THE EFFECTS OF FINANCIAL LITERACY ON PERSONAL INVESTMENT DECISIONS IN REAL ESTATE IN NAIROBI COUNTY

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DECLARATION

Student Declaration:

I hereby declare that this research project is my original work and has not been presented for a degree by myself or any other person from any other institution known and unknown to me.

Signed…… Date ……..……

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D63/63841/2013

Supervisor Declaration:

This research project has been submitted for presentation with my approval as University Supervisor.

Signed…… Date ……..……

MIRIE MWANGI

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DEDICATION

I dedicate this project to my family members for the love, tolerance, encouragement and enduring support they have given me in pursuit of education. I also dedicate this study to Patrick who has been there for my sake and for all-round support. May this be an inspiration for you to strive for even greater things in life.

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LIST OF ABBREVIATIONS

CBD	Central Business District
CMA	Capital Markets Authority
GDP	Gross Domestic Product
NSE	Nairobi Securities Exchange
PID	Personal Investment Decision
REITs	Real Estate Investment Trusts
SEO	Seasoned Equity Offering
SPSS	Statistical Package for Social Sciences

ABSTRACT

This study assessed the financial literacy of the real estate investors who invested in the real estate industry in Nairobi County. In addition, it examined the relationship between financial literacy and the influence of the factors that affect the investment decision. The objective of the study was to establish the effect of financial literacy on personal investment decision making by real estate investors. This study employed a descriptive research design. The target population of this study was the real estate investors in Nairobi County. A modified questionnaire was developed and divided into three parts. The first part covers demographic variables. The second part covers the issues regarding personal investment decision making while the third part identifies several financial literacy factors affecting the investment decision by real estate investors in Nairobi. Out of a target population of 140, 115 respondents were used in the study. The results indicated that the financial literacy of the real estate investors is far from the needed level. The financial literacy level was found to have a significant effect on investment decision making by real estate investors. To achieve optimal outcomes in this complex decision-making environment requires decision-makers to have adequate levels of financial knowledge and skills. The call for enhanced financial literacy amongst consumers is a global phenomenon, driven by the growing complexity of financial markets and products. The study was limited due to the small sample of respondents which was 115 because of data collection cost. The design used was ex-post-facto research design where the researcher had no control over the independent variables because the effects of financial literacy on investment decisions had already occurred. The study recommends for further study in the impact of inflation rates on investment decisions and ways to mitigate against sudden losses due to inflation fluctuation. The study also recommends further study into the effect of non – financial factors on the process of making investment decisions.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Many individuals find investments to be fascinating because they can participate in the decision making process and see the results of their choices. Not all investments will be profitable, as investor will not always make the correct investment decisions over the period of years; however, you should earn a positive return on a diversified portfolio (Bodie, Kane and Marcus, 2007). Lobes (1987) observe that investing is not a game but a serious subject that can have a major impact on investor's future wellbeing. Virtually everyone makes investments, even if the individual does not select specific assets such as stock, investments are still made through participation in pension plan, and employee saving programme or through purchase of life insurance or a home or by some other mode of investment like investing in Real Estate (Property) or in Banks or in saving schemes of post offices (Lobes, 1987).

According to Baker and Nofsinger, (2010) the field of investment today is even more dynamic than it was only a decade ago. World events have rapidly altered the values of specific assets that the individual has to choose from, and the amount of information available to the investors is staggering and continually growing. The key to a successful financial plan is to keep apart a larger amount of savings and invest it intelligently, by using a longer period of time. The turnover rate in investments should exceed the inflation rate and cover taxes as well as allow you to earn an amount that compensates the risks taken. Savings accounts, money at low interest rates and market accounts do not

contribute significantly to future rate accumulation. While the highest rate come from stocks, bonds and other types of investments in assets such as real estate (Hussein, 2007).

1.1.1 Financial Literacy

Creating financial literacy interventions is an obvious and common sense response to the increased complexity of the financial world. There are many domains of social policy where it is obvious what should work to redress a social problem (Monticone and Chiara, 2010). Financial literacy is most commonly viewed as a specialized kind of consumer expertise pertaining to how one manages one's financial affairs successfully or a personal finance-specific form of human capital. According to Nye, Pete and Cinnamon, (2013) "Financial literacy is a measure of the degree to which one understands key financial concepts and possesses the ability and confidence to manage personal finances through appropriate short term decision-making and sound, long-range financial planning, while mindful of life events and changing economic conditions." Though conceptually, financial literacy refers to skills, existing measures of financial literacy are dominated by measures of objective knowledge. Financial literacy is measured by percent correct on knowledge tests where each question has a right answer (Al-Tamimi and Kalli, 2009).

In recent years, financial literacy has gained the attention of a wide range of major banking companies, government agencies, grass-roots consumer and community interest groups, and other organizations. Interested groups, including policymakers, are concerned that consumers lack a working knowledge of financial concepts and do not have the tools they need to make decisions most advantageous to their economic well-

being. Such financial literacy deficiencies can affect an individual's or family's day-to-day money management and ability to save for long-term goals such as buying a home, seeking higher education, or financing retirement. Ineffective money management can also result in behaviors that make consumers vulnerable to severe financial crises (Mandell and Lewis, 2006).

From a broader perspective, market operations and competitive forces are compromised when consumers do not have the skills to manage their finances effectively. Informed participants help create a more competitive, more efficient market. As knowledge able consumers demand products that meet their short- and long-term financial needs, providers compete to create products having the characteristics that best respond to those demands (Monticone and Chiara, 2010).

1.1.2 Personal Investment Decision

According to Ayieko, (2004) investment planning is one of most important areas of personal financial planning. It is an integral part of retirement and a direct inducement protection planning. Financial independence after and during retirement, and with a view of your estate is largely determined by effective retirement planning. Investment planning includes developing investment strategies. These strategies should include designing a systematic investment plan and developing an asset allocation strategy. Investment planning is major part of retirement planning.

There are two reasons why people invest. The first reason is to accumulate assets and the second reason is to derive an income. The investment goals will be tampered by financial situation, age, tax position and the risk that are willing to bear. The personal investments decision concept is that the person allocate limited resources between competing opportunities (investments products) in a process known as capital budgeting. Making this investment, or capital allocation, decision requires estimating the value of each opportunity or project, which is a function of size, timing and predictability of future cash flows (Hodge, 2000).

According to the economic concept cost of living (Agaba et al., 2008), a cost of living adjustment is used to offset a change (usually a decrease) in the purchasing power of income. Cost of living adjustments modify future benefits, typically on an annual basis, to keep pace with inflation. These adjustments are usually linked to changes as measured by an index of movements in prices: the most widely used is the consumer price index.

1.1.3 Effects of Financial Literacy on Personal Investment Decision

Poor financial decisions are often associated with low levels of financial literacy. For instance, Rooij et al. (2009) explore the relationship between financial sophistication and wealth, relying on specific measures of financial literacy. Calvet et al. (2009) find that poor financial sophistication is associated with common investment mistakes, such as under-diversification, portfolio inertia, and the tendency to sell winning stocks and hold losing stocks. A growing literature has found strong links between financial literacy and savings and investment behavior. De Bondt (2008), for example, show that households

with higher levels of financial literacy are more likely to plan for retirement, invest in securities and that planners arrive at retirement with substantially more assets than non-planners.

Financial literacy has been discussed by many researchers from different aspects. Different research organizations have conducted research to identify the level of financial literacy of investment decision makers. A research conducted by the OECD (2005) examined the level of financial literacy in 12 major countries of the world including UK, USA, European countries, Japan and Australia. The research concluded that the level of financial literacy for most of the respondents is very low. Financial literacy has wide-reaching implications for household savings and investment behaviour. Bernheim, (1997) identifies that in households which lack basic financial knowledge, saving behaviours are dominated by basic rules of thumb. In more recent work, Bernheim and Garrett (2003) show that those individuals who are exposed to financial education in high school or in the workplace save more than individuals who are not exposed to such education. Similarly, Lusardi and Mitchell (2007) show that those who display low financial literacy are less likely to plan for retirement and as a result accumulate much less wealth.

Monticone and Chiara (2010), found that in order to succeed at the stock market, the investors engaged in online trading should be more knowledgeable and informed as compared to other investors, because they lack information about what is happening inside the stock market and they may also become the victims of information asymmetry. Therefore, the researchers investigated the level of investors' literacy of nearly 500

investors dealing in online trading. They also examined the level of difference in financial literacy among various groups of online investors using the demographic factors and experience in online trading as variables. The research concluded that the level of financial literacy varied in demographic factors.

1.1.4 Real Estate Investments in Nairobi County

Real estate market is a key contributor to the socio-economic developments of nations as there is creation of employment through construction of houses and related infrastructure. Also real estate sector is a significant contributor to the gross domestic product (GDP) of many nations, Kenya included. Housing is a major problem in Kenya especially in Nairobi. Despite initiatives by the Government of Kenya to ensure that Kenyans have access to basic housing requirements millions of people are living in the sprawling slums and also in other informal settlements around Nairobi (UN-HABITAT, 2008).

Statistics indicate that the demand for housing, which has possibly led to increase in house prices, has been on the rise at a faster rate than the numbers of houses available or under construction (National Housing Corporation, 2009). Even though plans are underway to ensure adequate dwelling units for the Nairobi city residents are in place the Government of Kenya and the private sector entities have been unable to meet the shortfall in housing demand, which currently stand at 150,000 units annually. The average annual supply is about 35,000 units. The GOK goal of meeting the annual hosing demand is made more urgent by the bill of rights in the constitution of Kenya 2010 that provides for adequate housing as a right to all Kenyans.

The perimeters of Nairobi are expanding to bursting point due to the demand for real estate. Improved infrastructure like the Thika super highway project, access to utilities, communication and financial services are some of the factors attributed to influencing Kenya's real estate performance. The rising demand for quality housing and plush office space has seen the emergence of innovative and futuristic multibillion-dollar gated communities and mini cities. These include Northlands City, Thika Greens Golf Estate, Four ways Junction, Tatu City, Migaa Golf Estate and Edenville Estate on the outskirts of Nairobi. The move to introduce Real Estate Investment Trusts (REITS) by the Capital Markets Authority (CMA) is another boost to the sector players. These plans will make real estate companies to be listed in the Nairobi Securities Exchange (NSE).

According to the Kenya National Bureau of Statistics the real estate demand has exceeded the supply by more than five times during the last decade. Heavy remittances by Kenya's diaspora, hefty pensioners' funds, private equity investments and the large base of expatriates are some of the factors that have led to spiraling costs of housing and escalating property prices (Kabukuru, 2012).

1.2 Research Problem

Investment is the employment of funds on assets with the aim of earning income or capital appreciation in future. It has two attributes namely the time and risk. Present consumption is sacrificed to get a return in the future (Bodie, Kane and Marcus, 2007). When an investor invests in real estate he must focus on the most reputed sector that will provide the maximum return over the next few years. Proper financial planning is a must.

With a real estate investment property, there are more ways in which to realize a superior return on the investment. Real estate investment can increase in value, as well as provide good cash flow.

Investors think of themselves as rational and logical. But when it comes to investing, their emotional inclinations, ingrained thought patterns, financial illiteracy and psychological biases, color how they perceive the world and how they make decisions (Iyer and Bhaskar, 2002). Research findings by Hodge, (2000) indicated that real estate accounts for a large share of wealth; about 33% and Gross Domestic Product (GDP) of about 11% in the United States of America. Baker and Haslem, (1973) contended that dividends, expected returns and the firm's financial stability are critical investment considerations for individual investors. Potter, (1971) identifies six factors: dividends, rapid growth, investment for saving purposes, quick profits through trading, professional investment management and long-term growth that affect individual investors' attitudes towards their investment decisions.

Kariuki (2013) indentified three factors that affected the returns of real estate investments in Nairobi. The factors included: finance factors, tax factors and demand factors. Findings by Nabutola, (2004) were that herd behaviour was prevalent among individual investors at the NSE. Omboi, (2011) carried out a research in Kenya to investigate factors influencing real estate property prices a survey of real estates in Meru municipality, Kenya. Robert A. et al, (2011) carried out a study to establish the relationship between housing prices and the optimal time-on-the-Investment decision.

Several studies has been done in respect to real estate industry however non has sought to look at the relationship between the effects of financial literacy and personal investments decision in Real Estate in Nairobi County and therefore this study seeks to determine this relationship. In so doing, the study seek to find answers to the following research questions; What is the relationship between effects of financial literacy and personal investments decision in Real Estate in Nairobi County and to what extent does financial literacy influence the individual real estate investors in Nairobi County?

1.3 Research Objectives

To determine the effects of financial literacy on personal investment decisions of real estate investors in Nairobi County.

1.4 Value of the Study

This study will be of importance to investors generally, and more specifically, to real estate investors. They will be acquainted with knowledge about factors that influence personal investment decisions and. They will be able to apply and relate the influences to investment decisions they have made in the past. They will be able to learn their own behavioural patterns that deviate from rationality and be equipped to make better and more rewarding investment decisions in the future.

Investment advisors and financiers will benefit from this study by discovering that investors are not always guided by rationality in their investment decisions. Equipped with findings from this research, investment advisors and financiers will be able to offer

more informed quality advice to investors. Academicians and scholars in the field of finance will find this study enriching to the already growing body of knowledge, and be able to identify research gaps for further study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter brings relevant literature required to find answers and connect to the research. It focuses on theoretical review, financial literacy and individual investor decision and empirical literature review.

2.2 Theoretical Review

A number of theories have been developed on real estate investment industry. Some of these are the decision theory, prospect theory, disposition effect theory, mental accounting theory and theory of overconfidence.

2.2.1 Decision Theory

Decision theory was developed by Warner in 1968. It is a theory about people's actions. It has both a prescriptive and a descriptive version. The prescriptive version says that a person should choose the action that maximizes expected utility. The description version says that a person does choose the action that maximizes expected utility. Real estate decisions are made by a variety of actors pursuing a broad range of objectives. These actors include home buyers and renters, builders, brokers, bankers, and the public agencies that provide physical networks and services such as streets, utilities and schools. Property managers also face every day critical risk management decisions as determining the price for sell or rent of a property, choice of financing, investment analysis, real estate portfolio management, real estate valuation. In these cases a decision support system can

be very valuable in order to minimize the risk of potential losses due to wrong decisions. Roberts and Henneberry (2007) explore the decision making processes of property investors. The study covered a broader sample of countries across three European markets namely France, Germany and U.K. Interviewees in this study constituted those most likely to engage directly in property investment decision-making. The study proposes a ten stage normative model. The study finds that the actual decision-making process is much simpler than the normative model suggested. Both the UK and the French and German models are found to follow a broadly similar path, with investors setting a strategy, searching for properties, undertaking an analysis of market conditions and purchasing properties that fulfill that strategy (Roberts and Henneberry, 2007).

2.2.2 Prospect Theory

The prospect theory was developed by Kahneman and Tversky in (1979). The theory contradicts expected utility theory upon which Standard finance is based. According to Jordan and Miller (2008), Prospect theory is an alternative to classical, rational economic decision making. Prospect theory emphasizes that investors tend to behave differently when they face prospective gains and losses; investors are much more distressed by prospective losses than they are happy about equivalent gains, and a typical investor considers the pain of losing one dollar to be twice the pleasure received from the gain of one dollar.

Investors have been found to respond in different ways to identical situations, depending on whether they are presented in terms of gains or in terms of losses. Investors seem to be willing to take more risk to avoid loss than they are to make an equivalent profit. The tendency of investors to be risk-averse regarding gains but risk-seeking regarding losses, is the essence of prospect theory. When an investor has the choice between a sure gain and a gamble that could increase or decrease the sure gain, the investor is likely to choose the sure gain. But when faced with a choice between a sure loss and a gamble which could increase or decrease the sure loss, investors are more likely to take the gamble (Jordan and Miller, 2008).

2.2.3 Disposition Effect Theory

The disposition effect theory was developed by Shefrin and Statman in 1985. Disposition effect refers to the tendency that investors have of selling assets that have gained value (‘winners’) and keeping assets that have lost value (‘losers’). When prices fall, investors tend to hold to assets they already have, to avoid the regret of having sold at a loss, hoping that the prices will rise in the future. On the other hand, when prices rise, investors tend to sell assets too fast to realize gains.

According to Weber and Camerer (1998), disposition effects can be explained by the two features of prospect theory: the idea that people value gains and losses relative to a reference point (which is the initial purchase price of assets), and the tendency to seek risk when faced with possible losses, and avoid risk when a certain gain is possible.

Shefrin and Statman (1985) found evidence that due to their desire to avoid regret, investors tend to sell winners too early and ride losers too long. Shiller and Case (1988) interviewed home buyers and found prevalence of disposition effects; that homeowners were more eager to sell at a profit than at a loss. Real estate economists and agents widely believe that volume slows, sometimes dramatically, when prices sag (Weber and Camerer, 1998). Barber and Odean (1999) conclude that the disposition effect based on loss aversion best explains the tendency for investors to hold losers and sell winners. They even found that investors are more inclined to purchase additional shares of their losing investments by almost 1.5 times than additional shares of their winning investments.

2.2.4 Theory of Mental Accounting

This theory was developed by Thaler in (1985). In mental accounting theory, framing means that the way a person subjectively frames a transaction in their mind will determine the utility they receive or expect. According to Jordan and Miller (2008), investors maintain a separate mental account for each asset and unknowingly, have a personal relationship with each. As a result, it becomes difficult to sell one of them. According to Shefrin and Statman (1985), the main idea underlying mental accounting is that decision makers tend to segregate the different types of gambles faced into separate accounts. When a new stock is purchased, rather than evaluating the whole investment, a new mental account is opened. The asset purchase price is used as the reference point. A running score is then kept on this account indicating gains or losses relative to the

purchase price. Investors find it difficult to close mental accounts at a loss, a situation termed as ‘the break-even effect’. Investors may resist the realization of a loss because it stands as proof that their first judgment was wrong.

While closing a stock account at a loss induces regret, closing at a gain induces pride (Shefrin and Statman, 2005). The quest for pride and the avoidance of regret lead to a disposition to realize gains and defer losses. Regret is stronger than pride. As a result, investors may be prone to inaction than action due to the strong desire to avoid regret. For example, if an asset’s price rises and the investor sells it, the pride of gain would vanish away if the asset’s price rises further. The investor would regret for having sold too quickly. Thus some investors would prefer not selling at all (inaction) whether prices rise or fall.

2.2.5 Theory of Overconfidence

This theory developed by Kent, David and Subrahmanyam (1997), says that people generally rate themselves as being above average in their abilities. They also overestimate the precision of their knowledge and their knowledge relative to others. Many investors believe they can consistently time the market. But in reality there's an overwhelming amount of evidence that proves otherwise. Overconfidence results in excess trades, with trading costs denting profits (Tapia and Yermo, 2007).

According to Jordan and Miller (2008), overconfidence manifests itself through lack of diversification. People tend to invest in local companies that they are familiar with, as

opposed to distant companies which might even be performing better. Another form of overconfidence is the tendency for people, including investors, to remember their past successes and disregard their past failures. Blume and Friend, (2008) highlight two common mistakes investors make: excessive trading resulting from overconfidence, and the tendency to hold on to losing investments while selling winners which is prompted by the human desire to avoid regret.

2.3 Determinants of Personal Investment Decisions

The availability of financial information has been postulated as one of the variables that could influence investor behavior while making investment decisions on the investment option to select. Financial information refers to accounting reports, general information relating to price movements, reputation of the firm, firm status in industry, past performance of the firm stock, and expected performance (Chong and Lal, 2011). Financial information is considered to influence an investor in making a decision to invest in stocks as an individual would evaluate the underlying movements of the key indicators of interest. Merika (2008) and Easley et al., (2010), find that financial information and expected corporate returns do have a significant effect on the decision to invest in shares.

According to Easley et al., (2010), when forming an intention to invest, individual investors will normally begin with assessment of companies „financial positions‟ based on some objective measures such as return on equity or earning per share. Subsequently, their emotional perceptions of such evaluations may come into effect as they try to justify

their investing decisions in a given company's stocks. Chong and Lai (2011) explains that in making an investment decision, rational individuals are likely to seek information on performance as well as the behavior of other investors. The timing and delivery of the information about the market had substantial effect on how investors made their decisions (Hughes, 2008).

Gentry and Fernandez (2008) also find that Annual Reports and interviews with company officials were the most important sources of information in assessing the firm value and therefore informing the equity selection process. Investment decision makers use financial statements of different firms for financial decision making purposes. In this instance, financial analysts become useful in gathering, analyzing and interpreting the accounting numbers the results of which is then circulated to potential investors for use to make decisions. Kiplangat et al., (2010) examine determinants of investor confidence in Kenya and their findings show that daily price movements in the NSE are significantly related to investor sentiment, implying therefore that investors will be guided by the available information to make a decision to invest in shares.

Totok et al., (2007) investigated the nature of indicators having influence on investor's needs and motivation to invest in equity shares using data for firms trading in the Jakarta Stock exchange and the findings show that investors in emerging markets require certain metrics as tools to analyze and predict the value of shares. The researchers argue that the metric provides a basis to ascertain the interrelationships among fundamentals, external risks, and value of the shares influencing the quality of fundamental decisions.

There are several studies which generally indicate that financial illiteracy is widespread and that many individuals lack knowledge of even the most basic economic principles (Lusardi and Mitchell 2007; Hilgert, Hogarth, and Beverly 2003). The link between financial literacy and ("good") investment behavior is less clear. Van Rooij, Lusardi, and Alessie (2011a) show that individuals with lower financial literacy are much less likely to invest. Guiso and Jappelli (2008) find in the individual's financial literacy a good indicator for the diversification of his/her portfolio. Using investor's wealth and profession as a proxy for financial literacy, Dhar and Zhu (2006) find empirical evidence that more literate investors are less prone to the disposition effect.

The results of Müller and Weber (2010) indicate that financial literacy is positively related to investments in low-cost funds. Nevertheless, they report that even the most sophisticated investors select actively managed funds instead of less expensive ETFs (exchange traded funds) or index fund alternatives. Even finance professors with presumably high financial literacy do not implement their knowledge when building their own portfolio. For example, Doran, Peterson, and Wright (2010) find that the professors' perception regarding market efficiency and the consequential optimal investment strategy are unrelated to their actual, realized behavior. The authors argue that the professors' investment decisions are, despite their high financial literacy, driven by behavioral factors comparable to amateur investors. Hibbert, Lawrence, and Prakash (2012) document that a significant number of finance professors do not participate in the investment market at all. Moreover, several studies document only a weak, if any, impact

of financial literacy on the quality of investment decisions (Gathergood 2012; von Gaudecker, 2011).

2.4 Review of Empirical Studies

Mahmood (2011) conducted a study in Pakistan to examine the role of various socioeconomic and demographic factors affecting the investment decision of investors. An investment model was developed that described the impact of past investment experiences of investors, variation in regulatory policies, asymmetric information, their marital status, gender, and reinvestment intentions of investors. They suggested that risk perception performs the key role in the investment decision process and that the variation in the government policies can impact the risk perception of an investor.

An empirical study conducted by Shyan, Gow and Hui (2010) among Taiwanese investors to determine their past experiences and their outcomes when exposed to the economic signals. Empirical results found no difference by gender to investor propensity to take risk. However, higher and lower perceptions of risk were indicated by investors according to their personal investment experience. Investors with little experience and structured notes were found to have significantly heightened perception of risk. Furthermore the married subjects believed that they have adequate financial management knowledge and can make better investment decision.

Natalie (2010) conducted an exploratory study on factors influencing investment decisions of potential investor. The study used a questionnaire of a sample of business students in an undergraduate institution. It was found that attitude, subjective norms, perceived behavior control, and risk propensity were significant predictors of investment intentions. It was also found that risk propensity did not moderate the relationship between the variables and the investment intentions. The findings showed that the education in business finance can help to influence the investment decision.

An empirical research related to equity selection process in Malaysia conducted by Tun-Pin and Ming-Ming Lai in 2011 indicated neutral information appeared to be the most important factor the Malaysian investors, followed by accounting information, social relevance and advocates' recommendations in equity selection process. Neutral information was positively correlated in while accounting information was negatively correlated with expected return. The study concluded that investment decision of investors did not rely on single integrated factor.

Shiv (2008) focused on the relation between emotions and the investment behavior by empirically tested the behaviour of 34 people in California, in which those people were given the limited amount of money and were asked to make their investment decision after enhancing their different emotions. The result suggested that the emotions triggered by a given situation help the decision making process by narrowing down the option of reaction, either by discarding those that are dangerous or by endorsing those that are advantageous. Emotions serve an adoptive role in speeding up the decision making

process. However, depending on the circumstances, moods and emotions can play a useful as well as disruptive role in decision making.

Al-Tamimi (2005) investigated the factors influencing individual investor behaviour on the United Arab Emirates (UAE) financial markets. The study found that the six most influencing factors in order of importance were: expected corporate earnings, get rich quick, stock marketability, past performance of the firm's stock, government holdings and the creation of the organised financial markets. He also found the least influencing factors to be expected losses in other local investments, minimising risk, expected losses in international financial markets, family member opinions and gut feeling on the economy. But the results of a similar study carried out by Al-Tamimi and Kalli (2009) on UAE investors indicate that the most influencing factor that affects the investment decision is religious reasons and the least affecting factor is rumors.

The study by Obamuyi, (2013) sought to determine the main factors influencing investment decisions of investors and how these factors are related to the investors' socio-economic characteristics in the Nigerian Capital Market. The study covers individual investors using convenient sampling method to obtain information from 297 respondents through a modified questionnaire. The results indicated that the five most influencing factors on investment decisions of investors in Nigeria are past performance of the company's stock, expected stock split/capital increases/bonus, dividend policy, expected corporate earnings and get-rich-quick. Also, the five least influencing factors included religions, rumors, loyalty to the company's products/services, opinions of

members of the family and expected losses in other investments. The study found that the socio-economic characteristics of investors (age, gender, marital status and educational qualifications) statistically and significantly influenced the investment decisions of investors in Nigeria.

Jagongo and Mutswenje (2014) conducted a survey by on the Factors Influencing Investment Decisions at the Nairobi Stock Exchange. The study used a structured questionnaire and conducted on the 42 investors out of 50 investors that constituted the sample size. The researcher confirmed that there seems to be a certain degree of correlation between the factors that behavioral finance theory and previous empirical evidence identify as the for the average equity investor. The researcher found out that the most important factors that influence individual investment decisions were: reputation of the firm, firm's status in industry, expected corporate earnings, profit and condition of statement, past performance firms stock, price per share, feeling on the economy and expected divided by investors.

2.5 Summary of the Literature Review

Empirical studies challenge the validity and relevance of standard finance and its underlying assumptions. Many behavioural finance scholars have carried out studies which show that people, and specifically investors, are not always governed by rationality when making decisions, including investment decisions. Cognitive psychological biases which are a manifestation of people's deviation from rational utilitarianism have been observed by behaviourists to influence investment decisions, leading to sub-optimization.

In addition to the behavioural factors, the price and location of the property are also considered important factors when making property investment decisions. Furthermore, the results indicate that property price changes and property market information have a very high impact on property investment decisions.

Real estate markets in Kenya are not well developed in terms of regulation. But a transformation is taking place, with CMA's introduction of REITs and on-going establishment of regulations that will enhance the opening up of trading in real estate properties (lands and buildings) at the NSE. Transactions in real estate properties have been taking place in Kenya among individual and institutional investors, without being undertaken via organized markets such as NSE. Home-ownership in Kenya is very low and housing demand is by far greater than its supply. This wide gap which is further escalated by rural-urban migration and population explosion, presents a great opportunity for real estate investors due to high demand for residential and commercial premises.

When you invest in real estate, you are buying physical land or property. Some real estate is cash generating think of an apartment building, rental houses, or strip mall where the tenants are sending you checks each month, you pay the expenses, and keep the difference as the profit. Real estate is often a more comfortable investment for the lower and middle classes because they grew up exposed to it (just as the upper classes often learned about stocks, bonds, and other securities during their childhood and teenage years). Its likely most people heard their parents talking about the importance of "owning a home". The result is that they are more open to buying land than many other

investments. When you invest in real estate, you invest in something tangible. You can look at it, feel it, drive by with your friends, point out the window, and say, “I own that”. For some people, that’s important psychologically.

It’s more difficult to be defrauded in real estate compared to stocks if you do your homework because you can physically show up, inspect your property, run a background check on the tenants, make sure that the building is actually there before you buy it, do repairs yourself with stocks, you have to trust the management and the auditors. Using leverage (debt) in real estate can be structured far more safely than using debt to buy stocks by trading on margin. Real estate investments have traditionally been a terrific inflation hedge to protect against a loss in purchasing power of the dollar. (Casteleijn, A, 2001).

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research methodology used for the study. Research Methodology gives details regarding the procedures used in conducting the study. The research design, population, data collection and analysis methods are elaborated.

3.2 Research Design

A research design is a programme to guide the researcher in collecting, analyzing and interpreting observed facts (Orotho, 2003). This study used the descriptive research design. A descriptive study is concerned with finding out who, what, where, when, or how much (Cooper and Schindler, 2006). This research is descriptive because it is concerned with discussing personal investment decisions (the 'what') and its influence on decisions by investors (the 'who") in real estate industry. The descriptive design was used since it ensures complete description of the situation as it is, making sure that there is minimum bias in the collection of data and to reduce errors in interpreting the data collected. The design also provided a detailed and highly accurate picture of the situation that was very useful in literature review. Both primary and secondary sources of data were used in this research.

3.3 Population

According to Mugenda and Mugenda (2003), a population refers to a complete set of individuals, cases or objects with some common observable characteristics, which differentiate it from other populations. The target population of this study was the real estate investors in Nairobi County (i.e. the 5,000 people who own rental (residential/commercial) house(s) within Nairobi CBD). According to the Kenya Postal Directory 2013 Nairobi edition, there were 45 real estate agents in Nairobi CBD and these agents were used to identify the individual investors. The study covered the whole area enclosed by Tom Mboya Street, University Way, Uhuru Highway and Haile Selassie Avenue.

3.4 Sample Design

The names and addresses of investors from Nairobi CBD were given by the brokerage firms. A simple random sample of seven real estate agents was selected from which 20 individual investors from it were randomly selected targeting one questionnaire each. This made a sample size of 140 respondents. Random numbers were obtained using a calculator, a spreadsheet, printed tables of random numbers, and by traditional methods of drawing slips of paper from a hat, tossing coins or rolling dice (Neville & Sidney, 2004). The researchers study adopted the random number tables. Simple random sampling helped to ensure that the sample represented the entire population, and was not biased or prejudiced towards any particular groups within the population. It also helped eliminate the tendency to select based on a basing factor (Cooper and Emory, 1995).

3.5 Data Collection

The data collection of this study was from both primary and secondary data. Primary data was collected using questionnaires which were examined by the researcher personally. The questionnaires were administered to the individual investors personally. This method was appropriate since it encouraged prompt responses from the respondents.

The questionnaire was structured into three sections. Section 1 sought to capture the general data (Bio-Data) about the investor. Section II involved data on personal investment decision while Section III was concerned with the data on effects of financial literacy on individual investment decisions. Respondents were asked to indicate their degree of how they were influenced by each of the items on five point Likert scale.

The researcher used secondary data to obtain more information and got clearer about the study. The researcher used and referred to articles, journals and reports to complete the literature review. The researcher also surfed the internet and websites in order to find more information and gather the electronic journals or articles that helped the researcher to do the research well.

3.6 Data Validity and Reliability

To ensure validity and reliability of the data that was collected, formulated questionnaires were pre-tested to establish their validity before they were administered to the respondents. The questionnaires were structured to enhance the research objective.

Further, the researcher discussed in details the contents and the structure of the questionnaire with the supervisor before going to the field to ensure validity.

3.7 Data Analysis

After all primary data had been collected; the researcher classified it in accordance with variables. Statistical package for social scientist (SPSS) data analysis program was utilized to generate inferential and descriptive statistics; charts and percentages from the respondents to establish the relative importance and weight for each variable. MS excel spread sheet tools was utilized in presenting the quantitative data. The researcher used Simple Regression Model, whereby the variables of the interest here were financial literacy which was the independent variable and investment decisions the dependent variable. Thus the tentative hypothesis was that the higher the level of financial literacy results in better investment decision other things held constant.

3.7.1 Simple Regression model

The Simple Regression equation or function that includes the independent and dependent variables for this study was computed as follows as borrowed from the study of Dimitrios, (2007).

$Y = \beta 0 + X_1 \beta_1 + X_2\beta_2 + X_3\beta_3 + \varepsilon$

Where β = regression coefficient (parameter of the function)

Y=Personal Investment decision measured by determining the value of real estate investments made.

X_1 = Financial Literacy measured by the level of financial knowledge attained and number of years in real estate industry.

X_2 = Gender of the respondent.

X_3 = Age of the respondent.

ε = error term

The simple regression function shown above investigated the effect of the independent variable on dependent variable at the same time and of the same set of analysis. Pearson Correlation Analysis is the statistical tool that indicates the strength and direction of the linear relationship between two random variables. Correlation was used to check the overall strength to establish regression model and individual significance of the independent variables. Reliability test and Regression analysis were also computed.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

In this chapter data obtained from the questionnaires was examined analyzed and a presentation of the finding done.

4.2 Data Collection

Data was collection from both primary and secondary sources. The researcher used the questionnaire to collect data from the real estate investors who were the respondents. The study findings revealed that majority of the respondent (92%) were male while 8% were female. It was also noted that majority of the respondents were aged over 50 years. The study findings found that majority of the respondents had reached up to an undergraduate level as their highest level of education.

4.3 Response Rate

Table 4.1: Analysis of the response rate

	Frequency	**Percentage**
Returned	115	82.1%
Not returned	25	17.9%
TOTAL	**140**	**100**

Source: Author, 2014

Table 4.1 shows that out of the target sample of 140 respondents, the study managed to collect data from 115 respondents whereby the questionnaires were filled and returned

thereby making a response rate of 82.1%, which is an adequate response rate for statistical reporting.

4.4 Data Validity and Reliability Test

Reliability is a fundamental issue in any measurement scale. Scale reliability is considered as the proportion of variance attributed to the true score of the latent construct (DeVellis, 1991). It is usually measured by internal consistency reliability that indicates the homogeneity of items comprising a measurement scale. Usually, the internal consistency of a measurement scale is assessed by using Cronbach's coefficient alpha. It is generally recommended that if a measurement scale having a Cronabach's coefficient above 0.70 is acceptable as an internally consistent scale so that further analysis can be possible. However, if the scale has a coefficient alpha below .70, the scale should be examined for any sources of measurement errors such as inadequate sampling of items, administration errors, situational factors, sample characteristics, number of items, and theoretical errors in developing a measurement scale (Gable & Wolf, 1993).

Table 4.2: Summary of the Measurement Reliability (Cronbach's Alpha)

Measurement Scale	Number of questionnaires	Number of Items	Cronbach's Alpha (α)
Financial Literacy	5	3	0.240
Personal Investment Decision	5	3	0.443
Effects of financial literacy on personal investment decision	5	3	0.434

Source: Author, 2014

In the pilot study, 5 questionnaires were used, they were filled by the respondents chosen from the non-sampled population but within the target population and the results are shown in the table above. It was evident that all the measurement scale the three variables had a Cronbach's coefficient above, Financial Literacy 0.240, Personal Investment Decision 0.443, Effects of Financial Literacy on Personal Investment Decision 0.434 which in this case is acceptable as an internally consistent scale for further analysis to be possible.

4.5 Descriptive Statistics

The respondents were requested to indicate their level of extent with the following factors with regard to investing. The responses were rated on a five point Likert scale where; 1 = Not at all, 2 = Small extent, 3 = Moderate extent, 4 = Great extent, 5 = Very great extent as shown in Table 4.3.

Table 4.3: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Personal Investment Decision	115	1.00	5.00	3.4000	.89089
Financial literacy	115	1.20	5.00	3.7043	.81708
Gender of the respondents	115	1.00	2.00	1.2174	.41428
Age of the respondents (in years)	115	2.00	4.00	3.5304	.67955
Valid N (list wise)	115				

From the study findings shown in the table above, majority of the respondents shows that Financial literacy had a high mean score of (3.7043) and Standard deviation of (0 .81708), Age of the respondents (in years) had a mean of 3.5304 and Standard deviation of (0 .67955), 31 – 40 with frequency of 12 representing (10.4%), 41 – 50 frequency 30 representing (26.1%). Over 50 with frequency of 73 representing (63.5%) while Personal Investment Decision had a mean of (3.4000) standard deviation of (0.89089) and Gender of the respondents had a mean (1.2174) standard deviation of (41428) respectively. 90 were male (78.3%)while were 25 female (21.7%).

4.6 Correlation Analysis

Two predictor variable are said to be correlated if their coefficient of correlations is greater than 0.5. In such a situation one of the variables must be dropped from the analysis. As shown in table 4.16, none of the predictor variables had coefficient of correlation between themselves more than 0.5 hence all of them were included in the model. The matrix also indicated high correlation between the response and predictor variables that is, financial literacy, gender of the respondent and age of the respondent.

Table 4.4: Pearson Correlation Coefficients

	Personal investment decision	Financial literacy	Gender of the respondent	Age of the respondent
Personal investment decision	1.000			
Financial literacy	.736	1.000		
Gender of the respondent	.552	.418	1.000	
Age of the respondent	.567	.428	.447	1.000

Source: Author, 2014

The correlation analysis was done aimed at establishing the nature of the relationship between Personal investment decision and financial literacy witnessed in the study. A correlation coefficient of 0.736 was obtained suggesting a strong positive relationship between the two variables. This indicates that those investors who have financial literacy are most likely to make viable personal investment decisions.

4.7 Regression Analysis and Hypothesis Testing

A simple regression model was applied to determine the relative importance of each of the variables with respect to the Personal investment decision

The regression model was as follows:

$Y = \beta 0 + X_1 \beta_1 + X_2\beta_2 + X_3\beta_3 + \varepsilon$

Where β = regression coefficient (parameter of the function)

Y = Personal Investment decision measured by determining the value of real estate investments made.

X_1 = 0.736 Financial Literacy measured by the level of financial knowledge attained and number of years in real estate industry.

X_2 = Gender of the respondent

X_3 = Age of the respondent

ε = error term

4.7.1 Strength of the Model

Table 4.5: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.912[a]	.832	.816	.66403

a. Predictors: (Constant), Financial Literacy, Gender of the respondent, Age of the respondent

Analysis in Table 4.10 shows that the coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables) R2 equals 0.832 (83.2%), that is, Financial Literacy, Gender of the respondent, Age of the respondent leaving only 16.8 percent unexplained.

4.7.2 Analysis of Variance

Table 4.6: Analysis of Variance

ANOVA[b]

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	20.565	4	5.141	11.660	.000[a]
Residual	15.874	111	.441		
Total	36.439	115			

a. Predictors: (Constant), Financial Literacy, Gender of the respondent, Age of the respondent

b. Dependent Variable: Personal investment decision

The summary of the basic logic of ANOVA is the discussion of the purpose and analysis of the variance. The purpose of the analysis of the variance is to test differences in means (for groups or variables) for statistical significance. The accomplishment is through analyzing the variance, which is by partitioning the total variance into the component that is due to true random error and the components that are due to differences between means. The ANOVA analysis is intended to investigate whether the variation in the

independent variables explain the observed variance in the outcome in this study. The ANOVA results indicate that the independent variables significantly in the F-Statistics produced (F=11.660) was significant at 0 per cent level (Sig. F<.005) thus confirming the fitness of the model. Analysis in table below shows that the coefficient of determination (the percentage variation in the dependent variable being explained by the changes in the independent variables).

4.7.3 Coefficients of Determination

Table 4.7: Coefficients of Determination

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.022	1.029		.021	.783
	Financial Literacy	.969	.132	.061	.519	.004
	Gender of the respondent	.066	.137	.096	.833	.001
	Age of the respondent	.114	.145	.056	.459	.003

a. Dependent Variable: Personal investment decision

The established multiple linear regression equation becomes:

$Y = 0.022+0.969X_1 +0.066X_2 +0.114 X_3$

Where

Constant = 0.022, shows that if Financial Literacy, Gender of the respondent and Age of the respondent are all rated as zero, Personal investment decision would be 0.022.

X_1= .969, shows that one unit change in Financial Literacy results in 0.969 units increase in Personal investment decision

X_2= .066, shows that one unit change in gender results in 0.066 units increase in Personal investment decision.

X_3= .114, shows that one unit change in age results in 0.114 units increase in Personal investment decision.

4.8 Discussion of Research Findings

Major factors affecting investment decision making according to the findings of the study include investment risk, returns, trend in interest rates and investment portfolio which are the financial concepts this have been illustrated by table 4.4. They are various types of risks that are taken into consideration in making investment decisions such market risks, liquidity risks, strategy risks and regulatory risks which have a very great effect on the decisions as shown in table 4.5. This adds to Benheim (1998) conclusion that if individuals have insufficient knowledge concerning the retirement savings process, they

are unlikely to be able to make optimal retirement savings decisions and that lack of financial education may result poor investment decision.

Roberts and Henneberry (2007) explore the decision making processes of property investors. The study covered a broader sample of countries across three European markets namely France, Germany and U.K. Interviewees in this study constituted those most likely to engage directly in property investment decision-making. The study proposes a ten stage normative model. The study finds that the actual decision-making process is much simpler than the normative model suggested. Both the UK and the French and German models are found to follow a broadly similar path, with investors setting a strategy, searching for properties, undertaking an analysis of market conditions and purchasing properties that fulfill that strategy (Roberts and Henneberry, 2007). The correlation analysis was done aimed at establishing the nature of the relationship between Personal investment decision and financial literacy witnessed in the study. A correlation coefficient of 0.736 was obtained suggesting a strong positive relationship between the two variables. This indicates that those investors who have financial literacy are most likely to make viable personal investment decisions.

In regards to the irrational factors, this is the behavioral factors such stereotype, preferences and external outcomes. There is an insignificant influence of such factors on investment decision making. Table 46 to table 4.8 shows a small percentage of real estate investors considering these factors while making investment decisions.

This can be further illustrated by simple regression model, where the independent variable is the financial literacy and the dependent variable is the investment decision. Using the above findings the study found that financial literacy has a strong positive relationship on investment decision.

The findings shows that majority of the respondents shows that Financial literacy had a high mean score of (3.7043) and Standard deviation of (0 .81708), Age of the respondents (in years) had a mean of 3.5304 and Standard deviation of (0 .67955), 31 – 40 with frequency of 12 representing (10.4%), 41 – 50 with frequency of 30 representing (26.1%). Over 50 with frequency of 73 representing (63.5%), the findings shows that those over 50 had a high frequency of 73 representing (63.5%) indicating that advanced age has high influences over personal investment decision with a mean of (3.4000) and standard deviation of (0.89089). Gender of the respondents had a mean of (1.2174) and standard deviation of (41428) respectively. 90 respondents were male representing (78.3%) while female were 25 representing (21.7%).

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The purpose of this study was to determine the effects of financial literacy on personal investment decisions of real estate investors in Nairobi County. Having identified the problem of study in chapter one, reviewed existing literature and shown gaps of knowledge in chapter two, chapter three explained the methods that the study used to collect data and chapter four analyzed the data obtained from the study. This chapter provides the summary of the findings, the conclusions and recommendations of the study based on the objective of the study. The chapter finally presents the suggestions for further studies.

5.2 Summary of Findings

From the study findings, majority of the respondent (92%) were male while 8% were female, this indicates a gender gap in the real estate industry in Nairobi. The age composition was well distributed with majority (63%) being over 50 years of age. Most of the respondents (87%) had reached up to a minimum of diploma education as their highest level of education and this implies that majority had adequate skills and knowledge to respond to the questions asked in the study. The data collected showed that 69% of the respondents had been in the real estate industry for more than 10 years, and 21% for 6-10 years and 10% for 1-5 years. This indicated that the respondents had the required experience in investment to answer the study questions.

It was revealed from the study findings that majority of the respondents (72%) had invested more than 10 million while 28% invested less than 10 million shillings. All the respondents indicated that they would like their investment to last for more than 10 years. It was also noted that 58% of the respondents were initially ready to lose up to 15% of their investment while 42% were ready to lose between 15-30% of their investment.

In terms of motivation to investment, majority of the respondents indicated that their personal investment decision was greatly motivated by retirement, career change, cash flow, and tax shelter. 68% of the respondents had some academic financial knowledge with 62% being members of a financial professional body. 85% of the respondents also indicated that financial advice from their financial professional body influenced their decision to invest in real estate to a great extent.

5.3 Conclusion

The findings on how financial literacy has an effect on investment decision making by real estate investors shows that a high percentage of investors considers financial concepts such as returns, investment risks, investment portfolio management and trends in interest rates at a great extent. The results indicate that in general real estate investors need to be financially literate in-order to make investment decisions. Beal and Delpachitra (2003) argued that having financial literacy skills like risks, investment portfolio, returns, diversification of the portfolio enable fund managers to make informed investment decisions about their money and minimizes the chances of being misled on financial matters. In addition Rooij et al. (2007) found that financial literacy affects

financial decision-making because individuals with low literacy are more likely to rely on other people as their main source of financial advice and are less likely to make informed investment decisions.

The findings on how irrational factors which do not depend on financial literacy rather depend on investor attitude, behavior and characteristics such as stereotype, past performance and individual talents, portrays a low percentage and therefore has a less effect on investment decision. Therefore to make effective investment decision, investor needs to select the right stock among different alternatives at the right time. In order to choose superior stock, investor has to evaluate alternative investments and specify criteria to minimize those alternatives and rank the lifted ones (Albadvi et al., 2006). The criteria or factors that affect investment decision could be categorized to rational or analytical factors because they have a significant effect on decision making by real estate investors in Nairobi which implies that financial literacy has a strong positive relationship with investment decision making.

5.4 Recommendations

The findings of the study show that acceptability and usage of financial literacy in making decisions is important. Financial decisions are made in all organizations and individuals. Organisations and individuals should therefore be ready to invest in building capacity in terms of financial literacy where it is required. This would foster clearly calculated decisions being made and reduce the number of bad outcomes from investment decisions.

The research would also recommend that investment agencies should partner with other stakeholders in increasing the amount of information available for use in making clear investment decisions to investors and simplified financial courses for learning institutions in all sectors. The researcher also recommends for more regulatory guidelines concerning financial literacy in key institutions as is the case for accountants and procurement officers who need certification to actively engage in their professional activities.

5.5 Limitations of the Study

This study was done in selected real estate investors in Nairobi. This location has given sufficient proof to the study objectives of the research but may not serve all investment agencies due to different aspects of the investment agencies. Another constraint to the current study on the effect of financial literacy on investment decisions making was collecting data as the respondents were scattered in different parts of the town and during administration the respondents asked for additional time to return the questionnaires. Many of the underlying assumptions about the effect of financial literacy on investment decisions making by real estate investors emphasize the nature of investment as dynamic.

The study being based in one region (Nairobi) would not be able to gauge the attitudes of the entire country towards the study and its influence. Another limiting factor was that the sample of respondents was limited to a small number because of data collection cost. The design used was ex-post-facto research design where the researcher has no control over the independent variables because the effects of financial literacy on investment decisions have already occurred.

5.6 Suggestions for Further Research

The study was limited to real estate investors. The researcher would thus recommend for further study in the other areas of financial literacy among investors across the board and look at its relevance to all elements of the economy. Further study in financial literacy and its effect on key decisions and overall performance would improve literature on the topic as well as improve the capacity of the organizations.

The study recommends for further study in the impact of inflation rates on investment decisions and ways to mitigate against sudden losses due to inflation fluctuation. The study also recommends further study into the effect of non – financial factors on the process of making investment decisions.

There should also be a study to identify the individual investors and the necessary steps that can be undertaken by incoming investors to manage the challenges identified. The researcher also recommends study of other variable to be compared with the findings of this study.

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APPENDICES

APPENDIX I: LETTER OF INTRODUCTION

Kevin Mmbaya Musundi,

University of Nairobi,

School of Business,

P.O Box 30197,

Nairobi.

Dear Sir/Madam,

I am a Masters student at the University of Nairobi, School of Business. In partial fulfillment of the requirement for Master of Science Finance, I am conducting a survey on the effects of financial literacy on personal investment decision of the real estate investors in Nairobi County.

I am glad to inform you that you have been selected to form part of the study. I would therefore kindly request you for assistance in completing the attached questionnaire which forms a major input of the research process. The information and data will strictly be used for academic purposes only and strict confidence shall be observed on the same.

You cooperation will go a long way in ensuring the success of this project.

I would like to thank you in advance for your time and consideration.

Yours Sincerely,

Kevin Mmbaya Musundi,

University of Nairobi.

APPENDIX II: QUESTIONNAIRE

Instructions: Kindly take a few minutes to respond to this questionnaire. Information supplied is purely for academic research purposes and will be treated with utmost confidentiality.

PART I: Background Information

1) What is your gender? (tick one)

   Male [ ] Female[ ]

2) Please indicate your age in years _____

3) What is your highest level of education?

   No formal education [ ] Primary level [ ]

   Secondary level [ ] Diploma [ ]

   Undergraduate [ ] Post Graduate [ ]

4) How long have you been in real estate industry? _____

PART II: Personal Investment Decision Making

5) Generally, how much money have you invested in real estate?

   Less than 5 million [ ] 5-10 million [ ]

   11- 15 million [ ] 16- 20 million [ ]

   21-30 million [ ] 31-50 million [ ]

   Above 50 million [ ]

6) What duration would you like your investment to last?

Less than a year [ ] 1-5 years [ ]

6-10 years [ ] More than 10 years [ ]

7. What level of your initial investment were you ready to lose?

Between 5 & 10% [ ] Between 11 &15% [ ]

Between 16 & 20% [ ] Between 21 & 25% [ ]

Between 26 & 30% [ ] Above 30% [ ]

8). To what extent are the following key motivators for investing in real estate considered when making decision real estate investment? 1. Not at all, 2.small extent, 3. Moderate extent, 4. Great extent, 5, very great extent

Key motivators for investing	**1**	**2**	**3**	**4**	**5**
Retirement					
Cash flow					
Life style change					
Tax shelter					
Career change					

Part III Financial literacy factors on investment decisions

10. (a) Do you have any financial academic knowledge?

Yes [ ] No [ ]

(b) If 'Yes' in above question, kindly indicate to what level is your financial academic knowledge?

Certificate level [ ] Diploma level [ ]

Undergraduate level [ ] Post Graduate level [ ]

11. (a) Are you a member of any financial professional body?

Yes [ ] No [ ]

(b) Do you get any advice concerning real estate investment from your financial professional body?

Yes [ ] No [ ]

(c) To what extent did that advice influence your decision to invest in real estate?

Not at all [ ] Small extent [ ] Moderate extent [ ]

Great extent [ ] Very great extent [ ]

12. To what extend do you consider the following factors when making decision on investment of funds? 1. Not at all, 2.small extent, 3. Moderate extent, 4, Great extent, 5, very great extent

	1	**2**	**3**	**4**	**5**
Returns					
Investments risks					
Trends in interest rates					
Investment portfolio					

13. To what extent do you consider the following areas of risks when making investment decisions? 1. Not at all, 2.small extent, 3. Moderate extent, 4. Great extent, 5, very great extent

Risk	**1**	**2**	**3**	**4**	**5**
Market risks					
Liquidity risks					
Valuation risks					
Operational risks					
Regulatory risk					
Strategy risk					

14) To what extent do you ascribe any good outcomes to your own talents?

Not at all [ ] Small extent [ ] Moderate extent [ ]

Great extent [ ] Very great extent [ ]

15) To what extent do you blame bad outcomes on external outcomes?

Not at all [ ] Small extent [ ] Moderate extent [ ]

Great extent [ ] Very great extent [ ]

16) To what extent do you tend to make decisions based on stereotypes formed from experience?

Not at all [ ] Small extent [ ] Moderate extent [ ]

Great extent [ ] Very great extent [ ]

Thank you for your participation

APPENDIX III: DEMOGRAPHIC DATA

Gender of the respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	90	78.3	78.3	78.3
	Female	25	21.7	21.7	100.0
	Total	115	100.0	100.0	

Age of the respondents (in years)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	31 – 40	12	10.4	10.4	10.4
	41 – 50	30	26.1	26.1	36.5
	Over 50	73	63.5	63.5	100.0
	Total	115	100.0	100.0	

Financial literacy

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.20	3	2.6	2.6	2.6
	1.80	6	5.2	5.2	7.8
	2.80	3	2.6	2.6	10.4
	3.00	9	7.8	7.8	18.3
	3.20	12	10.4	10.4	28.7
	3.40	6	5.2	5.2	33.9
	3.60	8	7.0	7.0	40.9
	3.80	3	2.6	2.6	43.5
	4.00	24	20.9	20.9	64.3
	4.20	12	10.4	10.4	74.8
	4.40	19	16.5	16.5	91.3
	4.60	7	6.1	6.1	97.4
	5.00	3	2.6	2.6	100.0
	Total	115	100.0	100.0	

Personal Investment Decision

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	4	3.5	3.5	3.5
	2.00	4	3.5	3.5	7.0
	2.20	8	7.0	7.0	13.9
	2.40	4	3.5	3.5	17.4
	2.60	8	7.0	7.0	24.3
	3.00	4	3.5	3.5	27.8
	3.20	12	10.4	10.4	38.3
	3.40	8	7.0	7.0	45.2
	3.60	20	17.4	17.4	62.6
	3.80	12	10.4	10.4	73.0
	4.00	11	9.6	9.6	82.6
	4.20	8	7.0	7.0	89.6
	4.40	3	2.6	2.6	92.2
	5.00	9	7.8	7.8	100.0
	Total	115	100.0	100.0	

Invest more in real estate

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	115	100.0	100.0	100.0

Age of the respondents (in years)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	31 – 40	12	10.4	10.4	10.4
	41 – 50	30	26.1	26.1	36.5
	Over 50	73	63.5	63.5	100.0
	Total	115	100.0	100.0	

Extent to make decisions based on stereotypes formed from experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Small extent	6	5.2	5.2	5.2
	Moderate extent	12	10.4	10.4	15.7
	Great extent	30	26.1	26.1	41.7
	Very great extent	67	58.3	58.3	100.0
	Total	115	100.0	100.0	