DETERMINANTS OF INVESTMENT BEHAVIOUR AMONGST GRADUATES IN REAL ESTATE IN NAIROBI COUNTY KENYA: A CASE OF UNITED STATES INTERNATIONAL UNIVERSITY-AFRICA

BY

NDUNGU JANE KASHU

UNITED STATES INTERNATIONAL UNIVERSITY-AFRICA

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NDUNGU JANE KASHU

A Research Project Report Submitted to the Chandaria School of Business in Partial Fulfillment of the Requirement for the Degree of Master’s in Business Administration (MBA)

UNITED STATES INTERNATIONAL UNIVERSITY-AFRICA

SUMMER 2019
STUDENT’S DECLARATION
I, the undersigned, declare that this is my original work and has not been submitted to any other college, institution or university other than the United States International University - Africa in Nairobi for academic credit.

Signed: ___________________________ Date: ___________________________
Ndungu Jane Kashu (ID NO: 656044)

This project has been presented for examination with my approval as the appointed supervisor.

Signed: ___________________________ Date: ___________________________
Mr Kepha Oyaro

Signed: ___________________________ Date: ___________________________
Dean, Chandaria School of Business
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ABSTRACT
This study sought to determine the factors that affect the graduates’ decision in investing in the real estate industry in Kenya with a focus on United States International University. The study aimed to examine in detail the effect of investor psychology on the decisions of graduates investing in the real estate industry in Kenya; the impact of investors’ attitude towards risk and the decision to invest in the real estate industry in Kenya; and the impact of information access on the decision of graduates’ investment in the real estate industry in Kenya.

The research design employed was descriptive survey method that aimed at establishing the factors that affect the graduate’s decision in investing in the real estate industry in Kenya with a focus on Nairobi - Kenya. The target population of the study was all the graduate students of United States International University - Africa (USIU-A) who were 935. The research employed a simple random sampling to select the study respondents. For this study, the researcher used 20% of the total population bringing the number to 187. Primary data was collected using semi-structured questionnaires. The questionnaire was tested by pre-administering to three teaching staff and the research office. The procedure of data analysis involved several stages: the completed questionnaires were edited for completeness and consistency, checked for errors and omissions and then coded to the Statistical Package for the Social Sciences (SPSS) tool, version 16 for qualitative and quantitative analysis. Data was analyzed using descriptive analysis such as mean scores, standard deviations and frequencies distributions and percentages. Correlation analysis was used in the study to identify the relationships between the study variables.

The study showed that investors logically weigh the respective costs of investment and investment benefits before making a decision and that although the real estate market in Kenya is illiquid, people still believe that the market is efficient. Real estate investment provides people with an investment decision as well as a consumption decision and that investors carry out a strong analysis before investing. It can be seen that, real estate information is hard to find and is not readily accessible to investors leading to the deterrence of most would be investors. Other factors like sentimental value affect the decision to invest in real estates and that real estate investors are overconfident in their investment.
From the study findings, individuals are usually risk-averse in terms of investment decisions and their attitude towards risk is normally independent of their financial circumstances. This leads to them focusing on potential losses rather than gains while evaluating a potential investment as well as focus on the aggregate outcome of the occasion, situation, or asset class. Political risk is another detraeting factor for investors, and this has become an influencing factor in the country since the sources of political risk are increasing. People also shy away from real estate investment due to unfamiliarity with the market structures as well as the different cultural and legal structures.

In Kenya, it has been shown that real estate investors make use of small pieces of information that they come across to invest and their price expectations in the market are created by rational expectations and changes are entirely random and unpredictable. To obtain the information, investors have to incur costs which leads to their decision to hoard the information. The findings showed that the commercial real estate market is a well-functioning market but it is much less informationally efficient and new investors entering the real estate market segment face higher capital constraints, thereby forcing them to borrow more money and increase their leverage ratio for investment.

The study recommends property managers to create implementation rating procedures. This would provide the potential investors with searching tools that provide an objective and standardized assessment of investment risk. The rating procedure would be an essential element of investment decision-making process which would help investors to determine the development of the capital market, including the real estate investment market. In the investment property market, not only would rating provide transparency of property risk, but it would also be used for real estate portfolio analysis, investment controlling, and the analysis of factors determining investment decisions by the graduates in the country.
ACKNOWLEDGEMENT

Firstly, I would like to express my sincere gratitude to my advisor and supervisor Mr Kepha Oyaro for the continuous support of my Masters Study and related research, for his patience, motivation, and immense knowledge. His guidance helped me in all the time of research and writing of this research project. I could not have imagined having a better advisor and mentor for my research project. I thank my fellow students for the stimulating discussions, for the sleepless nights we were working together before deadlines, and for all the fun we have had in the last one year. Also, I thank my friends for their continued support and encouraging words and advice during the research project. Last but not the least, I would like to thank my family: my husband and my children for supporting me spiritually throughout writing this research project and my life in general.
DEDICATION

I dedicate this project to my husband Paul Ngugi, My twins Abby and Debby, and my son Mark, my lovely mum Monica Wambui for their encouragement towards the completion of the MBA program.
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<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ADRs:</td>
<td>American Depositary Receipt</td>
</tr>
<tr>
<td>EMH:</td>
<td>Efficient Market Hypothesis</td>
</tr>
<tr>
<td>EMOD:</td>
<td>Executive Master of Science in Organizational Development</td>
</tr>
<tr>
<td>GEMBA:</td>
<td>Executive Master of Business Administration</td>
</tr>
<tr>
<td>IMF:</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>KREIS:</td>
<td>Korean Real Estate Information Service</td>
</tr>
<tr>
<td>LR:</td>
<td>Leverage Ratio</td>
</tr>
<tr>
<td>MBA:</td>
<td>Master of Business Administration</td>
</tr>
<tr>
<td>MPT:</td>
<td>Modern Portfolio Theory</td>
</tr>
<tr>
<td>REITs:</td>
<td>Estate Investment Trusts</td>
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<tr>
<td>ROE:</td>
<td>Return on Equity</td>
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<tr>
<td>SPSS:</td>
<td>Statistical Package for the Social Sciences</td>
</tr>
<tr>
<td>UK:</td>
<td>Kingdom</td>
</tr>
<tr>
<td>UM:</td>
<td>Utility Maximization</td>
</tr>
<tr>
<td>US:</td>
<td>United States</td>
</tr>
<tr>
<td>USIU-A:</td>
<td>United States International University – Africa</td>
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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Study

According to Iyer and Bhaskar (2012), investment is defined as the purchase of goods that are not consumed today but are used in the future to create wealth. In finance, it can be defined as a monetary asset purchased with the idea that the asset will provide income in the future or appreciate and be sold at a higher price. Investment decisions are made by investors and investment managers with an aim of making profits for themselves or their companies. Investors commonly perform investment analysis by making use of fundamental analysis, technical analysis and judgment. Investment decisions are often supported by decision tools. Clark-Murphy and Soutar (2013) state that, it is assumed that information structure and the factors in the market systematically influence individuals’ investment decisions as well as market outcomes.

Iyer and Bhaskar (2012) note that investor market behavior derives from psychological principles of decision making to explain why people buy or sell stocks. These factors will focus upon how investors interpret and act on information to make investment decisions. Individual investments behavior is concerned with choices about where and how to invest (Nofsinger & Richard, 2012). No matter how much an investor is well informed, has done research, studied deeply about the industry before investing, (s)he also behaves irrationally with the fear of loss in the future. This different behavior in the individual investors is caused by various factors which compromise the investor rationality.

It is generally believed that investment decisions are a function of several factors such as market characteristics and individual risk profiles, in addition to accounting information (Murphy & Soutar, 2013). The disposition error shows that regardless of accounting information, investors are influenced by sunk cost considerations and asymmetrical risk preferences for gain/loss situations (Iyer & Bhaskar, 2012). The research findings by Nagy and Obenberger, (1994) which examined factors influencing investor behavior, suggested that classical wealth – maximization criteria are important to investors, even though investors employ diverse criteria when choosing investment options. This has led to the study of human behavior and their investment decision (Fogel & Berry, 2010; Statman, Fisher & Anginer, 2008; Shiller, 2007; Ritter, 2013).
According to Fogel and Berry (2010), there are two different approaches for understanding the human behavior in their investment decision - Traditional finance and Behavior finance. Traditional finance assumes that markets are efficient, and investors are rational and consider all available information in the decision-making process, that they will favor investment that maximize their wealth. As such, “prices are right” reflecting all available information and there is no “free lunch”: no investment strategy can earn excess risk-free rate of return greater than that warranted by its risk. Hence, investment markets are efficient and security prices reflect the true “intrinsic values” of the assets. That investors act promptly to new information and update prices correctly within a normatively acceptable process.

Behavior finance which is based on psychological factors contends with market efficiency and investors rationality. Behavioral Finance is a relatively new area of research, that involves the study of how human psychology, our thoughts, feelings and attitudes (such as confidence) influence financial decisions (Statman, Fisher & Anginer, 2008). According to Shiller (2007), behavior finance is the study of the influence of psychology on the behavior of financial practitioners and the subsequent effect on market. There are two set of psychological factors-Cognitive and emotional. Behavior finance is based on the cognitive psychology and the limit to arbitrage (when market will be inefficient). Rather than using all the available information, people select some important information. Psychological factors influence investment decision so that investors have been found to make irrational decisions (Ritter, 2013).

To understand decision-making of investors, one can use Tobin q’s investment theory that was formulated based on financial markets. Tobin argued that firms’ investment level should depend on the ratio of the present value of installed capital to the replacement cost of capital. This ratio is Tobin’s q (Baddeley, 2003). According to Eklund (2010), the q theory of investment argues that firms will want to increase their capital when q is greater than 1 and decrease their capital stock when q is less than 1. If q is greater than 1, a firm can buy one dollar’s worth of capital and earn profits that have present value in excess of one dollar. Under those conditions, firms increase profits by investing in more capital, so one expects investment to be high. If q is less than 1, then the present value of the profits earned by installing new capital are less than the cost of the capital, so more investment lowers profit. One expects investment to be near zero if q is less than 1. Eklund, Desai
and Högberg (2011) further note that, when $q$ is less than 1, someone seeking to enter a particular industry can acquire the necessary capital assets more cheaply by buying an existing firm than by building a new one with new capital. This is true because the value of installed capital (that is, the cost of buying an existing firm) is less than the replacement cost (the cost of building a new firm).

Another view of human investment is the separation theorem proposed by Irvin Fisher. According to the separation theorem, investment and financing decisions can be separated if there is an opportunity to borrow and lend money (McLane, 2003). Investment decisions and financing decisions should thus be made independently of one another. According to Tirole (2006) the separation theorem has three important implications: first, the firm should invest in projects that make it wealthier; second, the personal investment preferences of individual “owners” are irrelevant in making corporate investment decisions, because individual “owners” can maximize their personal preferences for themselves; and third, the financing method does not affect the “owners”’ wealth. Gilson (2006) further states that, separation theorem is complemented by the unanimity proposition according to which firms need not worry about making decisions which reconcile conflicting shareholder interests, because all shareholders are thought to share the same interests and should therefore support the same decisions. This study will focus on the determinants of investment decisions by graduates in the real estate industry.

According to Murphy and Soutar (2013), investment in real estate is very common for the investors within the Australian economy. They state that investment in the country had risen by 7% between 2007 and 2012. People invest in the property market for different reasons, according to Statman, Fisher and Anginer (2008), some of the investors invest in the property for commercial purpose, some for resale, and some for investment purpose among many other reasons. They also state that, when they invest in the property market, they do not know that certain factors affect their investment decision. Jorden and Miller (2008) note that many people make investment emotionally, feeling fantasy, mood and sentiments have been observed to affect investment decision, and state that, these are some psychological factors that affect the investors in investment decision. From the above discussion, it is clear that investors are affected by how investment problems are presented to them. They often make different choices pertaining similar scenarios depending on how the problem has been framed.
Real estate is property consisting of land and the building on it along with its natural resources such as crops minerals or water immovable property of its nature an interest vested thus an item of real property building or housing in general. Real estate investing involves the purchase, ownership, management, rental land or sale of real estate for profit (Abraham, 2009). Kenyan real estate property covers all property categories including single and multi-family residential dwellings, commercial and agricultural land, office space, go-dawns and warehouses, retail outlets and shopping complexes (Masika, 2010). Real estate is an asset form with limited liquidity relative to other investment, it is also capital intensive (although capital may be gained through mortgage leverage) and is highly cash flow dependent. If the factors affecting the growth in the investment are not well understood and managed by an investor, real estate becomes a risky investment (Geoffrey, 2011).

Real estate investment plays crucial role in providing employment opportunities, offering shelter to households, enhancing income distribution and alleviating poverty. In the recent past, Kenya has witnessed an upsurge in real estate investment. This has been driven by a number of factors notably the quest for Kenyans to own homes, rural urban migration, increased diaspora remittances among others (Geoffrey, 2011). As a result, property prices in the urban areas have taken an upward trend. The expansion of Mombasa road and the construction of Thika Superhighway have also contributed to the rise of property prices in the adjacent areas. However, the real estate industry in Kenya has failed to fulfil this fundamental role due to a number of unique factors that affect investment in the sector (Abraham, 2009).

The primary cause of investment failure for real estate in Kenya 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 (Masika, 2010). Flipping is another reason for failure as the nature of the investment is often associated with short term profit with less effort. Real estate market in the country is not as organized or efficient as the market for other more liquid investment instruments. According to Abraham (2009), the individual’s properties are unique to themselves and not directly interchangeable, which presents a major challenge to an investor seeking to evaluate prices and investment opportunities in Kenya. For this reason, locating properties in which to invest can involve substantial work and competition among investors and to purchase individual properties
may be highly variable depending on knowledge of availability. Information asymmetries are commonplace in real estate markets. Geoffrey (2011) information asymmetries increases transaction risks, but also provide many opportunities for investors to obtain properties at bargain prices. Real estate investors typically use a variety of appraisal techniques to determine the value of properties prior to purchase. The opportunities and challenges that face real estate investment in Kenya pose a gap for the study to examine the determinants of real estate investment in the country.

1.2 Statement of the Problem
According to Thaler (2005), anyone with an investment portfolio, for example, would be well advised to check its value as rarely as possible. He further states that loss aversion is a very human thing, with countless studies confirming that people are more motivated by avoiding losses than by acquiring gains. Accordingly, people who check their portfolio frequently are more likely to experience the pain of losses. Gallimore and Gray (2012) in their study showed that the effect of loss aversion on the investors in their investment decision of housing real estate market. According to them, property transaction prices are determined by seller characteristics in addition to units’ attributes, which makes the property market far from being a perfect asset market. Thaler (2005) notes that, loss aversion can overlap with other behavioral eccentricities such as the endowment effect, the tendency for investors to value things much more when they own them compared with before they owned them.

Chandra (2008) explored the impact of behavioral factors and investor’s psychology on their decision-making, and to examine the relationship between investors’ attitude towards risk and behavioral decision-making. Through this research, the author finds that the investment decision-making is influenced, largely, by behavioral factors like greed and fear, Cognitive Dissonance, heuristics, Mental Accounting, and Anchoring. Skinner (2004) in his study found that there is a difference between behavior patterns of investors. His study was based on the influence of certain identified behavioral finance concepts (or biases), on the decision making process of individual investors in the Indian Stock Market and categorized the investors in to groups of young and experienced. He found that, Gamblers’ Fallacy, Anchoring and Hindsight biases were affecting the young investors significantly more than experienced investors.
The plethora of results that resulted from the various researchers conducted by various scholars indicate that there are a lot of factors that lead to investment decision. In the same respect, there are scarce studies on real estate investment in Kenya and no study has been conducted on the determinants that affect the graduates’ decision in real estate investment in industry in Nairobi, Kenya. This study will be driven to fill this gap.

1.3 General Objective
The general objective of the study was to determine the factors that affect the graduates’ decision in investing in the real estate industry in Kenya with a focus on United States International University.

1.4 Specific Objectives
The study was guided by the following specific objectives;

1.4.1 To examine that the effect of investor psychology on the decisions of graduates investing in the real estate industry in Kenya.

1.4.2 To determine the effect of investors’ attitude towards risk and the decision to invest in the real estate industry in Kenya.

1.4.3 To examine the effects of information access on the decision of graduates’ investment in the real estate industry in Kenya.

1.5 Significance of the Study
1.5.1 Potential Investors
This study may enable potential investors to critically analyze the various opportunities and challenges that exist in the real estate industry and arm them with information that may be crucial in their investment decision.

1.5.2 Regulators
This study may aid the various government and industry regulators with information that may facilitate their ability in making sound policies and guidance in the industry to facilitate more investments from the USIU graduates.

1.5.3 Academicians
This study may enable future academicians to better understand the factors that influence investors in deciding to invest in real estates. This has further created an avenue for further research in the subject area.
1.6 Scope of the Study
The study focused on the factors that affect the graduate’s decision in investing in the real estate industry in Kenya with a focus on Nairobi - Kenya. The study was based on Kenyan graduates in Nairobi – Kenya. The study was carried out between the months of March 2019 to April 2019.

1.7 Definition of Terms
1.7.1 Investment
This is defined as the purchase of goods that are not consumed today but are used in the future to create wealth. In finance, it can be defined as a monetary asset purchased with the idea that the asset will provide income in the future or appreciate and be sold at a higher price (Iyer & Bhaskar, 2012).

1.7.2 Investment Decisions
This is defined as the determination of where, when, how, and how much capital to spend and/or debt to acquire in the pursuit of making a profit and it is often reached between an investor and his/her investment advisors (Graham & Harvey, 2009).

1.7.3 Behavioral Finance
This is defined as a rapidly growing area that deals with the influence of psychology on the behavior of financial practitioners (Shefrin, 2010).

1.7.4 Individual Investments
This is behavior that is concerned with choices about where and how to invest (Nofsinger & Richard, 2012).

1.7.5 Real Estate
Real estate is property consisting of land and the building on it along with its natural resources such as crops minerals or water immovable property of its nature an interest vested thus an item of real property building or housing in general (Abraham, 2009).
1.7.6 Real Estate Investment
Real estate investment involves the purchase, ownership, management, rental land or sale of real estate for profit (Abraham, 2009).

1.8 Chapter Summary
Chapter one has reviewed the background information of the study in relation to response strategies, the statement of problem which identifies the gap the study seeks to fill, general objective, specific objective which are the reasons why the study was conducted, significance of the study to various stakeholders, scope of the study and the definition of important terms used in the study. The second chapter reviews the literature available effect of investor psychology on the decisions of graduates investing in the real estate industry in Kenya, the impact of investors’ attitude towards risk and the decision to invest in the real estate industry, and the impact of information access on the decision of graduates’ investment in the real estate. Chapter three examined the details of the research methodology that was used in conducting the study; chapter four focuses on the results and findings on the three research questions of the data collected; and finally, chapter five tackles the summary of findings, conclusion and recommendations of the study.
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

The chapter gives an overview of literature review on the factors that affect the graduate’s decision in investing in the real estate industry in Kenya. This chapter elaborates factors that underlie the study guided by the objectives that were: to examine that the effect of investor psychology on the decisions of graduates investing in the real estate industry in Kenya; to determine the impact of investors’ attitude towards risk and the decision to invest in the real estate industry in Kenya; and to examine the impact of information access on the decision of graduates’ investment in the real estate industry in Kenya and lastly it presents the chapter summary.

2.2 Effects of Investor Psychology on Real Estate Investment

Neoclassical economics is a theory that focuses on how the perception of efficacy or usefulness of products affects market forces: supply and demand (Fonseca, 2012). It suggests that because the consumer’s goal is utility maximization, or customer satisfaction, and that the organization’s goal is profit maximization, the customer is ultimately in control of market forces such as price and demand (Weintraub, 2017). Fonseca (2012), the basic assumptions of the neoclassical theory are: decisions on economic issues are always made rationally, based on full information on the usefulness of the product or service; consumers compare goods and then make the purchase decision based on the perceived utility; the customer’s main objective is to capitalize on the satisfaction afforded by the use of the product; the main aim of companies is to maximize profits; and that, market equilibrium is achieved only when both the customer and the company achieve their respective goals.

Traditional financial theory is based on the notion that investors act rationally, correctly considering all currently available information in the decision-making process (Kishore, 2016). Such ‘decision makers’ are characterized as logically weighing up the respective costs and benefits before acting. This is in line with the concept of utility maximization (UM). UM is a theory derived from a rational decision-making assumption. In finance, UM at the individual level leads to the Efficient Market Hypothesis (EMH), as introduced by Fama (1970). EMH states that efficient markets reflect all available information. Applied to real estate, this line of thinking implies that future house prices are
unpredictable based on currently available information; there is no such thing as a free lunch.

Although it is commonly known that real estate markets are rather illiquid, the majority of academics assume that these markets are efficient; it is assumed that participants act in accordance with rationality. Farlow (2014), for example, argues that the fundamental determinants of house prices in this efficient market are income, interest rates, housing stock, demographic changes, credit availability, and the tax structure. Housing provides different functions. Shiller (2018) stresses that purchasing a house is both an investment decision and a consumption decision. This diversity makes housing investment hard to compare to other financial investment assets that do not provide direct consumption (Benjamin, Chinloy & Jud, 2014). This section considers the corporate investors perspective. The key issue is always the value of a house and how it is determined. This determination includes rational as well as irrational behavior, implying that it deviates from an optimal strategy in pursuit of trying to determine a true valuation. Special attention is offered to irrational behavior in property investment (Gallimore & Gray, 2012).

Investment decisions in real estate are traditionally assumed to be a rational process. The process concentrates on sets of rules that decision makers should follow (Gallimore, Hansz & Gray, 2010). This normative process can be divided into different stages. Jaffe and Sirmans (1995) propose a model to structure property investment decisions. This model consists of five stages including an analysis of the initial environment, setting goals, an analysis on market conditions, and a combination of tactical and financial decisions. In general, it can be stated that the prescriptive literature on real estate investment about valuation, returns and diversification is widely available and well integrated (Brown & Matysiak, 2010). In contrast, Gallimore et al. (2010) state that literature on investment decision making is sparse, loosely integrated and focused principally upon large, institutional investors. Several studies show that behavior deviates from the prescribed normative process, predominantly, because normative process require a lot of information and information processing. Gallimore et al. (2010) study investment decisions in small property companies. They focus on how investment strategies are formulated and what determines the final decisions to buy or sell. They hypothesized that corporate decision-making exhibits, as does individual decision making, heuristics and
biases. Bokhari and Geltner (2011) even document that certain biases are stronger the more sophisticated or experienced the commercial investor is.

Information that is passed through market contacts is heavily weighted, potentially leading to behavior that is biased by availability and overreaction. After all, observed behavior highly differs from normative models (Gallimore et al., 2010). Moreover, Gallimore and Gray (2012) show that investment decision makers in the United Kingdom (UK) are influenced by their sentiment, despite its neglect to explain property market functioning. Just like in wider financial markets, this leads to suboptimal decisions. Usage of sentiment can be partly explained by the lack of qualitative or quantitative data that is required to make judgments according to prescribed models. The result is that it is not only hard market information that is used: decision makers are to a large degree influenced by personal feelings and the views of others.

2.2.1 Availability

Adair, Berry and McGreal (2004) describe the existence of an availability bias. They show that more often than not investors invest in projects where information is readily available. Market imperfections concerning the availability of information can make investors deviate from the normative process. Availability can also result in the representativeness bias: Investors typically mistake the most recent price changes as representative for the full distribution of returns. Mei and Sanders (2007) illustrate the trend chasing behavior of commercial banks investments in real estate. Furthermore, Ling (2009) lays bare similar patterns for professional forecasters of the commercial real estate market. A study based on a semi-rational model shows that investors in property are often overconfident when the developer’s private information is confirmed (Wang et al., 2010). One implication is the appearance of permanent overbuilding and cycles in Asian real estate markets. A possible source of biased risk and return estimates is offered by Lin and Vandell (2007), who argue that real estate is a heterogeneous commodity that is traded in decentralized markets with costly searches.

According to Wang et al. (2010), uncertainty about the time to sale and the marketing period make real estate illiquid. These aspects provide sources of bias. Ultimately, estimated returns must be biased upward and risks downward. This provides a solution
for the risk-premium puzzle in real estate, which means that ex-post returns appear too high for the low volatility.

**2.2.2 Smoothing and Lagging**

Biased behavior is not only observed when making investment decisions, but also when evaluating investment projects. According to Fuerst and Matysiak (2009) country, sector allocation, style, gearing, and fund size combinations impact the performance of real estate investment funds. The overall performance is often analyzed based on indices. Barkham and Geltner (2004) study these property indices and find that they are prone to smoothing and lagging. This is a result of the fact that property indices are based on valuations, which are lagged thereby understating the true volatility of property returns. The authors suggest that the smoothing of property indices can be great enough to bias investment policy and decision-making. Geltner *et al.* (2003) also showed that market tracking, and therefore, performance measurement is smoothed. There is no optimal use of past and current information because of a lack of trades or confidentiality. Brown and Matysiak (2010) suggest that these high frequency indices reflect a general trend rather than a market trend. One implication is that the risk cannot be managed optimally.

**2.2.3 Misaligned Incentives**

Shiller and Weiss (2010) find that misaligned incentives bias investment returns. They focus on how home equity conversion leads to moral hazard and lower investment returns. They found that homeowners have incentives to stop caring about the maintenance of the house as soon as they know that investors are aware of the risk of poor market performance. To conclude, it can be stated that both decision making as well as performance measurement in corporate real estate investment are shown to be biased; or, as Glaeser (2013) puts it, buyers do not appear to be irrational but rather cognitively limited investors who work with simple heuristic models, instead of a comprehensive general equilibrium framework.

Dieci and Westerhoff (2012) stress that the use of heuristics can be associated with bubbles. They find that the presence of speculation among real estate agents has the potential to generate bubbles and crashes. The key feature of the model is that heuristic based speculative forces determine housing demand. Some agents believe that prices converge to their fundamental value, while others are convinced that the bull or bear
market persists. Market circumstances determine the relative importance of the two competing heuristics. This nonlinear model based on speculation helps to explain observed inefficiencies in the housing market. Kouwenberg and Zwinkels (2011) provide empirical support for the model of Dieci and Westerhoff (2012) by estimating it on the United States (US) residential real estate market. Brown and Matysiak (2010) state that testable models are needed to isolate behavioral issues. Furthermore, property derivatives are needed to make the market more liquid. These derivatives should not be based on the smoothed indices. The next section describes the cognitive limitation that households experience when investing in housing.

2.3 Effect of Investors’ Attitude on Real Estate Investment

A longstanding tenet of theories of decision making, dating back to the work of Bernoulli (1738/1954), is that people are risk-averse, at least for decisions with outcomes in the domain of gains and with mixed outcomes that include both gains and losses. The research literature on behavioral decision making suggests several potential reasons for this observed risk aversion (Cordell, 2011). These potential factors affecting the degree of observed risk aversion include the following. First, as observed by Bernoulli, people seem to exhibit decreasing marginal utility for money in the domain of gains. In other words, a gain of $10 is less important to a rich person than to a poor one. Second, people show loss aversion, meaning that a given financial loss has a greater impact than the corresponding amount of gain (Higgins, 2012). Both these general tendencies, well documented in the research literature, can lead to risk aversion in financial decision making. People are generally risk-averse, it is also clear that individuals vary considerably in the degree of financial risk that they are willing to incur. In Bernoulli’s early version of expected utility theory, these differences in risk propensity are ascribed to differences in the wealth of investors, with wealthier investors being willing to incur more risk (Cordell, 2011).

More recently, it has been assumed that people have varying risk attitudes that exist independently of their financial circumstances, and that these attitudes affect investment behavior. Various explanations have been advanced for these individual differences in risk attitude. For example, it has been proposed that the trait of risk seeking in the investment domain may be related to a general personality trait, specifically a generalized disposition to tolerate anxiety or seek excitement (Zuckerman, 2011).
According to Higgins (2012), people may vary in their tendency to focus on potential losses rather than gains, a tendency that labeled a “prevention focus” as opposed to a “promotion focus”. This focus may vary across individuals (for instance, be a trait), but may also vary for an individual across time or situations (for instance, be a dispositional state). Another situational factor or mental disposition that can affect risk aversion is the tendency to aggregate outcomes over occasions, situations, asset classes, and etcetera. Whatever their cause, it is important to be able to assess individual differences in risk attitudes, if financial advisors and financial institutions are to properly serve individual investors. It is more and more widely accepted that individuals’ risk attitudes predict their comfort level with different investment strategies, and perhaps their level of unhappiness with unfavorable investment outcomes. Yook and Everett (2013) argue, modern portfolio theory holds that optimal asset allocation in an investment portfolio must take into account the tradeoff between expected return and risk, and accepts that individual investors have risk preferences that affect this optimization (Hallahan, Faff, & McKenzie, 2004).

2.3.1 Investment Risk

Real estate investment in emerging markets is riskier than investment in developed markets it could be argued that this alone will deter investors. Indeed Lim (2010) finds that UK investors are much more risk averse than their Asian counterparts. Consequently, the greater perceived risk of investing in the countries of Southeast Asia would seem to be the main reason for avoiding the area. Modern portfolio theory (MPT) states that investors should focus on the expected return and risk of their portfolio as a whole rather than on the return and risk of each asset in isolation (Madura, 2012). In other words, individual risks are not of consequence because they can be diversified away at the portfolio level. Indeed, although the issue of real estate diversification has received limited attention in the academic literature (Eichholtz et al., 2010) even though the globalization of financial markets has a particular significance for property investment.

In order to investigate the risk/return performance from investing in capital regions in comparison with other markets. The appreciation figures, however, are not based on appraisals, but upon changes in capitalized asking rents. The use of asking rents may make it difficult to identify sharp declines in commercial real estate markets, since effective rents typically lead asking rents in declining markets. Thus caution is needed to
interpret the results of such an analysis, as the result of such studies can be misleading (Engle & Susmel, 2013).

2.3.2 Political Risk

Political risk is often defined as the risk of adverse consequences arising from unexpected political events (Diamonte, Liew & Stevens, 2010). This definition is useful because it is the unexpected nature of the event that increases uncertainty and so investment risk. Consequently, events that are either expected or easy to anticipate do not constitute political risk. In addition, it is the adverse consequences of political risk that detract from investment returns, and hence most concern investors (Brewer, 2009). Political risk arises when a sovereign host government unexpectedly change the “rules of the game” under which businesses operate through intervention in the economy. Such intervention may take many forms, including explicit barriers to capital flows, taxes, exchange controls and outright expropriation (Diamonte, Liew & Stevens, 2010). In addition such interventions are precipitated by exogenous shocks to the economy, such as changes in world demand and trade, and endogenous behavior in response to internal forces, such as coupe or changes in the ruling party (Brewer, 2009).

However, the political sources of risk can also decrease the risk to investing. As exemplified recently in the cases of Korea, Indonesia, and Thailand, where previously closed markets have had to agree to reforms within their markets and relaxation of restrictions and taxes applied to investors as part of the conditions attached the loans from the International Monetary Fund (IMF) (Eichholtz et al., 2010). Loans needed by such countries to help them weather their currency, real estate and stock market crises. Thus, the political consequences of the crises have lead in the case of Korea to the removal of all restrictions on acquisition of land and property. Promoting the government to establish the Korean Real Estate Information Service (KREIS), to provide property market information thus increasing the transparency of the market. While the Korean Asset Management Company has acquired non-performing loans and packaging them to foreign and local investors alike. Thus, creating a level playing field for local and foreign real estate investors (Greenwood, 2011).
Furthermore, although political risk is typically associated with the developing world, all investments, whether in developed or developing countries, face some political risk (Brewer, 2009). Examples in developed countries include the imposition of tax on conversion of British shares to American Depositary Receipts (ADRs) and exchange controls in France. Also, the increased political instability, normally associated with less developed countries, need not translate into political risk. Indeed, although the consequences of instability are usually adverse, such risks also can provide a number of profitable opportunities (ibid).

2.3.3 Institutional Risk

From surveys of investors it appears that the most important factor deterring real estate investment is unfamiliarity with foreign market structures and conventions and other formal regulatory barriers. For example, Worzala (2004) found that 81% of the European institutional investors surveyed saw lack of local market expertise as the major problem affecting real estate investing. A result confirmed by the surveys of the Investment Property Forum (reported in Brewer, 2009) and Eichholtz et al. (2010) both of whom find the lack of local expertise and information the greatest difficulty to investment. Other factors sighted including different cultural and legal structures and difficulties in identifying and managing real estates, all of which are closely allied to this perceived lack of market knowledge (Worzala, Johnson & Lizieri, 2010). Thus lack of market knowledge adds an additional risk into the investment decision-making that investors would wish to avoid. In other words the greatest barrier to investment in the real estate sector is institutional complexity and the variation in market conduct.

In addition considerable differences exist in the characteristics of market participants, for instance developers, investors and real estate service providers across markets. This has had significant implications for the characteristics, quality and comparability of the market information generated (Lim, 2010). In addition differences in the obligations of occupation and transactions costs such as lease lengths, their statutory provisions, real estate transfer taxes, brokers’ fees and non-rent occupancy costs provide another tangible example of differences across and between markets (Worzala et al., 2010). In particular a diversity of types of real estate investment market exist, ranging from very sophisticated markets to simpler markets. These differences reflect amongst other things the stage of development of other asset markets in the country in question, the structure of investing
institutions and cultural factors like the prevailing attitude to real estate as an investment (D’Arcy & Keogh, 2011).

Guerts and Jaffe (2010) investment markets are not well developed, then the information base necessary for real estate investment decision making in a particular market may be absent. The “institutional risk” should be a prime area of concern when contemplating investing into real estate markets, especially into emerging markets where cultural a legal difference will be even more pronounced. Differences that D’Arcy and Keogh (2011) and Guerts and Jaffe (2010) suggest are likely to lead to differing levels of performance. All of which suggests that unless a new comer is fully aware of the institutional structures, both formal and informal, between markets and even for segments within the industry such investors are likely to be at a major disadvantage compared with experienced players when they wish to enter the market.

2.4 Effects of Information Access on Real Estate Investment

The efficient market hypothesis states that it is impossible to consistently outperform the market, that is, buy an asset at a bargain price, as market prices already incorporate and reflect all available information. The reason for this is that investors use small pieces of information that they come across, rapidly making it available to other investors, thereby eliminating any possible profit opportunity (Maier, 2009). In an efficient market, prices fully reflect all available information and the market adjusts rapidly to the arrival of any new piece of information. Investors’ price expectations are therefore created by rational expectations and price changes are entirely random and unpredictable (Geltner, 2007). In order for a market to be completely efficient there cannot be any costs associated with obtaining information or carrying through transactions (Gatzlaff, 1995).

The commercial real estate market is a well-functioning market but it is much less informationally efficient than the financial market, particularly the stock market and the foreign exchange market (Geltner, 2007). Informational inefficiency means that prices adjust very slowly to the arrival of new information than they would in an otherwise efficient market. On top of this, the unique characteristics of the real estate market make it challenging to model expected equilibrium prices (Maier, 2009). Some of the characteristics that makes the real estate market an inefficient market is inadequate and costly information, transaction costs, indivisible assets, limited liquidity, barriers to entry,
time lags in production, price volatility and dispersion, and market cycles (Maier, 2009). Clayton (2008) observes that, when heterogeneous properties trade infrequently in illiquid and highly segmented real estate markets, investors cannot obtain accurate and recent information on selling prices. This results in highly volatile prices, cycles as investors, with erroneous price expectations, start to speculate in future real estate prices.

2.4.1 Capital Structure
Real estate has a unique quality compared to other assets as it often serves as collateral for debt. The effect of leverage in real estate has therefore become a very important concept (Geltner, 2007). Leverage ratio (LR) is a way to measure the amount of debt in relation to the asset value in an investment. The higher the leverage ratio the larger is the fraction of debt used to finance a company’s assets (Ertugrul, 2011). Ertugrul and Giambona (2009) studied the capital structure using a sample of 91 Real Estate Investment Trusts (REITs) with different capital structures as well as different diversification and investment strategies. One conclusion of their study is that firms embedded with a safe risk structure (stable cash flows) have a lower leverage, whereas firms with riskier cash flows often choose a higher leverage ratio with the motive to transfer some of the risk to the debt holders (Ertugrul, 2011). This result is inconsistent with the result of Morri and Cristanziani (2009), who found evidence that managers of riskier REITs choose a safer capital structure, that is, a lower leverage ratio to reduce the overall uncertainty of the company.

It has also been shown that companies regularly entering new property segments display a higher leverage ratio. The reason for this is that companies entering a new segment face higher capital constraint, thereby forcing them to borrow more money and increase their leverage ratio (Ertugrul, 2011). Morri and Cristanziani (2009) also suggest that, debt is cheaper for larger companies. These companies can therefore afford some investments that others cannot as they can pay more for these assets without risking lowering their return on equity (ROE). According to the authors, this could also explain why larger companies tend to have a more diversified portfolio which in turn lowers the volatility of their earnings as they continuously get stable cash flows from numerous diversified sources. This creates a positively reinforcing circle as their stable cash flows and earnings
make it even easier to borrow money for future investments and growth (Morri & Cristanziani, 2009).

2.4.2 Specialization and Concentration

In an analysis conducted by the real estate consultancy company Leimdorfer (2011), Swedish listed real estate companies with a specialized portfolio, both in terms of property type and geographical diversification, is valued higher than less specialized companies. The study shows that investors value the most specialized companies’ 27 percent higher than the companies with the least specialized portfolios. Leimdorfer presented several reasons for this: firstly, only focusing on a few regions strengthens market positions and market knowledge for the regions; secondly, an increased concentration and specialization gives larger possibilities to achieve lower costs in property- and facility management activities; and lastly, shareholders get benefits from the fact that a more specialized company is easier for investors to value and understand and offer them a more effective way to diversify the risk (Leimdorfer & Partners, 1997).

In a recent study, however, the degree of specialization and concentration for the period 2005 to 2008 has a very small impact on the companies’ value. In fact, during this period all Swedish listed real estate companies were more or less valued the same, except for companies with a high geographical concentration and a low specialization in property type who were valued lower. According to Hellström (2010), the result could nevertheless differ from previous studies due to the new International Financial Reporting Standards (IFRS) that were introduced in 2005.

2.4.3 Return Preferences

Geltner and Miller (2007) stated that, there are two different investment objectives regarding real estate return, the appreciation (growth) objective and the income (cash flow) objective. Which return objective an investor favors has a large impact on his investment strategy, on what asset composition his portfolio will have, and in his decision of whether to invest in one individual asset or another. Which return objective an investor favors is largely dependent on the holding period of the assets in an investor’s portfolio. In the appreciation (growth) objective the investor’s return will be received upon sale of the investment and will equal the difference between the selling price and the purchase price of the investment. In the appreciation (growth) objective, the investor therefore
needs to have a fairly long-time horizon with no immediate need to withdraw cash from the investment (Hellström, 2010).

Cash generated by the investment in the meantime would thus be reinvested in the investment so as to maximize the growth of accumulated capital over its holding period (Morri & Cristanziani, 2009). In the income (cash flow) objective the investor’s return will be in the form of continuous cash flow payments. An investor favoring this return objective often has a short investment horizon and an ongoing need to use the cash produced by the investment. This investor needs to reflect upon the size of the initial cash flow payout as well as how the cash flow may change over time. As he has a short-term focus, he often goes for the investment that has the highest initial cash payout rate (Geltner, 2007).

2.4.4 Market Knowledge

Loutskina and Strahan (2008) attentions home mortgage lending and argue that mortgage lenders who have a concentrated, rather than diversified, lending strategy are a lot more profitable as they invest in private information, outperform diversified lenders, and can forecast future price changes. The authors also prove that the behavior of these concentrated mortgage lenders are like those of informed investors as both base their lending decisions on private information and strong market knowledge. Concentrated lenders here defined as lenders who focus on a small number of local markets, invest heavier in information than do diversified lenders as they have better ability and stronger incentives to collect private information (Hayunga, 2009). This helps them to better understand and predict current and future home prices in their key markets as well as to exploit deviations between prices and fundamentals, thus earning above normal profits.

Diversified lenders, on the other hand, trade for liquidity reasons and hold diversified portfolios in order to reduce systematic risk. These uninformed lenders are unable to accurately predict current and future prices and instead view prices as closely resembling fundamentals (that is, present value of future expected cash flows) (Loutskina, 2008). Hayunga and Pace (2009) discusses the trade-off between a specialized and geographically diversified real estate investment strategy. They argue that an investor can save money through specialization as he gains experience and knowledge of a particular market by continuously trading and observing that market. This increased market
knowledge allows the investor to obtain a more precise understanding of future expected prices and to achieve greater returns at a lower information and management cost. On the other hand, holding a geographically focused real estate portfolio implies exposing oneself to more systematic risk as properties in close proximity to one another often are positively correlated in terms of supply and demand, labor markets, prices and regulations (Hayunga, 2009).

2.5 Chapter Summary
This chapter elaborated in detail the investor psychology and its impact in real estate investment. The section discussed matters dealing with availability, smoothing and lagging, and misaligned incentives. The section also investigated the impact of investors’ attitude towards risk and real estate investment and it has addressed issues of investment risk, political risk, and institutional risk. The chapter finally discussed the impact of information access and real estate investment, and it has highlighted matters of capital structure, specialization versus concentration, return preferences, and market knowledge. The next chapter discusses the methodology employed.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

The chapter summarizes the overall methodology that was used in the study. The methodology in this study includes: the research design, population and sampling design, data collection methods, research procedures, and data analysis methods.

3.2 Research Design

The research design that was employed was the descriptive survey method aimed at establishing the factors that affect the graduate’s decision in investing in the real estate industry in Kenya with a focus on Nairobi, Kenya. According to Maxwell (2012), descriptive research studies are designed to obtain information concerning the current situation and other phenomena and wherever possible to draw valid conclusion from the facts discussed. Descriptive research studies are based on some previous understating of the nature of the research problem (Krishnaswamy, 2009). This study was a survey research that explored the existing status of two variables at a given point in time. This method was preferred because it allowed for a prudent comparison of the research findings as it put together a profile of a group of problems, people or events by collection of data and processing of the frequencies on research variables or their communication.

3.3 Population and Sampling Design

3.3.1 Population

Target population refers to the entire group of individuals or objects to which researchers are interested in generalizing the conclusions (Martirosyan et al., 2010). The target population of this study was all the graduate students of United States International University - Africa (USIU-A) who were undertaking various graduate programs like: Master of Business Administration (MBA); Executive Master of Science in Organizational Development (EMOD); Global Executive Master of Business Administration (GeMBA); and GeMBA Health and were 935 in number.
Table 3.1: Population Distribution

<table>
<thead>
<tr>
<th>Study Programs</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master of Business Administration (MBA)</td>
<td>781</td>
</tr>
<tr>
<td>Executive Master of Science in Organizational Development (EMOD)</td>
<td>65</td>
</tr>
<tr>
<td>Global Executive Master of Business Administration (GeMBA)</td>
<td>63</td>
</tr>
<tr>
<td>Global Executive Master of Business Administration Health (GeMBA)</td>
<td>26</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>935</strong></td>
</tr>
</tbody>
</table>

Source: USIU-A Academic Affairs, (2019)

3.3.2 Sampling Design

3.3.2.1 Sampling Technique

This research employed a simple random sampling which is a method of selection of a sample comprising of n number of sampling units out of the population having N number of sampling units such that every sampling unit has an equal chance of being chosen. Stratified sampling in this study was convenient due to its nature and formation of representation. According to Silver (2012), stratified sampling is defined as a method of sampling from a population. In statistical surveys, when sub-populations within an overall population vary, it is advantageous to sample each sub-population in stratum and thus independently. Byrnes (2010) also defined strata as layer within any structure this clustered or assigned according to their social status and education. He regarded statistics as a group into which members of a population are divided in stratified sampling. According to Silver (2012), stratified sampling technique gives all departments the probability of being selected into the sample, and this was considered while choosing the sampling technique.

3.3.2.2 Sample Size

According to Rubin and Babbie (2009), the major criterion used when deciding on the sample size is the extent to which the sample size represents the entire population. According to Cooper and Schindler (2013), when selecting a sample size for a study, 10% - 75% of the total population is a justifiable figure to use when the total population is large. For this study, the researcher used 20% of the total population selected from each
stratum. Simple random selection was used to select respondents from the various strata. This gave all the graduate students an equal chance of being selected. The sample size for the study was thus 187.

Table 3.2: Sample Size Distribution

<table>
<thead>
<tr>
<th>STUDY PROGRAM</th>
<th>NUMBER</th>
<th>PERCENTAGE</th>
<th>SAMPLE SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MBA</td>
<td>781</td>
<td>20</td>
<td>156</td>
</tr>
<tr>
<td>EMOD</td>
<td>65</td>
<td>20</td>
<td>13</td>
</tr>
<tr>
<td>GeMBA</td>
<td>63</td>
<td>20</td>
<td>13</td>
</tr>
<tr>
<td>GeMBA Health</td>
<td>26</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>935</strong></td>
<td><strong>20</strong></td>
<td><strong>187</strong></td>
</tr>
</tbody>
</table>

3.4 Data Collection Methods

The study collected primary data for analysis to ascertain the research objectives. Primary data was the information the researcher obtained from the field. Primary data was collected using semi-structured questionnaires. The questionnaire uses closed-ended and open-ended questions. The likert scale was used in the questionnaire to determine if the respondents agree or disagrees in a statement that they were provided with. The questionnaires were administered by the researcher in each and every category of respondents in the institution. The questionnaires were used because they allowed the respondents to give their responses in a free environment and helped the researcher get information that would not have been given out if interviews would have been used. Rubin and Babbie (2009), indicated that the important and advantage of close ended questions is that they are easier to analyze since they are in a usable form. They are also easy to administer because each item is followed by an alternative answer and is economical to use in terms of time saving. A self-administered survey is the only way to draw out self-report on people’s view, attitudes, thinking and principles.

3.5 Research Procedures

The questionnaire was tested by pre-administering to three teaching staff and the research office. During this exercise, questions that were perceived to be vague were re-adjusted accordingly for clear communication in the actual data collection process. For maximum
and complete participation of the respondents, the questionnaires were administered through drop and pick method whereby, the questionnaires were left for the respondents to be filled and then picked after some time. Strategies to ensure a high response rate included a clear notification to the respondents that their responses would be used for research purposes only and that the anonymity of their identity would be maintained.

3.6 Data Analysis Methods

This is a procedure of data analysis involved several stages: the completed questionnaires were edited for completeness and consistency, checked for errors and omissions and then coded to the Statistical Package for the Social Sciences (SPSS) tool, version 16 for qualitative and quantitative analysis. Qualitatively the data was sought into themes, categories and patterns. This enabled the researcher to make general statements in terms of the observed attributes hence conceptualization. According to Byrnes (2010), quantitative analysis employed both descriptive and inferential statistics. Data was analyzed using descriptive analysis such as descriptive statistics mean scores and standard deviations frequencies distributions and percentages. The results were presented in tables and figures. Correlation analysis in this study was used to enable the researcher to identify the relationships between the study variables.

3.7 Chapter Summary

Chapter three of this study summarized the generally methodology that was used in the study. This included the research design, population of the study, sampling procedures, data collection methods, research procedures and data analysis and presentation. The next chapter provides the analysis part of the study in compliance to the research objectives and data findings from the field.
CHAPTER FOUR

4.0 RESULTS AND FINDINGS

4.1 Introduction

This chapter presents the study findings received after analyzing the collected data using SPSS. The section presents the data in the form of tables and graphs, with brief explanations on the figures presented within the graphs and tables.

4.2 Demographic Information

4.2.1 Response Rate

The researcher handed out 187 questionnaires to the targeted population. After the collected questionnaires were cleaned and refined, there were 127 questionnaires that were completely filled. This gave the study a response rate of 67.9% which was approximately 70% which is above the required threshold.

![Response Rate Graph]

Figure 4.1: Response Rate

4.2.2 Gender of Respondents

The respondents were asked to indicate their gender and the results were as follows: From the study results 61.4% were female and 38.6% were female. These results showed that the population had more female than male.
4.2.3 Marital Status

The respondents were asked to indicate their marital status and their results was as follows. From the results obtained, 53.5% were married, 46.5% were single and none were widowed or divorced. The results show that majority of the population was married.

4.2.4 Age Group

The respondents were asked to indicate their age group and the results were as follows: From the results obtained, 73.2% were aged between 26-30 years, 18.9% were aged between 31-35 years and 7.9% were aged between 21-25 years. These results showed that majority of the respondents were in their early graduates.
4.2.5 Degree Course

The respondents were asked to indicate the degree course they were pursuing, and the results were as follows. Their response indicated that 81.1% were pursuing MBA, 8.7% were pursuing GeMBA, 7.9% were pursuing EMOD, and 2.3% were pursuing GeMBA Health. These results are in tandem with the target population.

4.2.6 Real Estate Investment

The respondents were asked whether they had invested in the real estate market and the results were as follows. From the response obtained, 61.4% had not invested in real estate while 38.6% had invested in the market. The results show that majority of the respondents had not invested in the real estate market.
4.3 Investor Psychology and Real Estate Investment

This section represents respondents rating results for various statements that regarded their psychological decisions and its impact on their decision to invest in real estate investment.

4.3.1 Cost Analysis

The respondents were asked whether as investors they logically weighed the respective costs of investment and investment benefits before making a decision and their response was as follows. Figure 4.6 shows that investors logically weighed the respective costs of investment and investment benefits before making a decision since 81.1% strongly agreed, 18.9% agreed and none of the respondents disagreed.

Figure 4.7: Cost Analysis

4.3.2 Market Efficiency

The respondents were asked whether they believed that the real estate market was efficient even though the market was illiquid, and the results were as follows: Figure 4.7 shows that although the real estate market is illiquid, investors still believed that the
market was efficient as shown by 68.5% who agreed, 14.2% who strongly agreed while 17.3% were neutral.

![Market Efficiency](image1)

**Figure 4.8: Market Efficiency**

### 4.3.3 Consumption Decision

The respondents were asked whether the option of the real estate investment providing them with both the investment decision as well as the consumption decision was a factor in their decision-making and the results were as follows. Figure 4.8 shows that the options provided by the real estate investment both the investment and consumption decision was a factor that influenced the investors since 70.9% agreed and 15% strongly agreed while 14.1% were neutral.

![Consumption Decision](image2)

**Figure 4.9: Consumption Decision**
4.3.4 Environmental Analysis
The respondents were asked whether they carried out an environmental analysis, set goals, analyze market conditions, and carry out a combination of tactical and financial decisions before investing and the results were as follows. The Figure 4.9 shows that, before investing, the respondents normally carry out an environmental analysis, set goals, analyze market conditions, and carry out a combination of tactical and financial decisions as shown by 52.8% who strongly agreed and 40.9% who agreed and only 6.3% strongly disagreed.

Figure 4.10: Environmental Analysis

4.3.5 Real Estate Information
The respondents were asked their opinion about finding information on real estate investment about valuation, returns and diversification widely available and well-integrated, and their results were as follows. The Table 4.1 shows that investors do not find information on real estate investment about valuation, returns and diversification widely available and well-integrated as shown by 33.1% who disagreed, 32.3% who were neutral, 34.6% agreed.
### Table 4.1: Real Estate Information

<table>
<thead>
<tr>
<th>Distribution</th>
<th>Numbers</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Disagree</td>
<td>42</td>
<td>33.1%</td>
</tr>
<tr>
<td>Neutral</td>
<td>41</td>
<td>32.3%</td>
</tr>
<tr>
<td>Agree</td>
<td>44</td>
<td>34.6%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>127</td>
<td>100%</td>
</tr>
</tbody>
</table>

#### 4.3.6 Sparse Information

The respondents were asked whether they found information on real estate investment decision-making, sparse, loosely integrated and focused principally upon large, institutional investors, and their results was as follows. Table 4.2 shows that investors did not find information on real estate investment decision-making, sparse, loosely integrated and focused principally upon large, institutional investors as shown by 26% of the respondents who strongly disagreed, 25.2% who disagreed, 29.9% who were neutral and 18.9% who agreed.

### Table 4.2: Sparse Information

<table>
<thead>
<tr>
<th>Distribution</th>
<th>Numbers</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>33</td>
<td>26%</td>
</tr>
<tr>
<td>Disagree</td>
<td>32</td>
<td>25.2%</td>
</tr>
<tr>
<td>Neutral</td>
<td>38</td>
<td>29.9%</td>
</tr>
<tr>
<td>Agree</td>
<td>24</td>
<td>18.9%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>127</td>
<td>100%</td>
</tr>
</tbody>
</table>

#### 4.3.7 Heavy Weighted Information

The respondents were asked about their opinion on the real estate information passed through market contacts being heavily weighted, and their response was as follows:
Figure 4.10 shows that real estate information passed through market contacts was heavily weighted, potentially leading to consumer behavior that was biased by availability and overreaction shown by 44.9% who agreed and 7.9% who strongly agreed, while 47.2% were neutral.

![Graph showing Heavy Weighted Information]

**Figure 4.11: Heavy Weighted Information**

### 4.3.8 Sentiment Influence

The respondents were asked whether they were influenced by their sentiments about real estate investment, and their response was as follows. The Table 4.3 shows that investors are highly influenced by their sentiments about real estate investment as shown by 53.5% who agreed, while 15% were neutral, 11% disagreed and 6.3% strongly disagreed.

**Table 4.3: Sentiment Influence**

<table>
<thead>
<tr>
<th>Distribution</th>
<th>Numbers</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>8</td>
<td>6.3%</td>
</tr>
<tr>
<td>Disagree</td>
<td>14</td>
<td>11%</td>
</tr>
<tr>
<td>Neutral</td>
<td>19</td>
<td>15%</td>
</tr>
<tr>
<td>Agree</td>
<td>68</td>
<td>53.5%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>127</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
4.3.9 Developer’s Information
The respondents were asked whether they became overconfident when they had confirmed the developer’s private information, and the results were as follows. The Figure 4.11 shows that investors became overconfident when they had confirmed the developer’s private information as shown by 40.9% who agreed and 37% who strongly agreed, while 22% were neutral.

![Developer's Information](image)

**Figure 4.12: Developer’s Information**

4.3.10 Trade Confidentiality
The respondents were asked their opinion about use of past and current information and trade confidentiality in real estate investment and their response was as follows. Figure 4.12 shows that the real estate market does not maximize on the use of past and current market information because of a lack of trades or confidentiality since 29.9% agreed and 14.2% strongly agreed, while 41% were neutral.

![Trade Confidentiality](image)

**Figure 4.13: Trade Confidentiality**
4.3.11 Focus on Home Equity

The respondents were asked whether as real estate investors their focus was on how home equity conversion led to moral hazard and lower investment returns, and their results were as follows. The Figure 4.13 shows that investors in real estate’s focused on how home equity conversion would lead to moral hazard and lower investment returns as shown by 79.5% of the respondents who agreed while 20.5% were neutral.

![Figure 4.13: Focus on Home Equity](image)

4.3.12 Correlation for Psychological Decisions affecting Investment in Real Estates

A correlation test was carried out to determine the significance of the various psychological factors that affected the decision-making of investors. A P value of 0.000, 0.01 and/or 0.05 indicates that the particular factor was very significant. The results of the test were as follows:

Table 4.4 shows the relationship between psychological decisions and investment in real estate. The table shows that there was a significant relationship between investors logically weighing the respective costs of investment and investment benefits before making a decision (R=0.237, P value=0.007). The table shows that there was a significant relationship between the real estate market being illiquid and investors believing that the market is efficient (R=0.360, P value=0.000). The table shows that the relationship between real estate investment providing investors with an investment decision as well as a consumption decision was insignificant to their investment decision (R=0.012, P value=0.897). The table shows that the relationship between carrying out an environmental analysis, setting goals, analyzing market conditions, and carrying out a
combination of tactical and financial decisions was insignificant to investment decisions (R=-0.056, P value=0.534).

The Table 4.4 below indicated that investors find information on real estate investment about valuation, returns and diversification widely available and well integrated was very significant to their investment decision-making (R=-0.398, P-value=0.000). The study showed that finding information on real estate investment decision making, sparse, loosely integrated and focused principally upon large, institutional investors was very significant to investment decision-making (R=-0.236, P-value=0.008). The investor’s opinion that real estate information passed through market contacts is heavily weighted, potentially leading to consumer behavior that is biased by availability and overreaction was insignificant to investment decision-making (R=0.018, P value=0.839).

The relationship between investors being influenced by their sentiment about real estate investment and their decision to invest in real estate was very significant (R=-0.312, P value=0.000). The study results show that the relationship between investors becoming overconfident when they have confirmed the developer’s private information and their decision to invest was very significant (R=0.458, P value=0.000). The study shows that real estate market not being able to maximize on the use of past and current market information because of a lack of trades or confidentiality and investment decision-making was insignificant (R=0.111, P value=0.216). The study shows that investors focus on how home equity conversion leads to moral hazard and lower investment returns is very significant to decision-making by investors (R=-0.402, P-value=0.000).
### Table 4.4: Correlation for Psychological Decisions affecting Investment in Real Estates

<table>
<thead>
<tr>
<th>Statement</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>As an investor, I logically weigh the respective costs of investment and</td>
<td>0.237**</td>
</tr>
<tr>
<td>investment benefits before making a decision</td>
<td>0.007</td>
</tr>
<tr>
<td>Although the real estate market is illiquid, I still believe that the</td>
<td>0.360**</td>
</tr>
<tr>
<td>market is efficient</td>
<td>0.000</td>
</tr>
<tr>
<td>Real estate investment provides me with an investment decision as well as</td>
<td>0.012*</td>
</tr>
<tr>
<td>a consumption decision</td>
<td>0.897</td>
</tr>
<tr>
<td>Before investing, I normally carry out an environmental analysis, set</td>
<td>-0.056*</td>
</tr>
<tr>
<td>goals, analyze market conditions, and carry out a combination of tactical</td>
<td>0.534</td>
</tr>
<tr>
<td>and financial decisions</td>
<td></td>
</tr>
<tr>
<td>I find information on real estate investment about valuation, returns and</td>
<td>-0.398**</td>
</tr>
<tr>
<td>diversification widely available and well integrated</td>
<td>0.000</td>
</tr>
<tr>
<td>I find information on real estate investment decision making, sparse,</td>
<td>-0.236**</td>
</tr>
<tr>
<td>loosely integrated and focused principally upon large, institutional</td>
<td>0.008</td>
</tr>
<tr>
<td>investors</td>
<td></td>
</tr>
<tr>
<td>In my opinion, real estate information passed through market contacts is</td>
<td>0.018*</td>
</tr>
<tr>
<td>heavily weighted, potentially leading to consumer behavior that is biased</td>
<td>0.839</td>
</tr>
<tr>
<td>by availability and overreaction</td>
<td></td>
</tr>
<tr>
<td>As an investor, I am highly influenced by my sentiment about real estate</td>
<td>-0.312**</td>
</tr>
<tr>
<td>investment</td>
<td>0.000</td>
</tr>
<tr>
<td>As an investor, I become overconfident when I have confirmed the</td>
<td>0.458**</td>
</tr>
<tr>
<td>developer’s private information</td>
<td>0.000</td>
</tr>
<tr>
<td>The real estate market does not maximize on the use of past and current</td>
<td>0.111*</td>
</tr>
<tr>
<td>market information because of a lack of trades or confidentiality</td>
<td>0.216</td>
</tr>
<tr>
<td>As a real estate investor, my focus is on how home equity conversion</td>
<td>-0.402**</td>
</tr>
<tr>
<td>leads to moral hazard and lower investment returns</td>
<td>0.000</td>
</tr>
</tbody>
</table>

** Correlation is Significant at the 0.01 level
* Correlation is significant at the 0.05 level
4.4 Impact of Investors’ Attitude towards Risk and Real Estate Investment

This section represents respondents rating results for various statements that regarded their attitude towards risk and its impact on their decision to invest in real estate investment.

4.4.1 Being Risk-Averse

The respondents were asked whether they found themselves to be risk-averse when it came to investment decisions, and the results were as follows. Table 4.5 shows that, as investors the respondents found themselves to be a risk-averse persons when it came to investment decisions since 33.1% strongly agreed, 26.8% agreed, while 25.2% disagreed and 15% were neutral.

<table>
<thead>
<tr>
<th>Distribution</th>
<th>Numbers</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Disagree</td>
<td>32</td>
<td>25.2%</td>
</tr>
<tr>
<td>Neutral</td>
<td>19</td>
<td>15%</td>
</tr>
<tr>
<td>Agree</td>
<td>34</td>
<td>26.8%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>42</td>
<td>33.1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>127</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

4.4.2 Risk-Attitude Independence

The respondents were asked whether their attitude towards risk was independent of their financial circumstances, and their response was as follows. The Figure 4.14 shows that the investor’s attitude towards risk was independent of their financial circumstances since 48.8% strongly agreed, 44.9% agreed while 6.3% disagreed. These results indicate that the risk-attitude of the respondents was independent of their financial circumstances.
4.4.3 Investor’s Focus
The respondents were asked whether they had the tendency to focus on potential losses rather than gains while evaluating a potential investment, and the results were as follows. The Figure 4.15 shows that some investors had the tendency to focus on potential losses rather than gains while evaluating a potential investment while other did not since 29.1% agreed, 7.9% strongly agreed, while 32.3% were neutral, 15.7% disagreed and 15% strongly disagreed.

Figure 4.16: Investor’s Focus
4.4.4 Aggregate Outcome
The respondents were asked whether investors tended to focus on the aggregate outcome of the occasion, situation, or asset class, depending on the investment, and their response was as follows. The Figure 4.16 shows that depending on the investment, most investors may tend to focus on the aggregate outcome of the occasion, situation, or asset class since 55.1% agreed, 19.7% strongly agreed while 25.2% were neutral.
4.4.5 Relationship between Risk Attitude and Comfort Level

The respondents were asked whether the level of an investor’s risk attitude could be used to predict their comfort level with different investment strategies, and their response was as follows. The Figure 4.17 shows that the level of an investor’s risk attitude can be used to predict their comfort level with different investment strategies as was agreed to by 56.7% and strongly agreed to by 7.1%, while 36.2% were neutral.

4.4.6 Perception of Emerging Markets

The respondents were asked whether they found real estate investment in emerging markets being more risky than in developed markets, and the results were as follows. The Figure 4.18 shows that investors found real estate investment in emerging markets being more risky than in developed markets as shown by 56.7% who strongly agreed, 29.1% agreed while 14.2% disagreed.
Figure 4.19: Perception of Emerging Markets

4.4.7 Focus on Expected Return

The respondents were asked whether as investors, they focused on the expected return and risk of the portfolio as a whole rather than on the return and risk of each asset in isolation, and their response was as follows. The Table 4.6 shows that investors focus on the expected return and risk of the portfolio as a whole rather than on the return and risk of each asset in isolation as agreed to by 48.8% and strongly agreed to by 15% of the respondents. The table also shows that 25.2% were neutral and 11% disagreed.

Table 4.6: Focus on Expected Return

<table>
<thead>
<tr>
<th></th>
<th>Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Numbers</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>0</td>
</tr>
<tr>
<td>Disagree</td>
<td>14</td>
</tr>
<tr>
<td>Neutral</td>
<td>32</td>
</tr>
<tr>
<td>Agree</td>
<td>62</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>19</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>127</td>
</tr>
</tbody>
</table>

4.4.8 Impact of Political Risk

The respondents were asked whether adverse consequences of political risk had detracted them from investment returns that could be gained from real estate investment, and the results were as follows. Table 4.7 shows that the adverse consequences of political risk detracted investors from investment returns that could be gained from real estate
investment as shown by 45.7% who agreed, 14.2% who strongly agreed, while 26% strongly disagreed, 6.3% disagreed and 7.9% were neutral.

**Table 4.7: Impact of Political Risk**

<table>
<thead>
<tr>
<th>Distribution</th>
<th>Numbers</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>33</td>
<td>26%</td>
</tr>
<tr>
<td>Disagree</td>
<td>8</td>
<td>6.3%</td>
</tr>
<tr>
<td>Neutral</td>
<td>10</td>
<td>7.9%</td>
</tr>
<tr>
<td>Agree</td>
<td>58</td>
<td>45.7%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>18</td>
<td>14.2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>127</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

**4.4.9 Rise in Political Risk**

The respondents were asked whether political risk in the country had risen through the unexpected change the “rules of the game” in real estate market, and their response was as follows. The Figure 4.19 shows that political risk in the country had risen through the unexpected change the “rules of the game” in real estate market as shown by 60.6% who agreed and 20.5% who strongly agreed while 18.9% were neutral.

**Figure 4.20: Rise in Political Risk**

**4.4.10 Investment Risk**

The respondents were asked whether political sources of risk in the country had decreased the risk to investing for them as an investor, and their results were as follows. The Figure
4.20 shows that the political sources of risk in the country had not decreased the risk to investing for investors as shown by 41.7% who disagreed, 6.3% who strongly disagreed while 40.2% were neutral and 11.8% agreed.

![Investment Risk Chart](image)

**Figure 4.21: Investment Risk**

**4.4.11 Market Unfamiliarity**

The respondents were asked whether they shy from real estate investment due to unfamiliarity with the market structures, conventions, and other formal regulatory barriers, and their results were as follows. The Figure 4.21 shows that investors shy from real estate investment due to unfamiliarity with market structures, conventions, and other formal regulatory barriers as shown by 23.6% who agreed and 13.4% who strongly agreed. The table also shows that 15% strongly disagreed, 11% disagreed while 11% were neutral.

![Market Unfamiliarity Chart](image)

**Figure 4.22: Market Unfamiliarity**

**4.4.12 Different Structures**

The respondents were asked whether different cultural and legal structures, and difficulties in identifying and managing real estates had deterred them from investing in
the real estate market, and their results were as follows. The Figure 4.22 shows that different cultural and legal structures, and difficulties in identifying and managing real estates had deterred investors from investing in the real estate market since 34.6% agreed while 31.5% were neutral, 22.8% strongly disagreed and 11.1% disagreed.

![Different Structures Chart]

**Figure 4.23: Different Structures**

### 4.4.13 Market Development

The respondents were asked whether investment markets were not well developed in the country, and their response was as follows. The Table 4.8 shows that investment markets were under developed in the country, leading to a lack of information base necessary for investment was indicated by 45.7% who agreed and 7.1% who strongly agreed. The table also shows that 29.1% strongly disagreed while 18.1% were neutral. The results of the study is indicated.

**Table 4.8: Market Development and Investment Markets**

<table>
<thead>
<tr>
<th>Distribution</th>
<th>Numbers</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>37</td>
<td>29.1%</td>
</tr>
<tr>
<td>Disagree</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Neutral</td>
<td>23</td>
<td>18.1%</td>
</tr>
<tr>
<td>Agree</td>
<td>58</td>
<td>45.7%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>9</td>
<td>7.1%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>127</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
4.4.14 Correlations for Investors’ Attitude towards Risk and Real Estate Investment

A correlation test was carried out to determine the significance of the various investor attitude factors that affected their decision-making. A P value of 0.000, 0.01 and/or 0.05 indicates that the particular factor was very significant. The results of the test were as follows:

Table 4.9 shows that the relationship between investors being risk-averse when it comes to investment decisions was insignificant (R=−0.039, P value=0.665). The relationship between the investor attitude towards risk being independent of their financial circumstances was also insignificant (R=0.057, P value=0.525). Investors having the tendency to focus on potential losses rather than gains while evaluating a potential investment was also insignificant (R=−0.130, P value=0.145). The relationship between investors tending to focus on the aggregate outcome of the occasion, situation, or asset class with decision-making was insignificant (R=−0.090, P value=0.316).

The Table 4.9 shows that the relationship between the levels of an investor’s risk attitude and it being used to predict their comfort level with different investment strategies was insignificant (R=−0.008, P value of 0.933). The relationship between finding real estate investment in emerging markets being riskier than in developed markets and investment decision was very significant (R=−0.238, P value=0.007). The relationship between investors focus on the expected return and risk of the portfolio as a whole rather than on the return and risk of each asset in isolation and investment decision was insignificant (R=−0.034, P value=0.702).

The relationship between adverse consequences of political risk having detracted investors from investment returns that can be gained from real estate investment and decision-making was very significant (R=−0.461, P value=0.000). The relationship between political risk in the country having risen through the unexpected change the “rules of the game” in real estate market as also very significant (R=0.381, P value=0.000). The relationship between political sources of risk in the country having also decreased the risk to investing for investors was significant (R=−0.329, P value=0.000). Investor shyness from real estate investment being due to unfamiliarity with market structures, conventions, and other formal regulatory barriers was insignificant (R=−0.018, P value=0.838).
### Table 4.9: Correlations for Investors’ Attitude towards Risk and Real Estate Investment

<table>
<thead>
<tr>
<th>Investors’ Attitude towards Risk</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>I find myself to be a risk-averse person when it comes to investment decisions</td>
<td>-0.039</td>
</tr>
<tr>
<td>My attitude towards risk is independent of my financial circumstances</td>
<td>0.057</td>
</tr>
<tr>
<td>At times, I have the tendency to focus on potential losses rather than gains while evaluating a potential investment</td>
<td>-0.130</td>
</tr>
<tr>
<td>Depending on the investment, I may tend to focus on the aggregate outcome of the occasion, situation, or asset class</td>
<td>-0.090</td>
</tr>
<tr>
<td>The level of an investor’s risk attitude can be used to predict their comfort level with different investment strategies</td>
<td>-0.008</td>
</tr>
<tr>
<td>I find real estate investment in emerging markets being more risky than in developed markets</td>
<td>-0.238**</td>
</tr>
<tr>
<td>As an investor, focus on the expected return and risk of the portfolio as a whole rather than on the return and risk of each asset in isolation</td>
<td>-0.034</td>
</tr>
<tr>
<td>The adverse consequences of political risk have detracted me from investment returns that can be gained from real estate investment</td>
<td>-0.461**</td>
</tr>
<tr>
<td>Political risk in the country has risen through the unexpected change the “rules of the game” in real estate market</td>
<td>0.381**</td>
</tr>
<tr>
<td>The political sources of risk in the country have also decreased the risk to investing for me as an investor</td>
<td>-0.329**</td>
</tr>
<tr>
<td>My shyness from real estate investment is due to unfamiliarity with market structures, conventions, and other formal regulatory barriers</td>
<td>-0.018</td>
</tr>
<tr>
<td>Different cultural and legal structures, and difficulties in identifying and managing real estates have deterred me from investing in the real estate market</td>
<td>-0.448**</td>
</tr>
<tr>
<td>Investment markets are not well developed in the country, leading to a lack of information base necessary for investment</td>
<td>-0.389**</td>
</tr>
</tbody>
</table>

** Correlation is Significant at the 0.01 level
4.5 Information Access and Real Estate Investment

This section represents respondents rating results for various statements that regarded their access to information and its impact on their decision to invest in the real estate market.

4.5.1 Pieces of Information

The respondents were asked whether they used small pieces of information they came across and made it available to other investors, and the results were as follows. The Figure 4.23 shows that investors used small pieces of information that they came across, rapidly making it available to other investors as agreed to by 37.8% and strongly agreed to by 7.9% of the respondents, while 37% were neutral, 11% strongly disagreed and 6.3% disagreed.

![Figure 4.24: Pieces of Information](image)

4.5.2 Price Expectations

The respondents were asked whether the investors’ price expectations in the market were created by rational expectations and changes that were entirely random and unpredictable, and the results were as follows. The Table 4.10 shows that investors’ price expectations in the market was being created by rational expectations and changes that were entirely random and unpredictable as agreed to by 35.4%, strongly agreed to by 13.4% while 40.2% were neutral and 11% disagreed.
Table 4.10: Price Expectations and Market Expectations

<table>
<thead>
<tr>
<th>Distribution</th>
<th>Numbers</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Disagree</td>
<td>14</td>
<td>11%</td>
</tr>
<tr>
<td>Neutral</td>
<td>51</td>
<td>40.2%</td>
</tr>
<tr>
<td>Agree</td>
<td>45</td>
<td>35.4%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>17</td>
<td>13.4%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>127</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

4.5.3 Cost of Information

The respondents were asked whether as investors they did not incur costs of obtaining market information or carrying through transactions, and their response was as follows: Figure 4.24 shows that investors did incur costs of obtaining market information and/or carrying through transactions as shown by 52.8% of the respondents that disagreed and 28.3% strongly disagreeing to not incurring costs, while 11.8% were neutral and 7.1% agreed.

![Information Cost](image)

Figure 4.25: Information Cost

4.5.4 Well-Functioning Market

The respondents were asked whether the commercial real estate market was well-functioning and their response was as follows. Table 4.11 shows that the commercial real estate market is a well-functioning market but it is much less informationally efficient as
agreed upon by 46.5% of the respondents and strongly agreed to by 32.3% of the respondents, while 6.3% were neutral and 15% disagreed.

Table 4.11: Well-Functioning Market

<table>
<thead>
<tr>
<th>Distribution</th>
<th>Numbers</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Disagree</td>
<td>19</td>
<td>15%</td>
</tr>
<tr>
<td>Neutral</td>
<td>8</td>
<td>6.3%</td>
</tr>
<tr>
<td>Agree</td>
<td>59</td>
<td>46.5%</td>
</tr>
<tr>
<td>Strongly Agree</td>
<td>41</td>
<td>32.3%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>127</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

4.5.5 Real Estate Leveraging

The respondents were asked whether the effect of leveraging in real estate was a very important concept to them, and their results were as follows. Figure 4.25 shows that the effect of leveraging in real estate was a very important concept, and thus the investors’ interest in investing in the market as agreed to by 30.7% of the respondents and strongly agreed to by 14.2%, while 11% strongly disagreed.

![Real Estate Leveraging](image)

Figure 4.26: Real Estate Leveraging

4.5.6 New Investors in the Real Estate Market

The respondents were asked whether new investors entering the real estate market segment faced higher capital constraints, and their results were as follows. The Figure 4.26 shows that new investors entering the real estate market segment faced higher capital constraints, thereby forcing them to borrow more money and increase their leverage ratio
as shown by 40.9% who strongly agreed, and 18.9% who agreed, while 14.2% were neutral and 26% disagreed.

![New Investors](image1)

**Figure 4.27: New Investors in the Real Estate Market**

### 4.5.7 Regional Focus

The respondents were asked whether as investors, focusing on a few regions strengthened market positions and market knowledge for the regions, and the results were as follows. Figure 4.27 shows that investors focusing on a few regions strengthened market positions and market knowledge for the regions as agreed upon by 59.8% and strongly agreed to by 7.9% while 21.3% were neutral and 11% strongly disagreed.

![Regional Focus](image2)

**Figure 4.28: Regional Focus**

### 4.5.8 Concentration and Specialization

The respondents were asked whether as investors, increasing concentration and specialization gave them larger possibilities to achieve lower costs in property - and facility management activities, and the results were as follows. Figure 4.28 shows that investors increasing concentration and specialization gave them larger possibilities to
achieve lower costs in property - and facility management activities as strongly agreed by 48.8% and agreed upon by 26% while 14.2% were neutral and 11% disagreed.

![Concentration and Specialization](image)

**Figure 4.29: Concentration and Specialization**

### 4.5.9 Correlations for Impact of Information Access and Real Estate Investment

A correlation test was carried out to determine the significance of the various information access factors that affected their decision-making. A P value of 0.000, 0.01 and/or 0.05 indicates that the particular factor was very significant. The results of the test were as follows.

Table 4.12 shows the relationship between information access and real estate investment decisions. The table shows that the relationship between investors using small pieces of information that came across, rapidly making it available to other investors was insignificant (R=-0.116, P value=0.193). The relationship between investors’ price expectations in the market being created by rational expectations and changes are entirely random and unpredictable was insignificant (R=0.077, P value=0.391). The relationship between investors incurring no costs for obtaining market information or carrying through transactions was very significant (R=-0.316, P value=0.000). The relationship between commercial real estate market being a well-functioning market but it is much less informationally efficient was insignificant (R=-0.031, P value=0.725). The relationship between the effects of leverage in real estate being a very important concept, and thus creating interest in investing in real estate was insignificant (R=-0.028, P value=0.756).

The relationship between new investors entering the real estate market segment facing higher capital constraints, thereby forcing them to borrow more money and increasing
their leverage ratio was very significant (R= -0.607, P value=0.000). The relationship between investors focusing on a few regions strengthening market positions and market knowledge for the regions was very significant (R=-0.356, P value=0.000). The relationship between investors increasing concentration and specialization giving investors larger possibilities to achieve lower costs in property - and facility management activities was very significant (R=-0.438, P value=0.000).

Table 4.12: Correlations for Impact of Information Access and Real Estate Investment

<table>
<thead>
<tr>
<th>Information Access</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>As an investor, I use small pieces of information that I come across, rapidly making it available to other investors</td>
<td>-0.116 0.193</td>
</tr>
<tr>
<td>Investors’ price expectations in the market are created by rational expectations and changes are entirely random and unpredictable</td>
<td>0.077 0.391</td>
</tr>
<tr>
<td>As an investor, I incur no costs for obtaining market information or carrying through transactions</td>
<td>-0.316** 0.000</td>
</tr>
<tr>
<td>The commercial real estate market is a well-functioning market, but it is much less informationally efficient</td>
<td>-0.031 0.725</td>
</tr>
<tr>
<td>The effect of leverage in real estate is a very important concept, and thus my interest in investing in it</td>
<td>-0.028 0.756</td>
</tr>
<tr>
<td>New investors entering the real estate market segment face higher capital constraints, thereby forcing them to borrow more money and increase their leverage ratio</td>
<td>-0.607** 0.000</td>
</tr>
<tr>
<td>As an investor, focusing on a few regions strengthens market positions and market knowledge for the regions</td>
<td>-0.356** 0.000</td>
</tr>
<tr>
<td>As an investor, increasing concentration and specialization gives me larger possibilities to achieve lower costs in property - and facility management activities</td>
<td>-0.438** 0.000</td>
</tr>
</tbody>
</table>

** Correlation is Significant at the 0.01 level
* Correlation is significant at the 0.05 level

4.6 Chapter Summary

The chapter presented the findings of the study. Correlation analysis has been used to determine the relationship between the study variables. Brief explanations have been given before or after the tables and figures that describe the meaning of the numbers.
presented within the figures and tables. The next chapter discusses the study findings and offers the conclusion and recommendations of the study.
CHAPTER FIVE

5.0 DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter concludes the study. The chapter gives the conclusions in various sections that address the summary of findings; discussions; conclusions; and recommendations both for improvement and for further studies.

5.2 Summary

This study sought to determine the factors that affect the graduate’s decision in investing in the real estate industry in Kenya with a focus on Nairobi - Kenya. The study aimed to examine in detail the effect of investor psychology on the decisions of graduates investing in the real estate industry in Kenya; the impact of investors’ attitude towards risk and the decision to invest in the real estate industry in Kenya; and the impact of information access on the decision of graduates’ investment in the real estate industry in Kenya.

The research design employed was descriptive survey method that aimed at establishing the factors that affect the graduates’ decision in investing in the real estate industry in Kenya with a focus on Nairobi - Kenya. The target population of the study was all the graduate students of United States International University - Africa (USIU-A) who were 935. The research employed a simple random sampling to select the study respondents. For this study, the researcher used 20% of the total population bringing the number to 187. Primary data was collected using semi-structured questionnaires. The questionnaire was tested by pre-administering to three teaching staff and the research office. The procedure of data analysis involved several stages: the completed questionnaires were edited for completeness and consistency, checked for errors and omissions and then coded to the Statistical Package for the Social Sciences (SPSS) tool, version 16 for qualitative and quantitative analysis. Data was analyzed using descriptive analysis such as mean scores, standard deviations and frequencies distributions and percentages. Correlation analysis was used in the study to identify the relationships between the study variables.

The study showed that investors logically weigh the respective costs of investment and investment benefits before making a decision and that although the real estate market in...
Kenya is illiquid, people still believe that the market is efficient. The study revealed that real estate investment provides people with an investment decision as well as a consumption decision and that investors carry out a strong analysis before investing. It can be seen from the study that real estate information is hard to find and is not readily accessible to investors leading to the deterrence of most would be investors. The study also showed that other factors like sentimental value affect the decision to invest in real estates and that real estate investors are overconfident in their investment.

The study showed that individuals are usually risk-averse in terms of investment decisions and their attitude towards risk is normally independent of their financial circumstances. This leads to them focusing on potential losses rather than gains while evaluating a potential investment as well as focus on the aggregate outcome of the occasion, situation, or asset class. The study showed that political risk is another deterring factor for investors, and this has become an influencing factor in the country since the sources of political risk are increasing. People also shy away from real estate investment due to unfamiliarity with the market structures as well as the different cultural and legal structures.

In Kenya, real estate investors make use of small pieces of information that they come across to invest and their price expectations in the market are created by rational expectations and changes are entirely random and unpredictable. To obtain the information, investors have to incur costs which leads to their decision to hoard the information. The study has shown that the commercial real estate market is a well-functioning market but it is much less informationally efficient and new investors entering the real estate market segment face higher capital constraints, thereby forcing them to borrow more money and increase their leverage ratio.

The study recommends property managers to create implementation rating procedures. This would provide the potential investors with searching tools that provide an objective and standardized assessment of investment risk. The rating procedure would be an essential element of investment decision-making process which would help investors to determine the development of the capital market, including the real estate investment market. In the investment property market, not only would rating provide transparency of
property risk, but it would also be used for real estate portfolio analysis, investment controlling, and the analysis of factors determining investment decisions.

5.3 Discussion

5.3.1 Effects of Investor Psychology on Real Estate Investment

The study showed that investors logically weigh the respective costs of investment and investment benefits before making a decision. According to Kishore (2006), traditional financial theory is based on the notion that investors act rationally, correctly considering all currently available information in the decision-making process. He further states that such ‘decision makers’ are characterized as logically weighing up the respective costs and benefits before acting. Although the real estate market is illiquid, the study showed that people still believe that the market is efficient. Farlow (2004) states that, although it is commonly known that real estate markets are rather illiquid, the majority of academics assume that these markets are efficient; it is assumed that participants act in accordance with rationality.

The study showed that investors in real estate perceived the investment provided them with an investment decision as well as a consumption decision. Housing provides different functions. Shiller (2008) stresses that purchasing a house is both an investment decision and a consumption decision. The study showed that, before investing, the respondents normally carry out an environmental analysis, set goals, analyze market conditions, and carry out a combination of tactical and financial decisions. According to Jaffe and Sirmans (1995), the model to structure property investment decisions consists of five stages including an analysis of the initial environment, setting goals, an analysis on market conditions, and a combination of tactical and financial decisions. Shiller (2018) stresses that purchasing a house is both an investment decision and a consumption decision. This diversity makes housing investment hard to compare to other financial investment assets that do not provide direct consumption.

The study showed that investors do not find information on real estate investment about valuation, returns and diversification widely available and well-integrated. Brown and Matysiak (2010) state that in general, it can be stated that the prescriptive literature on real estate investment about valuation, returns and diversification is widely available and well-integrated. The study showed that investors did not find information on real estate
investment decision making, sparse, loosely integrated and focused principally upon large, institutional investors. Gallimore et al. (2010) state that literature on investment decision making is sparse, loosely integrated and focused principally upon large, institutional investors.

The study showed that real estate information passed through market contacts is heavily weighted, potentially leading to consumer behavior that is biased by availability and overreaction. According to Gallimore et al. (2010), information that is passed through market contacts is heavily weighted, potentially leading to behavior that is biased by availability and overreaction. The study showed that investors are highly influenced by my sentiment about real estate investment. Gallimore and Gray (2012), usage of sentiment can be partly explained by the lack of qualitative or quantitative data that is required to make judgments according to prescribed models. Investment strategies are formulated and what determines the final decisions to buy or sell. They hypothesized that corporate decision-making exhibits, as does individual decision making, heuristics and biases. Bokhari and Geltner (2011) even document that certain biases are stronger the more sophisticated or experienced the commercial investor is.

The study showed that investors become overconfident when they have confirmed the developer’s private information. A study by Wang et al. (2010) based on a semi-rational model shows that investors in property are often overconfident when the developer’s private information is confirmed. The study showed that real estate market does not maximize on the use of past and current market information because of a lack of trades or confidentiality. According to Brown and Matysiak (2010), there is no optimal use of past and current information because of a lack of trades or confidentiality and they further suggest that these high frequency indices reflect a general trend rather than a market trend.

The study showed that investors in real estate’s focus on how home equity conversion leads to moral hazard and lower investment returns. Shiller and Weiss (2010) find that misaligned incentives bias investment returns. They focus on how home equity conversion leads to moral hazard and lower investment returns. They found that homeowners have incentives to stop caring about the maintenance of the house as soon as they know that investors are aware of the risk of poor market performance.
5.3.2 Effects of Investors’ Attitude on Real Estate Investment

The study indicates that, as investors the respondents found themselves to be a risk-averse person when it came to investment decisions. A longstanding tenet of theories of decision making, dating back to the work of Bernoulli (1738/1954), is that people are risk-averse, at least for decisions with outcomes in the domain of gains and with mixed outcomes that include both gains and losses. The study showed that investor’s attitude towards risk was independent of their financial circumstances. Zuckerman (2011) notes that, it has been assumed that people have varying risk attitudes that exist independently of their financial circumstances, and that these attitudes affect investment behavior.

The study showed investors had the tendency to focus on potential losses rather than gains while evaluating a potential investment. According to Higgins (2012), people may vary in their tendency to focus on potential losses rather than gains, a tendency that has labeled a “prevention focus” as opposed to a “promotion focus. The study showed that depending on the investment, most people may tend to focus on the aggregate outcome of the occasion, situation, or asset class. Higgins (2012) further states that, another situational factor or mental disposition that can affect risk aversion is the tendency to aggregate outcomes over occasions, situations, asset classes, and etcetera.

The study shows that the level of an investor’s risk attitude can be used to predict their comfort level with different investment strategies. Yook and Everett (2013) states that it is more and more widely accepted that individuals’ risk attitudes predict their comfort level with different investment strategies, and perhaps their level of unhappiness with unfavorable investment outcomes. The study showed that investors found real estate investment in emerging markets being riskier than in developed markets. Real estate investment in emerging markets is riskier than investment in developed markets it could be argued that this alone will deter investors. Indeed Lim (2010) finds that UK investors are much more risk averse than their Asian counterparts.

The study revealed that investors focus on the expected return and risk of the portfolio as a whole rather than on the return and risk of each asset in isolation. According to Madura (2012), modern portfolio theory (MPT) states that investors should focus on the expected return and risk of their portfolio as a whole rather than on the return and risk of each asset in isolation. The study showed that adverse consequences of political risk detracted
investors from investment returns that could be gained from real estate investment. Brewer (2009) states that it is the adverse consequences of political risk that detract from investment returns, and hence most concern investors.

The study also showed that, political risk in the country had risen through the unexpected change the “rules of the game” in real estate market. According to Diamonte, Liew and Stevens (2010) states that, political risk arises when a sovereign host government unexpectedly change the “rules of the game” under which businesses operate through intervention in the economy. Such intervention may take many forms, including explicit barriers to capital flows, taxes, exchange controls and outright expropriation. The study showed that political sources of risk in the country had not decreased the risk to investing for investors. According to Eichholtz et al. (2010) states that, political sources of risk can also decrease the risk to investing. political sources of risk can also decrease the risk to investing. As exemplified recently in the cases of Korea, Indonesia, and Thailand, where previously closed markets have had to agree to reforms within their markets and relaxation of restrictions and taxes applied to investors as part of the conditions attached the loans. According to Brewer (2009), political risk is typically associated with the developing world, all investments, whether in developed or developing countries, face some political risk.

The study showed that investors’ shyness from real estate investment was due to unfamiliarity with market structures, conventions, and other formal regulatory barriers. According to Worzala (2004), the most important factor deterring real estate investment is unfamiliarity with foreign market structures and conventions and other formal regulatory barriers. The study showed that different cultural and legal structures, and difficulties in identifying and managing real estates had deterred investors from investing in the real estate market. Worzala, Johnson and Lizieri (2010) note that, other factors sighted including different cultural and legal structures and difficulties in identifying and managing real estates, all of which are closely allied to this perceived lack of market knowledge. The study showed that investment markets being underdeveloped in the country, led to a lack of information base necessary for investment. According to D’Arcy and Keogh (2011), if investment markets are not well developed, then the information base necessary for real estate investment decision making in a particular market may be absent.
5.3.3 Effects of Information Access on Real Estate Investment

The study showed that investors used small pieces of information that they came across, rapidly making it available to other investors. Maier (2009), investors use small pieces of information that they come across, rapidly making it available to other investors, thereby eliminating any possible profit opportunity. The study showed that investors’ price expectations in the market were created by rational expectations and changes were entirely random and unpredictable. Geltner (2007) an efficient market, prices fully reflect all available information and the market adjusts rapidly to the arrival of any new piece of information. Investors’ price expectations are therefore created by rational expectations and price changes are entirely random and unpredictable.

The findings is supported by Maier (2009) who indicated that the investors use small pieces of information that they come across, rapidly making it available to other investors, thereby eliminating any possible profit opportunity. In an efficient market, prices fully reflect all available information and the market adjusts rapidly to the arrival of any new piece of information. Investors’ price expectations are therefore created by rational expectations and price changes are entirely random and unpredictable. In order for a market to be completely efficient there cannot be any costs associated with obtaining information or carrying through transactions. Informational inefficiency means that prices adjust very slowly to the arrival of new information than they would in an otherwise efficient market. On top of this, the unique characteristics of the real estate market make it challenging to model expected equilibrium prices.

According to the study, investors did incur costs for obtaining market information or carrying through transactions. Maier (2009), some of the characteristics that makes the real estate market an inefficient market is inadequate and costly information, transaction costs, indivisible assets, limited liquidity, barriers to entry, time lags in production, price volatility and dispersion, and market cycles. The study revealed that commercial real estate market was a well-functioning market, but it was much less informationally efficient. Geltner (2007) states that the commercial real estate market is a well-functioning market, but it is much less informationally efficient than the financial market, particularly the stock market and the foreign exchange market.
The study showed that the effect of leverage in real estate was a very important concept, and thus the interest in investing. According to Geltner (2007), real estate has a unique quality compared to other assets as it often serves as collateral for debt. The effect of leverage in real estate has therefore become a very important concept. The study showed that new investors entering the real estate market segment faced higher capital constraints, thereby forcing them to borrow more money and increase their leverage ratio. Ertugrul (2011) states that it has also been shown that companies regularly entering new property segments display a higher leverage ratio. The reason for this is that companies entering a new segment face higher capital constraint, thereby forcing them to borrow more money and increase their leverage ratio.

The study showed that investors focusing on a few regions strengthens market positions and market knowledge for the regions. Leimdorfer (2011) presented several reasons for this: firstly, only focusing on a few regions strengthens market positions and market knowledge for the regions. The study showed that investors increasing concentration and specialization gave them larger possibilities to achieve lower costs in property- and facility management activities. Leimdorfer and Partners (1997), an increased concentration and specialization gives larger possibilities to achieve lower costs in property- and facility management activities; and lastly, shareholders get benefits from the fact that a more specialized company is easier for investors to value and understand and offer them a more effective way to diversify the risk.

The findings of the study concides with that of Hayunga and Pace (2009) who indicated that the trade-off between a specialized and geographically diversified real estate investment strategy. They argue that an investor can save money through specialization as he gains experience and knowledge of a particular market by continuously trading and observing that market. This increased market knowledge allows the investor to obtain a more precise understanding of future expected prices and to achieve greater returns at a lower information and management cost. On the other hand, holding a geographically focused real estate portfolio implies exposing oneself to more systematic risk as properties in close proximity to one another often are positively correlated in terms of supply and demand, labor markets, prices and regulations.
5.4 Conclusions

5.4.1 Effects of Investor Psychology on Real Estate Investment
The study concludes that investors logically weigh the respective costs of investment and investment benefits before making a decision and that although the real estate market in Kenya is illiquid, people still believe that the market is efficient. From the study, it can be concluded that real estate investment provides people with an investment decision as well as a consumption decision and that investors carry out a strong analysis before investing. It can be concluded from the study that real estate information is hard to find and is not readily accessible to investors leading to the deterrence of most would-be investors. The study also concludes that other factors like sentimental value affect the decision to invest in real estates and that real estate investors are overconfident in their investment.

5.4.2 Effects of Investors’ Attitude on Real Estate Investment
The study concludes that individuals are usually risk-averse in terms of investment decisions and their attitude towards risk is normally independent of their financial circumstances. This leads to them focusing on potential losses rather than gains while evaluating a potential investment as well as focus on the aggregate outcome of the occasion, situation, or asset class. The study concludes that political risk is another deterring factor for investors, and this has become an influencing factor in the country since the sources of political risk are increasing. People also shy away from real estate investment due to unfamiliarity with the market structures as well as the different cultural and legal structures.

5.4.3 Effects of Information Access on Real Estate Investment
In Kenya, real estate investors make use of small pieces of information that they come across to invest and their price expectations in the market are created by rational expectations and changes are entirely random and unpredictable. To obtain the information, investors have to incur costs which leads to their decision to hoard the information. From the study it can be concluded that the commercial real estate market is a well-functioning market but it is much less informationally efficient and new investors entering the real estate market segment face higher capital constraints, thereby forcing them to borrow more money and increase their leverage ratio.
5.5 Recommendations

5.5.1 Recommendations for Improvement

5.5.1.1 Effects of Investor Psychology on Real Estate Investment
From the study it is clear that psychological factors are important in decision-making for would be investors, the study therefore recommends that, real estate property dealers need to be acquainted with the fact that investor psychology plays a great role in determining investment decisions and market prices to facilitate more people to invest in the market.

5.5.1.2 Effects of Investors’ Attitude on Real Estate Investment
For investors who are willing to accept some risk to principal, portfolio optimization can actually combine risky investments in a way that actually reduces the overall investment risk. When one investment zigs and another zags, the combined result is less risky than owning just one of these investments. The study recommends that property dealers need to offer information to would be investors on how they could intelligently expand their portfolio out to a few investments and own a diversified portfolio.

5.5.1.3 Effects of Information Access on Real Estate Investment
The study recommends property managers to create implementation rating procedures. This would provide the potential investors with searching tools that provide an objective and standardized assessment of investment risk. The rating procedure would be an essential element of investment decision-making process which would help investors to determine the development of the capital market, including the real estate investment market. In the investment property market, not only would rating provide transparency of property risk, but it would also be used for real estate portfolio analysis, investment controlling, and the analysis of factors determining investment decisions.

5.5.2 Recommendations for Further Research
This study has focused on the factors that affect the graduate’s decision in investing in the real estate industry in Kenya with a focus on Nairobi - Kenya. The study recommends that further research be carried out that will focus on other areas that will facilitate understanding of other factors that determine real estate decision-making for instance the impact of the cost of finance on the construction industry and or the effect of the population growth on real estate development.
REFERENCES


APPENDICES

APPENDIX I: QUESTIONNAIRE

I am a student at the United States International University - Africa pursuing a master’s degree in Business Administration. I am undertaking a research project titled, “Determinants of Investment Behavior amongst graduates Investment in the Real Estate Industry in Nairobi, Kenya”, as part of my degree requirement. I would be grateful if you accept to participate in this research. The information you give shall be treated with the utmost confidentiality and shall be used solely for this research study. A copy of the same shall be availed to you on request.

Section A: Demographics

1. Gender
   Male ( )   Female ( )

2. What is your marital status?
   Single ( )   Married ( )   Divorced ( )   Widowed ( )
   Other ( ) Please Specify_____________________

3. Age Group
   21-25 Years ( )   26-30 Years ( )   31-35 Years ( )

4. What degree course are you currently pursuing in USIU-A?
   Master of Business Administration (MBA)
      ( )
   Executive Master of Science in Organizational Development (EMOD)
      ( )
   Global Executive Master of Business Administration (GeMBA)
      ( )
   Global Executive Master of Business Administration Health (GeMBA)
      ( )

5. Have you invested in the real estate industry?
   Yes ( )   No ( )
6. Why have invested or have not invested in the real estate industry?

________________

________________

________________

__________________________________________________

SECTION B: INVESTOR PSYCHOLOGY AND REAL ESTATE INVESTMENT

Given the statements on the table below, kindly rate your level of acceptance to the statements with regards to psychological decisions for real estate investment. Use the following key to rate your response: (SD-Strongly Disagree; D-Disagree; N-Neutral; A-Agree; and SA-Strongly Agree).

<table>
<thead>
<tr>
<th>Investor Psychology</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>As an investor, I logically weigh the respective costs of investment and investment benefits before making a decision</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Although the real estate market is illiquid, I still believe that the market is efficient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real estate investment provides me with an investment decision as well as a consumption decision</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before investing, I normally carry out an environmental analysis, set goals, analyze market conditions, and carry out a combination of tactical and financial decisions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I find information on real estate investment about valuation, returns and diversification widely available and well integrated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I find information on real estate investment decision making, sparse, loosely integrated and focused principally upon large, institutional investors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In my opinion, real estate information passed through market contacts is heavily weighted, potentially leading to consumer behavior that is biased by availability and overreaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As an investor, I am highly influenced by my sentiment about real estate investment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
As an investor, I become overconfident when I have confirmed the developer’s private information

The real estate market does not maximize on the use of past and current market information because of a lack of trades or confidentiality

As a real estate investor, my focus is on how home equity conversion leads to moral hazard and lower investment returns

SECTION C: IMPACT OF INVESTORS’ ATTITUDE TOWARDS RISK AND REAL ESTATE INVESTMENT

Given the statements on the table below, kindly rate your level of acceptance to the statements with regards to investors’ attitude towards risk and real estate investment. Use the following key to rate your response: (SD-Strongly Disagree; D-Disagree; N-Neutral; A-Agree; and SA-Strongly Agree).

<table>
<thead>
<tr>
<th>Investors’ Attitude towards Risk</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>I find myself to be a risk-averse person when it comes to investment decisions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My attitude towards risk is independent of my financial circumstances</td>
<td></td>
<td></td>
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<td>At times, I have the tendency to focus on potential losses rather than gains while evaluating a potential investment</td>
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<td>Depending on the investment, I may tend to focus on the aggregate outcome of the occasion, situation, or asset class</td>
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<td>The level of an investor’s risk attitude can be used to predict their comfort level with different investment strategies</td>
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<tr>
<td>I find real estate investment in emerging markets being more risky than in developed markets</td>
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<tr>
<td>As an investors, focus on the expected return and risk of the portfolio as a whole rather than on the return and risk of each asset in isolation</td>
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<tr>
<td>The adverse consequences of political risk have detracted me from investment returns that can be gained from real estate</td>
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72
Political risk in the country has risen through the unexpected change the “rules of the game” in real estate market

The political sources of risk in the country have also decreased the risk to investing for me as an investor

My shyness from real estate investment is due to unfamiliarity with market structures, conventions, and other formal regulatory barriers

Different cultural and legal structures, and difficulties in identifying and managing real estates have deterred me from investing in the real estate market

Investment markets are not well developed in the country, leading to a lack of information base necessary for investment

### SECTION D: INFORMATION ACCESS AND REAL ESTATE INVESTMENT

Given the statements on the table below, kindly rate your level of acceptance to the statements with regards to information access and real estate investment. Use the following key to rate your response: (SD-Strongly Disagree; D-Disagree; N-Neutral; A-Agree; and SA-Strongly Agree).

<table>
<thead>
<tr>
<th>Information Access</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>As an investor, I use small pieces of information that I come across, rapidly making it available to other investors</td>
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<td>Investors’ price expectations in the market are created by rational expectations and changes are entirely random and unpredictable</td>
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<tr>
<td>As an investor, I incur no costs for obtaining market information or carrying through transactions</td>
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<td>The commercial real estate market is a well-functioning market but it is much less informationally efficient</td>
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<td>The effect of leverage in real estate is a very important concept, and thus my interest in investing in it</td>
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<td>New investors entering the real estate market segment face higher capital constraints, thereby forcing them to borrow more</td>
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<td>money and increase their leverage ratio</td>
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<td>As an investor, focusing on a few regions strengthens market</td>
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<td>positions and market knowledge for the regions</td>
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<td>As an investor, increasing concentration and specialization gives</td>
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<td>me larger possibilities to achieve lower costs in property - and</td>
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<td>facility management activities</td>
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</table>

**THANK YOU**
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This is to certify that Miss. Jane Ndungu of United States International University Africa (USIU), has been licensed to conduct research in Nairobi on the topic: DETERMINANTS OF INVESTMENT BEHAVIOUR AMONGST GRADUATES IN THE REAL ESTATE INDUSTRY IN NAIROBI KENYA (CASE STUDY OF USIU AFRICA) for the period ending: 25/July/2020.

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