest rates can greatly influence a person's ability to purchase a residential property (Chomba, 1999). This was due to the fact that as the interest rates fall, the cost to obtain a mortgage to buy a home decreases, which creates a higher demand for real estate, which pushes prices up. Conversely, as interest rates rise, the cost to obtain a mortgage increases, thus lowering demand and prices of real estate (Davis, 2008). However, when looking at the impact of interest rates on an equity investment such as a real

estate investment trust (REIT), rather than on residential real estate, the relationship can be thought of as similar to a bond's relationship with interest rates (Ellison, 2007).

The influence of interest rates on an individual's ability to purchase residential properties by increasing or decreasing the cost of mortgage capital is so profound many people incorrectly assume that the only deciding factor in real estate valuation is the mortgage rate (Daminiano, 2001). Interest rate affects an individual's choice between current consumption and saving for the future consumption. Classical theory considers the payment of interest a reward for waiting-the postponement of current consumption in of greater future consumption. Higher interest increases the attractiveness of saving relative to consumption spending, encouraging more individuals to substitute current saving and future consumption for some quality of current consumption. This is called substitution effect calls for a positive relationship between interest rates and the volume of savings (Marquis, 2002).

Interest rates, especially the rates on interbank exchanges and Treasury bills, have as profound an effect on the value of income-producing real estate as on any investment vehicle (Fernandez & Nichols, 2002). Because the influence of interest rates on an individual's ability to purchase residential properties (by increasing or decreasing the cost of mortgage capital) is so profound, many people incorrectly assume that the only deciding factor in real estate valuation is the mortgage rate. However, mortgage rates are only one interest-related factor influencing property values. Because interest rates also affect capital flows, the supply and demand for capital and investors' required rates of return on investment, interest rates will drive property prices in a variety of ways (Fernandez & Nichols, 2002).

To understand how government-influenced interest rates, capital flows and financing rates affect property values, you should have a basic understanding of the income approach to real estate values (Fisher & Goetzmann, 2005). Although real estate values are influenced by the supply and demand for properties in a given locale and the replacement cost of developing new properties, the income approach is the most common valuation technique for investors. The income approach provided by appraisers of commercial properties and by underwriters and investors of real estate-backed investments is very similar to the discounted cash flow analysis conducted on equity and bond investments (Golland, 1996).

Golland further asserts that Interest rates can significantly affect the cost of financing and mortgage rates, which in turn affects property-level costs and thus influences values. However, supply and demand for capital and competing investments have the greatest impact on required rates of return (RRR) and investment values. Theoretical studies shows that down-payment constraints, as reflected in the maximum available loan-to-value ratio, also help determine home prices using the home price-to-rent approach to model home prices. The lack of good data on mortgage availability and on regional home stocks raises concerns that estimates of home price and consumption models may suffer from omitted variable bias (Glaeser et al., 2010). Changes in interest rates can greatly influence a person's ability to purchase a residential property (Kummerow, 2000). That is because as the interest rates fall, the cost to obtain a mortgage to buy a home decreases, which creates a higher demand for real estate, which pushes prices up. Conversely, as interest rates rise, the cost to obtain a mortgage increases, thus lowering demand and prices of real estate (Kibirige, 2006).

A basic understanding of interest rates and the economic influences that determine the future course of interest rates can help consumers make financially sound mortgage decisions, such as making the choice between a fixed-rate mortgage, or adjustable-rate mortgage (ARM) or deciding whether to refinance out of an adjustable-rate mortgage. Interest rates also affect capital flows, the supply and demand for capital and investors' required rates of return on investment, interest rate will drive property prices in a variety of ways (Andrew, 2004). Inflation will affect interest rate levels. The higher the rate of inflation, the more interest rates are likely to rise. This occurs because lenders will demand higher interest rates as compensation for the decrease in the purchasing power of the money they will be repaid in the future. (Jessica, 2001). Lenders will demand higher interest rates as compensation for the decrease in the purchasing power of the money they will be repaid in the future (McGraw, 1999).

A study by Ambrose and Barlow (2000) found out that changes in interest rates can greatly influence a person's ability to purchase a residential property. That is because as the interest rates fall, the cost to obtain a mortgage to buy a home decreases, which creates a higher demand for real estate, which pushes prices up. Conversely, as interest rates rise, the cost to obtain a mortgage increases, thus lowering demand and prices of real estate. A study by O'Sullivan and Sheffrin (2003) found out real estate investment is affected by diverse factors including; fluctuations in exchange rate, interest rate, inflation rate, money supply, national output etc.

A study by Fortin and Leclerc (2007) found out that new mortgage loans are significantly affected by interest rates charged while value of property is influenced by prices of housing

units. A study by (Barkham, 2012) found out that the fluctuating rates of interest do fluctuate the interest charged by lending institutions on loans – cost of capital for investment. A study Muli (2012) on an assessment of the factors affecting the growth in real estate investment in Kenya found out that the investment growth depends on the economic activity prosperity. A study by Makena (2012) found out that level of money supply can influence the level of real estate investments as well as real estate property prices. A study by O'Sullivan and Sheffrin (2003) that income effects are more important in determining the current account than are price effects in Real estate investment.

### 2.3.4 Demographics and Financial Performance of Real Estate Investment Trusts

Demographics are the data that describes the composition of a population, such as age, race, gender, income, migration patterns and population growth. These statistics are often overlooked but are significant factors that affect how real estate is priced and what types of properties are in demand. Han (1996) concluded from his survey that real estate investment opportunities, demographic attributes, and the market structure are important selection criteria for investment decisions. Major shifts in the demographics of a nation can have a large impact on real estate trends for several decades (Mugwe, 2011). Demographic variables such as age, gender, education, occupation plays a very important role in investment decision (Geetha& Ramesh, 2011; Jain & Mandot, 2012; Jamshidinavid et al., 2012).

According to a study by Thalmann (2006), demographics are the data that describes the composition of a population, such as age, race, gender, income, migration patterns and population growth. These statistics are an often overlooked but are significant factors that affect how real estate is priced and what types of properties are in demand. Major shifts in

the demographics of a nation can have a large impact on real estate trends for several decades. There are numerous ways this type of demographic shift can affect the real estate market, but for an investor, some key questions to ask might include: how would this affect the demand for second homes in popular vacation areas as more people start to retire? How would this affect the demand for larger homes if incomes are smaller and the children have all moved out?

## 2.4 Summary of Literature and Research Gaps

Government policies can have a significant impact on demand and prices thus affecting viability of REITs in a country. During times of expansion, investors seek to purchase companies in technology, capital goods and basic energy. During times of contraction, investors will look to purchase companies such as utilities, financials and healthcare. Monetary policy guards against inflation and ensures stability of prices, interest rates and exchange rates. Inadequate environmental management of land and rapid urbanization have been cited as a key challenge of the land equation in Kenya which affects the quality of real estate in Kenya. Policy measures geared toward improving the economic growth and curbing rising inflation rates and interest rates should be undertaken as they increased the investment levels. However, the reviewed studies failed to address the influence of government policies on real estate investment trusts in Kenya.

A productive economy positively affects the demand for real estate. Besides the growth in the gross domestic product, growth in inflation rate and unemployment significantly affect the growth in real estate. An economy is deemed to be in the expansion stage of the economic cycle when the GDP is rapidly increasing. It has been found that property price

leads economic growth and drives inflation. An increase in residential investment will lead to economic growth this is in contrast to the "income effect," which suggests that people's demand for housing increases when their incomes increases. Past studies have revealed that there is a relationship between the variables (real estate prices and real estate investment) revealing that a quarterly change in housing prices yields a quarterly change in GDP. Issues concerning economic and physical properties of the estate that constitute its value, are of great importance for prospective investors on the real estate market. Though there are several studies that have touched on the issue of economy and economy factors and subject to real estate sector, the reviewed studies have failed to clearly empirically examine the implication of the economic factors on performance of real estate investment trusts especially in Kenyan context.

Economic conditions have an important influence on overall interest rates. Rates tend to increase during periods of strong economic activity when the demand for credit is high. The influence of interest rates on an individual's ability to purchase residential properties by increasing or decreasing the cost of mortgage capital is very profound. Higher interest increases the attractiveness of saving relative to consumption spending, encouraging more individuals to substitute current saving and future consumption for some quality of current consumption. Given that the influence of interest rates on an individual's ability to purchase residential properties is so profound, many people incorrectly assume that the only deciding factor in real estate valuation is the mortgage rate. Although real estate values are influenced by the supply and demand for properties in a given locale and the replacement cost of developing new properties, the income approach is the most common valuation technique for investors. Interest rates can significantly affect the cost of financing and mortgage rates,

which in turn affects property-level costs and thus influences values. A basic understanding of interest rates and the economic influences that determine the future course of interest rates can help consumers make financially sound mortgage decisions. Against the backdrop of the numerous studies reviewed in respect to interest rates, none of them has come out clearly to illustrate and explain the link between interest rates and performance of real estate investment trusts in Kenya.

Demographics are the data that describes the composition of a population, such as age, race, gender, income, migration patterns and population growth. Demographic variables such as age, gender, education, occupation plays a very important role in investment decision. Major shifts in the demographics of a nation can have a large impact on real estate trends for several decades. There are numerous ways this type of demographic shift can affect the real estate market. There is quite limited review of empirical studies on demographics in respect to performance of REITs. Premised on this, therefore, there exists clear research gaps that are addressed in the latter chapters of the present study.

## 2.5 Conceptual Framework

A conceptual framework is a diagram that illustrates the perceived relationships between study variables as shown in Figure 2.1.

**Figure 2.1: Conceptual Framework**

**Independent Variables**                                    **Dependent Variable**

```
┌─────────────────────────────────┐
│      Government Policies         │
│                                  │
│   • Tax Credits                  │
│   • Government restrictions       │
│   • Subsidies                    │
│   • Double taxation              │
│   • Corporate tax                │
│   • Income tax                   │
│   • VAT on rental income         │
│   • VAT on professional          │
│     services                     │
└─────────────────────────────────┘

┌─────────────────────────────────┐
│            Economy               │
│   • Inflation rates              │
│   • Industry Production          │
│   • Employment rates             │          ┌──────────────────────────────┐
│   • Disposable income            │          │  Financial Performance of    │
│   • Real Income                  │          │  Real Estate Investment      │
│   • GDP                          │          │          Trusts              │
│   • Investment attractiveness    │          │   • Dividend yield           │
│   • Demand and supply            │          │   • Capitalization rate      │
└─────────────────────────────────┘          │   • Equity turnover          │
                                              │   • Real estate indices      │
┌─────────────────────────────────┐          │   • Return on investments    │
│         Interest Rates           │          └──────────────────────────────┘
│   • Expected inflation           │
│   • Real risk-free rate          │
│   • Default risk premium         │
│   • Liquidity premium            │
│   • Maturity premium             │
└─────────────────────────────────┘

┌─────────────────────────────────┐
│         Demographics             │
│   • Age category                 │
│   • Education level              │
│   • Income level                 │
│   • Occupation                   │
│   • Size of households           │
└─────────────────────────────────┘
```

*Source*: **Researcher (2016)**

In the present study and as shown in Figure 2.1, there are two sets of variables which are independent and dependent variables. Independent variables include government policies, economy, interest rates and demographics while performance of real estate investment trusts is the dependent variable. As shown in Figure 2.1, it was hypothesized that there existed relationships between each of the predictor (independent) variables and performance of REITs.

# CHAPTER THREE

# RESEARCH METHODOLOGY

## 3.1 Introduction

This chapter outlines the research design, empirical model, operationalization of study variables, target population, census design, data collection instrument, data collection procedure, and lastly how the collected data were analyzed and results presented.

## 3.2 Research Design

A research design is a framework that guides a researcher in studying a research problem (Mugenda & Mugenda, 2003). The research design therefore was seen as a conceptual structure within the research conducted with an intention to explore new knowledge to a recent study. It guides a researcher to know what to do in the whole of research process. The researcher used descriptive research design which according to Kothari (2004) explains the phenomenon as it is without alteration. In the present study, the researcher never made any attempt to influence the outcome of the study hence adhering to the characteristics of descriptive studies.

## 3.3 Target Population

The population of the study had been defined as a complete set of individuals, cases or objects with some common observable characteristic (Krishnaswami, 2003). Additionally, a population involves a group of individuals' objects or items from which samples are taken for measurement. The target population for the present study comprised of managers working

with real estate investment trusts in Kenya. The accessible population which is a subset of the target population comprised of managers working with REITs in Nairobi County. Table 3.1 shows the distribution of the study population.

**Table 3.1: Distribution of the Study Population**

| REITs | Management Staff |
|---|---:|
| Centum Assets Management Ltd | 6 |
| UAP Investment Ltd | 6 |
| CIC Asset Management Ltd | 6 |
| Fusion Investment Management Ltd | 6 |
| Stanlib Kenya Limited | 6 |
| Kenya commercial bank Limited | 6 |
| **Total** | **36** |

*Source*: Capital Markets Authority (2016)

**3.4 Census Design**

A census design is an approach which is adopted when the size of the study population is relatively small thus warranting no sampling (Kothari, 2004). The method eliminates both the sampling error and sampling bias and thus enhances the generalizability of the findings to the study population. The present study adopted a census design since the members of the study population were 36 only.

**3.5 Empirical Model**

An empirical model is similarly called regression model and shows the influence of predictor variables on the dependent variable. The following empirical model guided the present study:

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$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where:

| | | |
|---|---|---|
| $Y$ | = | Financial performance of REITs |
| $B_0$ | = | Constant |
| $X_1$ | = | Government policies |
| $X_2$ | = | Economy |
| $X_3$ | = | Interest rates |
| $X_4$ | = | Demographics |
| $\varepsilon$ | = | Error Term |
| $\beta_1, \beta_2, \beta_3, \beta_4$ | = | Regression coefficients |

## 3.5.1 Operationalization and Measurement of Study Variables

This section illustrates the study variables, their classifications, operationalization and how they are measured as indicated in Table 3.2.

**Table 3.2: Operationalization and Measurement of Variables**

| Variable | Classification | Operationalization | Measurement |
|---|---|---|---|
| Government policies | Independent | Tax credits, government restrictions, subsidies, double taxation, corporate tax, income tax, VAT | Likert Scale of 1 - 5 |
| Economy | Independent | Inflation rates, industry production, employee rates, disposable income, real income, GDP, investment attractiveness, demand & supply | Likert Scale of 1 - 5 |
| Interest rates | Independent | Inflation, real risk-free rate, default risk premium, liquidity premium, maturity premium | Likert Scale of 1 - 5 |
| Demographics | Independent | Age, education, income, occupation, household size | Likert Scale of 1 - 5 |
| Financial performance | Dependent | Dividend yield, capitalization rate, equity turnover, real estate indices, ROI | Likert Scale of 1 - 5 |

## 3.6 Data Collection instrument

The instrument used to facilitate data collection was a structured questionnaire that contained closed-ended questions. The questions addressed the background of the respondents and also the study objectives. The latter part was on a 5-point Likert scale. The questionnaire was self-designed and self-administered. According to Mugenda and Mugenda (2003) questionnaires are the most appropriate tools to facilitate collection of data when respondents are

decentralized as it was the case with the current study.

## 3.7 Data Collection Procedure

The requisite permits and consents were sought prior to data collection. A letter of introduction from the School of Business of Kenyatta University was obtained. This was followed by application for a research permit from the National Council of Science, Technology and Innovation (NaCoSTI). The consent of the senior management of the REITs based in Nairobi County was further sought. Drop-and-pick-later method was used during collection of data for the main study.

## 3.8 Pilot Testing

The instrument was pilot tested on randomly selected managers working with branches of REITs in Nakuru town, Kenya. The purpose of the pilot study was to determine both the validity and reliability of the research instrument. The content validity of the instrument was determined through consultations with the assigned university supervisors since this validity cannot statistically be determined (Kimberlin & Winterstein, 2008). The reliability was tested using the Cronbach alpha coefficient where the reliability threshold was alpha coefficient equal to or greater than 0.7. All the study constructs contained in the final questionnaire were ensured that they returned alpha values greater than 0.7 as shown in Table 3.3 before the instrument was employed in collection of data for the main study.

**Table 3.3: Reliability Test Results**

| Study Construct | No. of Items | Alpha coefficient |
|---|:---:|:---:|
| Government policies | 8 | 0.825 |
| Economy | 8 | 0.791 |
| Interest rates | 5 | 0.770 |
| Demographics | 5 | 0.810 |
| Financial performance | 5 | 0.847 |

## 3.9 Data Analysis Procedures and Presentation

After collecting the filled questionnaires, the researcher ensured that the ones considered for analysis were completely and appropriately filled. The data collected in the research were edited, coded and entries made into Statistical Package for Social Sciences (SPSS) version 24. This software facilitated in data analysis. Both descriptive and inferential statistics were used in the analysis. Descriptive statistics contained measures of distribution in form of frequencies and percentages, measures of central tendencies on form of means and measures of dispersion in form of standard deviations. Inferential statistics were in form of Pearson's correlation and multiple regression. Correlation analysis enabled determination of relationship between predictor variables and performance of REITS. Regression analysis facilitated determination of the extent to which each of the predictor variables influenced the aforesaid performance and also the combined effect of the studied determinants on performance of the REITs. Diagnostic tests were carried out in order to assess the multicollinearity of study variables. The results of the study were presented in tables.

## 3.10 Ethical Issues

The study factored in a number of ethical issues. First, the researcher sought the necessary permits and consents from relevant authorities in order to be allowed to collect data for the study. The researcher desisted from asking respondents sensitive questions such as their specific ages. Moreover, the respondents were not required to disclose their names or those of their institutions. The study ensured and also the researcher assured the respondents that the data collected and the findings thereof would and will not be used for other purposes besides academic. Moreover, the respondents were assured that the study findings were not going to be shared with third parties without the consent of the participants (respondents).

## CHAPTER FOUR

## RESEARCH FINDINGS

### 4.1 Introduction

This chapter covers the findings resulting from the analyses of the data collected alongside the pertinent discussions. The first section presents the response rate followed by the background information of the respondents. This is followed by descriptive and inferential findings respectively. In the latter sections (descriptive and inferential findings) the findings are presented in tandem with study objectives.

### 4.2 Analysis of Response Rate and Descriptive Statistics

This section puts into perspective the response rate and descriptive statistics resulting from data analysis. Descriptive statistics used include measures of distribution, measures of central tendencies and measures of variation or dispersion. Measures of distribution include frequencies and percentages, measures of central tendencies were means while standard deviations constituted the measures of variation employed in the study.

### 4.2.1 Response Rate

Response rate refers to the number of questionnaires that are returned or collected from respondents having been filled appropriately against the number of questionnaires that had been issued. In this study, a total of 36 questionnaires were issued to the management staff of REITs based in Nairobi County. From this figure, 34 questionnaires were filled appropriately and returned. The foregoing translated to 94.44% response rate which was deemed sufficient and acceptable for use in data analysis (Nulty, 2008). The high response rate was attributed

to the fact that the questionnaires were administered by the researcher in person who explained to the respondents the importance of their participating in the study.

## 4.2.2 Background Information

This section outlines the results of descriptive analysis in respect to background information of respondents. The findings have addressed the gender, age, qualifications and working experience of the respondents. Table 4.1 shows the distribution of respondents according to their gender.

**Table 4.1: Distribution of Respondents by Gender**

|  | Frequency | Percentage |
|---|---|---|
| Male | 22 | 64.7 |
| Female | 12 | 35.3 |
| **Total** | **34** | **100.0** |

*Source:* survey data, 2016

As shown in Table 4.1, majority of respondents at 64.7% were male while the rests (35.3%) were female. The results indicated that real estate investment trusts in the Nairobi Securities Exchange were dominated by males in their management levels. However, these firms were found to abide with the two thirds gender rule stipulated in the Constitution of Kenya, 2010.

**Table 4.2: Distribution of Respondents by Ages**

|  | Frequency | Percentage |
|---|---|---|
| 25-29 years | 2 | 5.9 |
| 30-34 years | 8 | 23.5 |
| 35-39 years | 12 | 35.3 |
| 40 years and above | 12 | 35.3 |
| **Total** | **34** | **100.0** |

*Source:* survey data, 2016

The results of the analysis as shown in Table 4.2 indicated that majority (35.3%) of the managers working with REITs were aged at least 40 years while an equal proportion of the management staff were aged between 35 and 39 years. Notably, only 2 managers representing 5.9% of all managers working with REITs were aged between 25 and 29 years. The findings could have been employed to explain the emphasis made by REITs in respect of the age of their management team. This was probably due to the positive link between age and working experience.

**Table 4.3: Distribution of Respondents by Academic Qualifications**

|  | Frequency | Percentage |
|---|---|---|
| Undergraduate | 12 | 35.3 |
| Postgraduate | 22 | 64.7 |
| **Total** | **34** | **100.0** |

The results of the analysis indicated in Table 4.3 shows that most of the managers working with real estate investment trusts in Nairobi County (64.7%) possessed postgraduate degrees. The study further revealed that only 35.3% of the managers had undergraduate degrees while

none of them had lower qualifications. The findings indicated the great importance attached to the persons managing REITs in the country.

**Table 4.4: Distribution of Respondents by Work Experience with REITs**

|  | Frequency | Percentage |
|---|---|---|
| Less than 1 year | 2 | 5.9 |
| 1-3 years | 2 | 5.9 |
| 4-5 years | 8 | 23.5 |
| Over 5 years | 22 | 64.7 |
| **Total** | **34** | **100.0** |

*Source:* survey data, 2016

The study further examined the distribution of managers participating in the study according to their work experience with REITs. As shown in Table 4.4, majority of the managers (64.7%) had worked with the aforesaid firms for a period of more than 5 years. Only 5.9% of the managers had worked with REITs for a period of less than 1 year. The findings underscored the high level of experience of managers in real estate investment trusts.

**4.2.3 Government Policies and Financial Performance of REITs**

The study examined the views of finance managers on government policies in light of real estate investment trusts. The pertinent descriptive results are as shown in Table 4.5.

**Table 4.5: Descriptive Statistics for Government Policies**

| | N | Min | Max | Mean | Std. Dev |
|---|---|---|---|---|---|
| Government gives tax credits to REITS | 34 | 1 | 5 | 4.35 | .996 |
| Government put restriction on investments of REITS | 34 | 3 | 5 | 4.18 | .529 |
| Government offers subsidies to REITS | 34 | 4 | 5 | 4.35 | .493 |
| REITs get protection against double taxation from the government | 34 | 4 | 5 | 4.29 | .470 |
| Corporate tax is scrapped from REITs | 34 | 4 | 5 | 4.12 | .332 |
| Government does not charge income tax on REITs | 34 | 4 | 5 | 4.47 | .514 |
| Government does not charge income on VAT on rental income by REITs | 34 | 4 | 5 | 4.53 | .514 |
| Government get relief on VAT charged on professional services | 34 | 2 | 5 | 4.18 | .728 |

As shown in Table 4.6, it was strongly agreed (mean = 4.53; std dev = 0.514) that the government does not charge income on VAT on rental income by REITs. In the same light, it was concurred that the government put restriction on investments of REITs (mean = 4.18; std dev = 0.529) and also offers subsidies to REITs (mean = 4.35; std dev = 0.493) in addition to protecting these firms against double taxation (mean = 4.29; std dev = 0.470). The study further observed that respondents were in agreement that the corporate tax is scrapped from REITs (mean = 4.12; std dev = 0.332) and that the government does not charge income tax on REITs (mean = 4.47; std dev = 0.514). Moreover, respondents held the view that REITs get relief on VAT charged on professional services (mean = 4.18; std dev = 0.728). The foregoing findings concurred with earlier observations in a study conducted in the U.S. by Avlonitis and Indounas (2005).

### 4.2.4 Economy and Financial Performance of REITs

The study further analyzed the opinions of investment managers of real estate investment trusts on issues touching on economic factors and performance of their firms. The descriptive results are as illustrated in Table 4.6.

**Table 4.6: Descriptive Statistics for Economy**

|  | N | Min | Max | Mean | Std. Dev |
|---|---|---|---|---|---|
| Kenyan economy influences inflation rates | 34 | 4 | 5 | 4.47 | .514 |
| Production of REITs is affected by the prevailing economic conditions | 34 | 4 | 5 | 4.41 | .507 |
| Employment rates in REITs are subject to the country's economy | 34 | 3 | 5 | 4.24 | .562 |
| Disposable income of Kenyans influence REITs performance | 34 | 1 | 5 | 4.00 | 1.225 |
| Real income of Kenyans is presently high | 34 | 1 | 4 | 2.59 | 1.121 |
| The country's GDP is relatively high compared to neighboring countries | 34 | 1 | 5 | 3.71 | 1.359 |
| REITs are attractive to potential investors | 34 | 4 | 5 | 4.29 | .470 |
| The demand and supply of housing influence the performance of REITs in Kenya | 34 | 4 | 5 | 4.65 | .493 |

The study found that managers working with REITs were in agreement that Kenyan economy influences inflation rates (mean = 4.47; std dev = 0.514). This was in tandem with earlier findings that the value of real estate is affected by the overall health of the economy (Constantine et al., 2006). Moreover, the study found that production of REITs is affected by the prevailing economic conditions (mean = 4.41; std dev = 0.507);  employment rates in REITs are subject to the country's economy (mean = 4.24; std dev = 0.562);  disposable income of Kenyans influence REITs performance (mean = 4.00; std dev = 1.225); the country's GDP is relatively high compared to neighboring countries (mean = 3.71; std dev = 1.359);  and that REITs are attractive to potential investors (mean = 4.29; std dev = 0.470). It

was strongly agreed (mean = 4.65; std dev = 0.493) that the demand and supply of housing influence the performance of REITs in Kenya. Nevertheless, managers of REITs were indifferent (mean = 2.59; std dev = 1.121) regarding the proposition that real income of Kenyans is presently high. Indeed, a large number of these managers disagreed with the stated proposition. The present findings were in agreement with the assertion by Muli, (2012) that the growth in the gross domestic product, growth in inflation rate and unemployment significantly affect the growth in real estate.

### 4.2.5 Interest Rates and Financial Performance of REITs

The study also sought the views of managers of real estate investment trusts on the issue of interest rates and performance of REITs. Table 4.7 shows the relevant findings.

**Table 4.7: Descriptive Statistics for Interest Rates**

|  | N | Min | Max | Mean | Std. Dev |
|---|---|---|---|---|---|
| Interest rates charged by REITs are subject to expected inflation | 34 | 4 | 5 | 4.59 | .507 |
| Real risk-free rate affects interest rates charged by REITs | 34 | 4 | 5 | 4.18 | .393 |
| REITs attaches default risk premium on the interest they charge | 34 | 4 | 5 | 4.29 | .470 |
| Liquidity premium is factored in the interest charged by REITs | 34 | 2 | 5 | 4.06 | .659 |
| REITs include maturity premium on the interest rates of their products | 34 | 4 | 5 | 4.24 | .437 |

The managers were found to strongly admit that Interest rates charged by REITs are subject to expected inflation (mean = 4.59; std dev = 0.507). The managers further agreed that real

risk-free rate affects interest rates charged by REITs (mean = 4.18; std dev = 0.393); REITs attach default risk premium on the interest they charge (mean = 4.29; std dev = 0.470); liquidity premium is factored in the interest charged by REITs (mean = 4.06; std dev = 0.659); and also that REITs include maturity premium on the interest rates of their products (mean = 4.24; std dev = 0.437). The findings concurred with the observations made in a study by Jessica (2001) that Inflation will affect interest rate levels. The higher the rate of inflation, the more interest rates are likely to rise. This occurs because lenders will demand higher interest rates as compensation for the decrease in the purchasing power of the money they will be repaid in the future.

### 4.2.6 Demographics and Financial Performance of REITs

The study also examined the position of managers regarding various issues revolving around demographics and performance of REITs. The relevant results are shown in Table 4.8.

**Table 4.8: Descriptive Statistics for Demographics**

|  | N | Min | Max | Mean | Std. Dev |
|---|---|---|---|---|---|
| Customers of REITs fall under different age categories | 34 | 4 | 5 | 4.65 | .493 |
| Education level of Kenyans affect REITs | 34 | 1 | 5 | 2.76 | 1.251 |
| Income levels of present and prospective clients of REITs affect the performance of the firms | 34 | 4 | 5 | 4.41 | .507 |
| Occupation of Kenyans influence performance of REITs | 34 | 2 | 5 | 3.59 | 1.121 |
| Size of households in Kenya influence performance of REITs | 34 | 2 | 5 | 4.29 | .772 |

The study found respondents strongly agreed that customers of real estate investment trusts fall under different age categories (mean = 4.65; std dev = 0.493). It was also agreed that

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income levels of present and prospective clients of REITs affect the performance of the firms (mean = 4.41; std dev = 0.507); occupation of Kenyans influence performance of REITS (mean = 3.59; std dev = 1.121); and that the size of households in Kenya influence performance of REITs (mean = 4.29; std dev = 0.772). It was, however, not clear (mean = 2.76; std dev = 1.251) whether or not education level of Kenyans affect REITs. The study findings were in agreement with the observations made by Mugwe, (2011) that major shifts in the demographics of a nation in terms of age, gender, education, occupation can have a large impact on real estate trends

### 4.2.7 Financial Performance of REITs

The study further examined the views of managers working with REITs regarding the performance of the aforestated firms. The pertinent descriptive findings are as shown in Table 4.9.

**Table 4.9: Descriptive Statistics for Financial Performance of REITs**

|  | N | Min | Max | Mean | Std. Dev |
|---|---|---|---|---|---|
| REITs have been recording increased dividend yields | 34 | 3 | 5 | 4.35 | .606 |
| Capitalization of REITs is relatively high compared to other firms | 34 | 1 | 2 | 1.53 | .514 |
| REITs have progressively enjoyed high equity turnover | 34 | 2 | 5 | 3.94 | .659 |
| Real estate indices in Kenya are quite high | 34 | 1 | 4 | 3.47 | .943 |
| REITs have been recording increased return on investments | 16 | 4 | 5 | 4.31 | .479 |

The study found that respondents were in agreement that real estate investment trusts have been recording increased dividend yields (mean = 4.35; std dev = 0.606). It was further concurred that REITs have progressively enjoyed high equity turnover (mean = 3.94; std dev

= 0.659); and also that REITs have been recording increased return on investments (mean = 4.31; std dev = 0.479). The study, however, indicated that there were highly varied opinion that real estate indices in Kenya are quite high (mean = 3.47; std dev = 0.943). Managers disputed that capitalization of REITs is relatively high compared to other firms (mean = 1.53; std dev = 0.514). The findings concur with observations made by Agaba et al, (2009) that adoption of REITs was necessitated by the idea of maximizing returns from real estate products.

## 4.3 Inferential Analysis

This section puts into perspective the inferential statistics stemming from both correlation and multiple regression analyses.

### 4.3.1 Correlation Analysis

Correlation analysis was purposed to determine the relationship between each of the investigated determinants and financial performance of real estate investment trusts. The results of the analysis are indicate in a Pearson's correlation matrix as shown in Table 4.10.

**Table 4.10: Correlation Matrix**

|  |  | 1 | 2 | 3 | 4 | 4 |
|---|---|---|---|---|---|---|
| **Government Policies** | Pearson Correlation | 1 |  |  |  |  |
|  | Sig. (2-tailed) |  |  |  |  |  |
|  | N | 34 |  |  |  |  |
| **Economy** | Pearson Correlation | .484$^*$ | 1 |  |  |  |
|  | Sig. (2-tailed) | .049 |  |  |  |  |
|  | N | 34 | 34 |  |  |  |
| **Interest Rates** | Pearson Correlation | .959$^{**}$ | .380 | 1 |  |  |
|  | Sig. (2-tailed) | .000 | .133 |  |  |  |
|  | N | 34 | 34 | 34 |  |  |
| **Demographics** | Pearson Correlation | .431 | .835$^{**}$ | .342 | 1 |  |
|  | Sig. (2-tailed) | .084 | .000 | .349 |  |  |
|  | N | 34 | 34 | 34 | 34 |  |
| **Financial Performance of REITs** | Pearson Correlation | .696$^{**}$ | .905$^{**}$ | .592$^*$ | .683$^{**}$ | 1 |
|  | Sig. (2-tailed) | .002 | .000 | .012 | .003 |  |
|  | N | 34 | 34 | 34 | 34 | 34 |

*. Correlation is significant at the 0.05 level (2-tailed).

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

From the results of the correlation analysis indicated in Table 4.10, the relationship between government policies and financial performance of REITs was found to be positive, strong and significant at 0.01 level of significance (r = 0.696; p < 0.01). This implied when government policies were enhanced, the greater the likelihood of improving financial performance of REITs. The foregoing results are in agreement with the findings by Omagwa and Auda (2012) that housing finance policy and practice influenced apartment property

developers. The relationship between economy and financial performance of REITs was revealed to be positive, strong and significant at 0.01 level of significance (r = 0.905; p < 0.01). The findings implied that improving the economic variables such as inflation and both monetary and fiscal policies was certainly going to enhance financial performance of REITS and the reverse was found to be true. Economic factors were underscored to be very important in as far as performance of REITs was concerned. This tallied with Muli's, (2012) findings that the growth in the gross domestic product, growth in inflation rate and unemployment significantly affect the growth in real estate in Kenya.

More so, the results established a positive, moderately strong and significant relationship between interest rates and financial performance of REITs at 0.05 level of significance (p = 0.592; p < 0.05). The results implied increasing interest rates on the investments of REITs was likely to improve the financial performance of these firms. The findings were contrary to observations made in a study by Davis (2008) that as interest rates rise, the cost to obtain a mortgage increases, thus lowering demand and prices of real estate. Furthermore, it was indicated that the relationship between demographics and financial performance of REITs was positive, strong and significant at 0.01 level of significance (p = 0.683; 0.01). The results meant that improving demographics was bound to enhance financial performance of REITs. The findings in this study offered responses to questions raised in a study by Thalmann, (2006), that is, how does demographic shift affect the demand for second homes/ and How would this affect the demand for larger homes if incomes are smaller and the children have all moved out? Moreover, it was noted that economic factors had the greatest implication on the financial performance of REITs while interest rates had the least implication on the same.

This meant that amongst the four determinants under study, economic variables were the ones that were supposed to be emphasized a lot.

## 4.3.2 Multiple Regression Analysis

This section shows the results of multiple regression analysis. In particular, the results of the general correlation between the determinants studied and performance of real estate investment trusts are outlined. The results of coefficient of determination ($r^2$) that shows the extent to which the predictor variables (government policies, economy, interest rates and demographics) explain financial performance of REITs are also shown (Table 4.11) and explained. Moreover, the results of analysis of variance (ANOVA) are shown in Table 4.12 and also explained. Furthermore, regression coefficients and variance inflated factors (VIF) are shown in Table 4.13 and explained.

**Table 4.11: Model Summary**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .965[a] | .931 | .908 | .16952 |

a. Predictors: (Constant), Government Policies, Economy, Interest Rates, Demographics

As shown in Table 4.12, the general correlation between determinant under study (government policies, economy, interest rates and demographics) and financial performance of REITs was found to be positive and strong (R = 0.965). The results illustrated in Table 4.13 show that the foregoing relationship was statistically significant (F = 40.633; $p < 0.05$). These results underscored the importance of the foregoing determinants in enhancing financial performance of REITs Moreover, as shown in Table 4.12, the results of the coefficient of determination ($r^2 = 0.931$) imply that 93.1% of the financial performance of

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REITs could be explained by the four determinants studied (government policies, economy, interest rates and demographics). The remaining 6.9% could be attributed to other factors that were not studied. This implied that factors investigation were very crucial in enhancing financial performance of REITs and as such, these firms are supposed to put a lot of emphasis on them.

**Table 4.12: Analysis of Variance**

| Model | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| 1 Regression | 4.671 | 4 | 1.168 | 40.633 | .000[a] |
| Residual | .345 | 12 | .029 | | |
| Total | 5.016 | 16 | | | |

a. Predictors: (Constant), Government Policies, Economy, Interest Rates, Demographics

b. Dependent Variable: Financial Performance of REITs

The results of regression coefficients and Collinearity statistic (VIF) are illustrated in Table 4.13.

**Table 4.13: Regression Coefficients and Collinearity Statistics**

| | Unstandardized Coefficients | | Standardized Coefficients | | | Collinearity Statistics | |
|---|---|---|---|---|---|---|---|
| Model | B | Std. Error | Beta | t | Sig. | Tolerance | VIF |
| 1 (Constant) | -.752 | .465 | | -1.619 | .131 | | |
| Government policies | .685 | .376 | .551 | 1.821 | .094 | .063 | 15.965 |
| Economy | .997 | .154 | .944 | 6.493 | .000 | .271 | 3.690 |
| Interest rates | -.230 | .327 | -.201 | -.703 | .496 | .070 | 14.274 |
| Demographics | -.345 | .173 | -.275 | -1.990 | .070 | .301 | 3.322 |

a. Dependent Variable: Financial Performance of REITs

The results shown in Table 4.13 follows the empirical model outlined hereunder.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

The results are interpreted as follows.

$$Y = -0.752 + 0.685 X_1 + 0.997 X_2 - 0.230 X_3 - 0.345 X_4$$

The above results implied that for every unit change in financial performance of REITs, there had to 0.685 unit, 0.997 unit, -0.230 unit and -0.345 unit changes in government policies, economy, interest rates and demographics respectively while holding other factors constant as reflected by -0.752.

The results of VIF shown in Table 4.13 show that there is relatively high degree of multicollinearity particularly for two predictor variables namely government policies (VIF = 15.965) and interest rates (VIF = 14.274). The two variables are highly inflated. This means that the two determinants were highly linearly correlated. These results are also corroborated by the findings indicated in Table 4.10 where the correlation between economy and interest rates was found to be (r = 0.959; p< 0.01). The two variables unlike the rest (government policies and demographics) were revealed to be prone to multicollinearity problems which implied that it was quite hard to determine with precision the influence of each of them on financial performance of REITs while holding the other variable constant. Given that both the government policies and interest rates returned very low tolerance levels (below 0.1), they were effectively removed from the model. The final model thus was as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

$$Y = -0.752 + 0.997 X_2 - 0.345 X_4$$

The results indicate that economic factors were the most important in determining financial performance of REITs. These results of regression coefficients corroborated the results of correlation analysis shown in Table 4.10.

# CHAPTER FIVE

## SUMMARY CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Introduction

This chapter covers the summary of major study findings, the conclusions drawn from those findings and also suggested recommendations. It further highlights areas for further empirical studies.

### 5.2 Summary

This section puts into perspective the major study findings in line with specific objectives of the study. The study adopted a census design where the investment managers working with the real estate investment trusts participated in the study.

### 5.2.1 Government Policies and Financial Performance of REITs

The study found that the government does not charge VAT on residential rental income by REITs but it puts restriction on investments of REITs. The government was also found to protect these firms against double taxation. According to the study, the corporate tax is scrapped from REITs and the government does not charge income tax on REITs. It was further noted that REITs get relief on VAT charged on professional services. The relationship between government policies and performance of REITs was found to be positive, strong and significant which implied when government policies were enhanced, the greater the likelihood of improving performance of REITs.

### 5.2.2 Economy and Financial Performance of REITs

The Kenyan economy was established to influence inflation rates and as such, production of REITs is affected by the prevailing economic conditions. The study also found that employment rates in REITs were subject to the country's economy and that disposable income of Kenyans influence performance of REITs. It was also revealed that the gross domestic product of Kenya is relatively high compared to neighboring countries and that REITs are attractive to potential investors. The study further found that the demand and supply of housing influence the performance of REITs in Kenya. Real income of Kenyans was however found to be high for some members of the citizenry and low for others. The relationship between economy and performance of REITs was revealed to be positive, strong and significant. This meant that improving the economic variables such as inflation and both monetary and fiscal policies was certainly going to enhance performance of REITs and the reverse was found to be true.

### 5.2.3 Interest Rates and Financial Performance of REITs

Interest rates charged by real estate investment trusts were found to be subject to expected inflation. In addition, the study revealed that real risk-free rate affected interest rates charged by REITs and also that REITs attached default risk premium on the interest they charged. Moreover, it was established that liquidity premium was factored in the interest charged by REITs and also that REITs included maturity premium on the interest rates of their products. The study established a positive, moderately strong and significant relationship between interest rates and performance of REITs. This implied increasing interest rates on the investments of REITs was likely to improve the performance of these entities.

### 5.2.4 Demographics and Financial Performance of REITs

It was found that customers of real estate investment trusts fell under different age categories and also that income levels of present and prospective clients of REITs affect the performance of the firms. The study further observed that occupation of Kenyans and the size of households influenced performance of REITs. However, the study failed to establish with clarity whether or not education level of Kenyans affected REITs. The study indicated that the relationship between demographics and performance of REITs was positive, strong and significant.

### 5.2.5 Financial Performance of REITs

The study found that real estate investment trusts had been recording increased dividend yields. It was further noted that, REITs had progressively enjoyed high equity turnover and also that REITs have been recording increased return on investments. The study, however, indicated that there were highly varied opinion that real estate indices in Kenya are quite high. It was, however, disputed that capitalization of REITs was relatively high compared to those of other firms. Moreover, it was noted that economic factors had the strongest relationship with performance of REITs while interest rates had the weakest relationship with the same. The general correlation between determinant under study (government policies, economy, interest rates and demographics) and performance of REITs was found to be positive and strong.

**5.3 Conclusions**

The study drew a number of conclusions subject to the study objectives. The study concluded that there are several tax waivers that REITs enjoy from the government. These include VAT on rental income, corporate tax, income tax and VAT charged on professional services. Essentially, the study deduced that REITs are protected against double taxation. It was also inferred that the government put restriction on investments of REITs. Therefore, the study concluded that the government policies put in place were favourable towards enhancing the performance of REITs.

The study concluded that inflation rates were subject to the prevailing economic factors such as both monetary and fiscal policies. The economy of the country was also concluded to influence employment rates. Moreover, the study inferred that disposable income of Kenyans influence REITs performance. The GDP of Kenya was concluded to be relatively higher than that of the neighbouring countries such as Uganda and Tanzania. The performance of the REITs was further deduced to be influenced by the demand and supply of housing. The economic factors were concluded to have a great influence on performance of REITs

It was inferred that interest rates charged by REITs are subject to expected inflation. More so, the study concluded that real risk-free rate affects interest rates charged by REITs. The study also concluded that REITs factor in default risk premium, liquidity premium and maturity premium when determining interest rates for their products. Among the four determinants under investigation, interest rates were found to have the list implication on the performance of REITs.

The study deduced that customers of REITs fall under different age groups. Indeed, it was concluded that income levels of both present and prospective clients influenced performance of these firms. This is due to the fact that income levels determined the disposable income part of which could be employed in acquiring assets from REITs. The occupation of Kenyans influences the disposable income to present and prospective customers of REITs and as such was concluded to impact on the performance of these firms. The size of the households in Kenya was also concluded to affect performance of REITs since some households are not only obliged to acquire home due to their disposable income but also due to the number of family members. Generally, demographics were inferred to be consequential to the performance of REITs.

## 5.4 Recommendations

The study made a number of recommendations in tandem with the conclusions drawn and also subject to the study objectives. The real estate investment trusts are advised to pass on to their customers the financial benefits they get from the tax waivers offered by the government. In other words, they should reduce the price of the products they sell to their customers since by so doing they would not be forfeiting any profits when compared to other real estate firms that do not enjoy tax waivers. Despite Kenya being a free market, the government should place a condition on the REITs to reduce the prices for their products since they enjoy tax waivers from the State.

The government agencies that are mandated with stabilizing the country's economy such as the central bank are advised to have in place sound monetary and fiscal policies that would resonate positively with other macroeconomic factors such as inflation and employment. The

foregoing would in turn positively influence performance of REITs since various costs are likely to go down. The REITs are recommended to lay down and implement strategies that can initiate demand for housing by, for instance, increasing supply of affordable housing in the country.

Real estate investment trusts are advised to ensure that their prices are not too exorbitant to attract customers as they factor in various factors when stipulating their interest rates. On one hand, they are recommended to ensure that they are protected against various risks by pegging their interest rates subject to default risk premium, liquidity premium and maturity premium; yet each premium ought to be reasonable enough not to drive away both present and prospective customers.

The study recommends that REITs should factor in the demographics of Kenyans when coming up with various housing products. This implies that they ought to understand that various age groups, family sizes, and also classes do have preferential tastes of housing. It is therefore important to conduct prior market research based on the foregoing criteria in order to address the issue of housing in Kenya objectively and profitably.

### 5.4.1 Suggestions for Further Research

The study makes suggestions for empirical studies to be carried out based on the following themes. A comparative study on the determinants of performance of real estate investment trust both listed and not listed on the bourse. Influence of tax waivers on the performance of REITs in Kenya. Relationship between economic factors and performance of REITs in

Kenya. Determinants of interest rates charged by REITs in Kenya. Demographic factors influencing performance of REITs in Kenya.

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## APPENDICES

## APPENDIX I

## INTRODUCTORY LETTER

**C/O Kenyatta University,**

**TO WHOM IT MAY CONCERN**

Dear Respondent,

**REF: MBA RESEARCH STUDY**

I am a student studying for a Masters degree in Business Administration at Kenyatta University. In partial fulfillment of the requirement to the award of the Masters degree, I am required to do and write a research paper. The topic of my research *"Determinants of financial performance of Real Estate Investment Trusts in Nairobi County, Kenya"*
The choice is based on our strategic importance of the REIT's due to dynamic consumer needs and business environment. You have been identified as one of the person that could be of assistance with this research and thus i kindly request your participation in the research. Your questionnaire will be treated anonymously and your responses will be treated with utmost confidentiality. The information you provide will be used only for academic purpose. A copy of the final report will be made available to you at your request. Your assistance will be highly appreciated.

**Thanks in advance.**

_____

**Mburu Peter Nyoro**
D53/OL/23448/2010
0722995592

**QUESTIONNAIRE**

This research questionnaire is integral to a study titled: ***Determinants of Financial Performance of Real Estate Investment Trusts in Nairobi County, Kenya***. You are kindly requested to give information regarding the aforesaid subject to the best of your knowledge. Utmost confidentiality of the data collected and identity of the respondents will be upheld. Kindly do not indicate your name on this questionnaire.

Tick where appropriate.

1. Kindly indicate your gender
Male                          [   ]

Female                        [   ]

2. Kindly state your age?

Below 25 years                [   ]

25-29 years                   [   ]

30-34 years                   [   ]

35-39 years                   [   ]

40 years and above            [   ]

3. What is your highest academic qualification?

Diploma                       [   ]

Undergraduate                 [   ]

Postgraduate                  [   ]

4. How long have you worked with REITs?

Less than 1 year              [   ]

1-3 years                     [   ]

4-5 years                     [   ]

Over 5 years                  [   ]

**Section II**

Kindly indicate your level of agreement with the following propositions regarding **government policies** in respect of REITs. Kindly use the scale 1 represents strongly disagree, 2 represents disagree, 3 represents neutral, 4 represents agree and 5 represents strongly agree.

Tick where appropriate.

| | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|
| 1.  The government gives tax credits to REITs. | | | | | |
| 2.  The government put restrictions on the investments of REITs. | | | | | |
| 3.  The government offers subsidies to REITs. | | | | | |
| 4.  REITs get protection against double taxation from the government. | | | | | |
| 5.  Corporate tax is scrapped from REITs. | | | | | |
| 6.  The government does not charge income tax on REITs. | | | | | |
| 7.  The government does not charge VAT on rental income by REITs. | | | | | |
| 8.  REITs get relief on VAT charged on professional services. | | | | | |

**Section III**

Kindly indicate your level of agreement with the following propositions regarding **economy** in respect of REITs. Kindly use the scale 1 represents strongly disagree, 2 represents disagree, 3 represents neutral, 4 represents agree and 5 represents strongly agree.

Tick where appropriate.

|  | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|
| 9. The Kenyan economy influences inflation rates. |  |  |  |  |  |
| 10. Production of REITS is affected by the prevailing economic conditions. |  |  |  |  |  |
| 11. Employment rates in REITs are subject to the country's economy. |  |  |  |  |  |
| 12. The disposable income of Kenyans influences REITs' performance. |  |  |  |  |  |
| 13. The real income of Kenyans is presently high. |  |  |  |  |  |
| 14. The country's GDP is relatively high compared to neighbouring countries. |  |  |  |  |  |
| 15. REITs are attractive to potential investors. |  |  |  |  |  |
| 16. The demand and supply of housing influence the performance of REITs in Kenya. |  |  |  |  |  |

**Section IV**

Kindly indicate your level of agreement with the following propositions regarding **interest rates** in respect of REITs. Kindly use the scale 1 represents strongly disagree, 2 represents disagree, 3 represents neutral, 4 represents agree and 5 represents strongly agree.

Tick where appropriate.

| | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|
| 17. Interest rates charged by REITs are subject to expected inflation. | | | | | |
| 18. Real risk-free rate affects interest rates charged by REITs. | | | | | |
| 19. REITs attaches default risk premium on the interest they charge. | | | | | |
| 20. Liquidity premium is factored in in the interest charged by REITs. | | | | | |
| 21. REITs include maturity premium on the interest rates of their products. | | | | | |

**Section V**

Kindly indicate your level of agreement with the following propositions regarding **demographics** in respect of REITs. Kindly use the scale 1 represents strongly disagree, 2 represents disagree, 3 represents neutral, 4 represents agree and 5 represents strongly agree. Tick where appropriate.

| | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|
| 22. Customers of REITs fall under different age categories. | | | | | |
| 23. Education level of Kenyans affect REITs. | | | | | |
| 24. Income levels of present and prospective clients of REITs affect the performance of these firms. | | | | | |
| 25. Occupations of Kenyans influence performance of REITs. | | | | | |
| 26. Size of households in Kenya influence performance of REITs. | | | | | |

**Section VI:**

Kindly indicate your level of agreement with the following propositions regarding **financial performance of REITs**. Kindly use the scale 1 represents strongly disagree, 2 represents disagree, 3 represents neutral, 4 represents agree and 5 represents strongly agree.

Tick where appropriate.

|  | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|
| 27. REITs have been recording increased dividend yields. |  |  |  |  |  |
| 28. Capitalization of REITs is relatively high compared to other firms. |  |  |  |  |  |
| 29. REITs have progressively enjoyed high equity turnover. |  |  |  |  |  |
| 30. Real estate indices in Kenya are quite high |  |  |  |  |  |
| 31. REITs have been recording increased return on investments. |  |  |  |  |  |