CONTRIBUTION OF NON-FINANCIAL AND FINANCIAL INVESTMENT APPRAISAL FACTORS IN INFLUENCING THE CHOICE OF INVESTMENTS BY REAL ESTATE INVESTORS IN KISUMU CITY, KENYA

BY

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A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN FINANCE

DEPARTMENT OF ACCOUNTING AND FINANCE

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DECLARATION

I declare that this research project has not been presented anywhere for any award and that all sources of information have been acknowledged by means of references

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ACKNOWLEDGEMENT

I gratefully acknowledge the assistance I have got from friends, colleagues, my family members and my lecturers. This work is a struggle and it needs a lot of dedication. Their encouragements and support, both financial and moral, inspired me to reach this far. God bless you all. Amen.

DEDICATION

I dedicate this Project Report to my children Yvonne Arunga, Amollo Ambole, Angus Otieno, Adelaide Randiga, Akumu Fiona, for their support, and especially to my last born, Roxanne Hawi for her continuous encouragement throughout this process.

ABSTRACT

The last decade has seen phenomenal investments in real estate. According to a report by Wisconsin School of Business in 2016, Association of Foreign Investors in Real Estate (AFIRE) with an estimated $2 trillion or more in real estate assets under management globally, reported intention to increase their investment in US. Real estate investment contributed 9% of Kenya's GDP in 2016. In Kisumu City, real estate investors have a total per annum return of 13.3%, with an income yield of 4.8% and annual capital appreciation of 8.5% which is considered as low. However, despite many studies on the subject of investment, none covers how financial and non-financial factor appraisal contributes to choice of investment. They also do not investigate other areas of investment by the real estate investors. Therefore, choice and extent of investments by real estate investors, the contribution of non-financial appraisal factors and the contribution of financial appraisal factors, in choice of investments by real estate investors in Kisumu City, are unknown. The general objective was to establish contribution of investment appraisal factors in investment choices by real estate investors in Kisumu. Specifically the study sought to establish choice and extent of investments by real estate investors, establish contribution of non-financial appraisal factors in choice of investments by real estate investors and establish contribution of financial appraisal factors in choice of investments by real estate investors in Kisumu. The study was anchored on Rational Choice Theory and adopted a descriptive research design. The target population was all 9900 real estate investors in Kisumu. Sample size was 385, obtained using stratified sampling technique. Primary and secondary data were obtained using semi-structured questionnaire. Reliability test at Cronbach's Alpha threshold of 0.7 was done using pilot test results obtained from a survey of 10 investors and yielded coefficient of above 0.701 implying internal consistency. Face, Construct and Content validity test were done using expert reviewers. Data analysis was done using descriptive statistics. The findings are that the choice and extent of investments' overall mean response score for all the investments was 3.000, coded as moderate meaning that the extent of investment is moderately practiced by real estate investors in Kisumu. The highly rated non-financial appraisal factors were operational benefits (Mean = 4.000, Std. Dev =1.37), risks (Mean = 4.00, Std. Dev = .533), public image (Mean = 4.00, Std. Dev = .840), and power and prestige (Mean = 4.00, Std. dev = .614), payback period (Mean = 4.000, Std. Dev =1.29) and capital outlay invested (Mean = 4.00, Std. dev = 1.32), meaning that they were highly considered and highly rated in terms of financial appraisal factors by investors, The study concludes that choice and extent of investment is moderately practiced; contribution of non-financial appraisal factors and financial appraisal factors in choice of investments by real estate investors is moderate. The study is expected to benefit prospective investors in making future investment choices, government in formulating investment policy and researchers in conducting further research.

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LIST OF ABBREVIATIONS

NSE	Nairobi Securities Exchange
SPSS	Statistical package for social sciences
GOK	Government of Kenya
IRR	Internal Rate of Return
NPV	Net Present Value

OPERATIONAL DEFINITION OF TERMS USED IN THE STUDY

Financial Factor: Factors used to quantitatively appraise investment in advance including return on investment, average rate of return, net present value and payback period

Investment Appraisal: Investment appraisal is a process and technique used to identify the attractiveness of an investment

Investment Choice: An activity chosen to invest in which may include single or multiples of real estate and construction, agriculture, health, education, energy, hotel and accommodation, entertainment, art and culture, merchandising and consumer goods, banking and insurance, tourism and ICT

Investment product: is a contract between two agents stipulating movements of cash now and in the future. In this study, investment products will include: corporate bonds, equities, real estate and government securities.

Investment return: The yield that an investor predicts he will earn on average being the price of investing in financial investment product.

Investment: Commitment of money or capital to purchase financial instruments or other assets to gain profitable returns in form such as interest, income, dividend or appreciation of the value of the instrument.

Liquidity risk: risk that a given security or asset cannot be traded quickly enough in the market to prevent a loss or make the required profit.

Non-financial Factor: Factors used to qualitatively appraise investment in advance including legal, environmental, social aspects measured in terms of quality of life or even lives saved; increased customer satisfaction, higher staff morale or competitive advantage and; risk in terms of business and operational risk.

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CHAPTER ONE
INTRODUCTION

This chapter presents the background to the study, statement of the problem, research objectives, hypotheses, justification for the study and the conceptual framework. It also highlights the context of the study which is real estate investors in Kisumu City, Kenya

1.1 Background of the Study

The last decade has seen phenomenal investments in real estate. According to a report by Wisconsin School of Business (2016), Association of Foreign Investors in Real Estate (AFIRE) reported intention to maintain or increase their investment in the US. AFIRE members are among the largest international institutional real estate investors in the world and have an estimated $2 trillion or more in real estate assets under management globally. Projects worth billions of shillings have either been completed or are under construction. The real estate sector contributed 9% of Kenya's GDP, according to a Real Estate Report released by Cytonn Investments (2016). According to a report on Real Estate Sector in Kenya, A Review of 2016 and Forecast for 2017 by Okumu (2017) Kenya's real estate market is well diversified in terms of income, geography and types. In terms of income, there is a clear segmentation of high, middle and low income. Kenya is a diverse country from the long coast line having prime beach properties, to the highlands dotted with large and small scale farms and arid and semi-arid lands to the north with hidden reserves in the forms of mineral and oil resources. The main property types include retail, office, residential, Industrial and special properties mainly found in cities, towns and urban centers. The key drivers of the real estate market include demographics, income, availability and cost of credit, government policy, advertising, price, and changing lifestyles. According to Hass Consult's land price index for the first quarter of 2014, an investor in Kenya was better at land than stocks, bonds or treasury bills. In the same year, 60 per cent of Diaspora investments went to real estate.

In Kisumu, the lakeside city too has seen unprecedented development within the last five years. Like Nairobi, the trend in Kisumu is to move away from the city's hub to the outskirts. Formerly desolate areas such as Awasi and Kibos have seen developers erecting residential units for owner occupation or rental. And while Milimani was the preferred address a few years ago, the picturesque Riat Hills has lately seen investments in billions of shillings. In 2014, a high profile real estate developer in the name of Coromandele

Design embarked on a project to develop 30 Swedish style villas on 8.5 acres with an initial budget of more than a billion shillings. Despite these drive for real estate investment a research note by Cytonn Real Estate (2016), the residential real estate sector in Kisumu presents investors with a total per annum return of 13.3%, with an income yield of 4.8% and annual capital appreciation of 8.5%. However, more attractive income yields of 9.6% p.a. are available in investing in mixed-use developments. The same report cites a number of challenges facing real estate investment as low returns, poor planning, inadequate space for expansion, political instability and intolerance and fraud. Despite these problems investment in the sector continues. It is essential to address the challenges by looking at factors contributing to the choice of investments among the real estate investors.

Investment is the commitment of investors' funds to derive future income in the form of interest, dividend, premiums, pension benefits or appreciation in the value of their capital (Sharpe *et al.* 2001). An investment is an entity that is purchased or established with the hope that it will generate income or will appreciate in the future. Investment also implies any mechanism used for the purpose of generating future income. In an economic sense, an investment is the purchase of goods that are not consumed today but are used in the future to create wealth. Additionally, the constructed building or other facility used to produce goods can be seen as an investment. The production of goods required to produce other goods may also be seen as investing. Economic growth can be encouraged through the use of sound investments at the business level. This allows the economy to grow through increased production, based on the previous levels.

On the other hand, investment choices refer to investment avenues available for savers in any market. Some of them are marketable and liquid while others are non-marketable. Some of them are highly risky while others are almost riskless. The investor has to choose proper avenues from among them depending on his preferences, needs and ability to assume risk (Brigham et al., 2001). These investment avenues include: equity shares, corporate bonds, real estates, government securities and bank cash and deposits (Sharpe *et al.*, 2001).

There are various investment options available in Kenya with some being marketable and liquid while others are non-marketable. Some are highly risky while some others are almost riskless. The investor therefore has the option of choosing carefully depending on

his preferences, needs and ability to assume risk. (Brigham et al., 2001). In Kenya, it is not uncommon to find these individuals investing in property as the first option and in complete disregard to the other investment options. There are various factors that affect the decisions of the investor and different sets of factors have been used in various studies to explain how they influence the decisions of the individual investor. According to Saini (2012) there are seven categories of investment factors namely; risk tolerance, return needs, investment horizon, tax exposure, market trends, investment needs and dependants needs.

Investment returns refers to what accrues from an investment and it represents the sum of the products of the possible outcomes and the probabilities that those outcomes will be realized, (Pandey, 2008). Copeland *et al*. (2005) observes that an investment's expected return is an average of the possible returns from an investment where each of these returns is weighted by the probability that it will occur. Investors generally are expected to have a higher degree of knowledge as pertains to the various investments they make. Knowledge of past returns of asset categories is normally poorly understood by investors.

Investment appraisal focuses on how to identify the attractiveness of an investment. An evaluation of the attractiveness of an investment proposal is done. Methods applicable may include analyses of average rate of return, internal rate of return, net present value, and or payback period. According to Kolaksazov (2015), investment appraisal assesses the viability of an investment and the value it will generate. In the context of a business case, the primary objective of investment appraisal is to place a value on benefits so that justification for costs can be found.

Non-financial factor appraisal and financial factor appraisal often take place. Non-financials such as such as legal, which is the value of an investment enabling an organization to meet current or future legislation; environmental, which is the impact of the work on the environment and; social factor for charitable organizations. In this regard, return on investment could be measured in terms of 'quality of life' or even 'lives saved'; operational benefits may be expressed in terms of 'increased customer satisfaction', 'higher staff morale' or 'competitive advantage'; risk in terms of business and operational risk. An investment decision may be justified because it reduces risk. Gotze, Röhrich, (2007) contends that financial factor appraisal uses most easily quantifiable approaches but it can only be applied to benefits that produce financial returns. Upon consideration of

financial and or non-financial factors investment choices may range through real estate and construction, agriculture, health, education, energy, hotel and accommodation, entertainment, art and culture, merchandising and consumer goods, banking and insurance, tourism and ICT. It is expected that investment appraisal factors drive the choice of investment.

A number of studies have been conducted in the field of investment. Merikas *et. al.*(2003) and Krishnan and Brooker (2002) studied the factors influencing the decisions of investor who use analysts' recommendation in the economies of UK and Greece but no study yet on listed firms in Kenya. Mbugua (2011) studying factors affecting the choice and growth of SMEs in motor vehicle spare parts in Kirinyaga Road, Nairobi, Kenya established that inadequate finances and managerial skills hindered growth. A study by Hodge (2003) analyzed investors' perceptions of earnings quality, auditor independence, and the usefulness of audited financial information. He concluded that lower perceptions of earnings quality are associated with greater reliance on a firm's audited financial statements and fundamental analysis of those statements when making investment decisions. On the contrary, others (Fischer and Gerhardt, 2007; Krishnan and Brooker, 2002 and Brown and Cliff, 2004) studied individual investor investment decision making processes using exploratory research design in the developed economies of Jordan, UK and Germany as opposed to listed firms in Kenya. Jagongo and Mutswenje (2014) established the factors influencing investment decisions at the Nairobi Stock Exchange. They 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.

The studies were involved in different areas of investment but did not investigate the contribution of non-financial factors in choice of investment by real estate investors. It is not known how non-financial factors separately contribute to choice of investment among real estate investors in Kisumu City. Again, it is unknown whether the real estate investors in Kisumu City, with non-financial factors in mind, have invested in other areas and the extent to which this is done.

More studies have also been conducted on the subject of investment and investment choices. Mutwiwa and Fondo (2014) investigated the factors that influence investment in the mining sector in Kenya. The results reveal that labour related issues, capital investment decision and country's risk have significant and positive effects on investment in mining, while land tenure administration and entrepreneurship have insignificant effects on investment in mining in Kenya. Krishnan and Brooker (2002) analyzed the factors influencing the decisions of investor who use analysts' recommendations to arrive at a short-term decision to hold or sell a stock. The results indicated that a strong form of the analyst summary recommendation report, i.e. one with additional information supporting the analysts' position further, reduces the disposition error for gains and also reduces the disposition error for losses as well. Wambua (2013) in Kenya studied the relationship between the profitability and the liquidity of commercial banks using descriptive research design for 44 commercial banks operating in the years 2008 to 2012. Lubos and Stambargh (2001) studied relationship between market wide liquidity and investment pricing, Greenwood (2014) analyzed time series of investor expectations of future stock market returns from six data sources between 1963 and 2011 and found that the six measures of expectations are highly positively correlated with each other, as well as with past stock returns and with the level of the stock market. Dimitrios (2007) investigated determinants of investors behavior in the Athens and found that individual investors rely more on newspapers/media and noise in the market when making their investment decisions, while professional investors rely more on fundamental and technical analysis and less on portfolio analysis. Karanja (2007) identified factors influencing investment companies' portfolio choice among fund managers at capital markets authority. The findings from this research indicated that investment objective and regulatory framework are the most important factors influencing portfolio choice amongst investment companies

From the empirical evidence, none of the studies covered financial factors and investment by real estate investors. It is unknown the contribution of financial factors on choice of choice of investments among real estate investors. Further, the same is not known among real estate investors in Kisumu City. Knowledge is lacking on whether the real estate investors in Kisumu City, even after considering financial factors, have invested in other areas and the extent to which this has happened.

1.2 Statement of the Problem

An investment refers to the commitment of investors' funds to derive future income in the form of interest, dividend, premiums, pension benefits or appreciation in the value of their capital. Real estate investment contributed 9% of Kenya's GDP in 2016. The residential real estate in Kisumu presents investors with a total per annum return of 13.3%, with an income yield of 4.8% and annual capital appreciation of 8.5%. However, income yields of 9.6% p.a. are available in investing in mixed-use developments. This is still low. The same report cites a number of challenges facing real estate investment as low returns, poor planning, inadequate space for expansion, political instability and intolerance and fraud. **Despite these problems and with the low income yield of 4.8% for real estate investments as compared to a higher income yield of 9.6% for mixed-use developments, investors still prefer investing in this sector. It is therefore essential to investigate the factors contributing to choice of investments among the real estate investors in Kisumu.** However, despite many studies on the subject of investment, none covers how financial factor appraisal and or non-financial factor appraisal contributes to choice of investment. They also do not investigate other areas of investment by the real estate investors. It is therefore unknown; the choice and extent of investments by real estate investors in Kisumu City, the contribution of non-financial appraisal factors in choice of investments by real estate investors in Kisumu City and the contribution of financial appraisal factors in choice of investments by real estate investors in Kisumu City.

1.3 Objectives of the Study

The general objective was to establish contribution of investment appraisal factors in investment choices by real estate investors in Kisumu City, Kenya

Specifically the study sought to:

i. Establish choice and extent of investments by real estate investors in Kisumu City
ii. Determine contribution of non-financial appraisal factors in choice of investments by real estate investors in Kisumu City
iii. Determine contribution of financial appraisal factors in choice of investments by real estate investors in Kisumu City

1.4 Research Questions

This study was guided by the following research questions:

i. What is the choice and extent of investments by real estate investors in Kisumu City?
ii. What is the contribution of non-financial appraisal factors in choice of investments by real estate investors in Kisumu City?
iii. What is the contribution of financial appraisal factors in choice of investments by real estate investors in Kisumu City?

1.5 Scope of the Study

This study was limited to establishing investment appraisal factors influencing investment choices by real estate investors in Kisumu City, Kenya. It concentrated on establishing choice and extent of investments, established contribution of non-financial appraisal factors in choice of investments and established contribution of financial appraisal factors in choice of investments. The study was carried out in Kisumu City which is the headquarters of Kisumu County. The period for which responses was expected to be current.

1.6 Significance of the Study

This study is expected to facilitate decision making by public and private investment policymakers. Prospective investors at corporate and individual level may find the results of the study useful when choosing investments. The study will also be useful to academicians as it forms a foundation for research in the field of investments and real estate.

1.7 Theoretical Framework

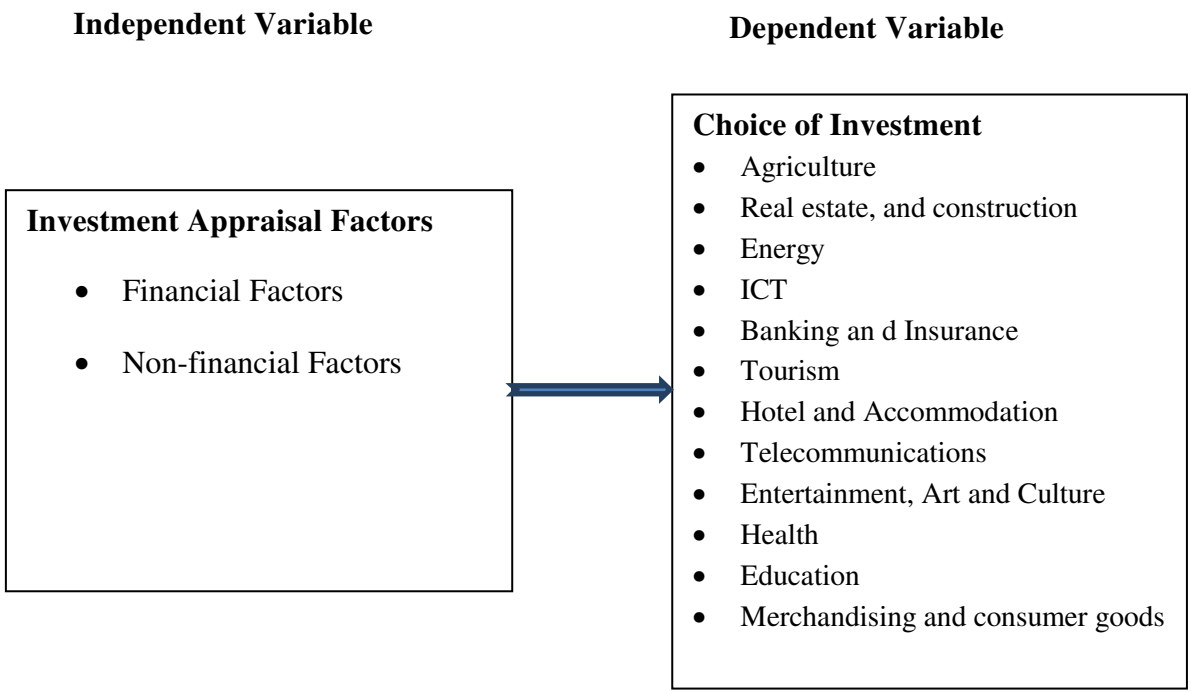

Figure 1: Contribution of Investment appraisal factors in choice of investment

Source: Adopted from Brooker (2005) and Pandit (2008)

Figure 1.1 shows investment appraisal factors influencing choice of investment. From the framework investment appraisal factors is the independent variable and choice of investment is the dependent variable. The former is constructed using financial and non-financial factors. The latter is constructed on real estate and construction, agriculture, health, education, energy, hotel and accommodation, entertainment, art and culture, merchandising and consumer goods, banking and insurance, tourism and ICT. It is expected that the investment appraisal factors drive the choice of investment.

CHAPTER TWO
LITERATURE REVIEW

This chapter focuses on the theoretical foundations on which the study is built and also explores comparative empirical literature which helps to explain the gap which the study sought to address after discussing concepts.

2.1 Theoretical Review

2.1.1. Theory of the Study

Rational choice theory is used for the study. This theory assumes that all people try to actively maximize their advantage in any situation and therefore consistently try to minimize their losses. The theory is based on the idea that all humans base their decisions on rational calculations, act with rationality when choosing, and aim to increase either pleasure or profit. Rational choice theory assumes that an individual has preferences among the available choice alternatives that allow them to state which option they prefer. The theory therefore focuses on the determinants of the individual choices. Rational choice theory is easy to understand but many have pointed out that individuals usually make irrational investment decisions.

2.1.2 The Concept of Investment

Sharpe *et al.* (2001) defines investment as the commitment of investors' funds to derive future income in the form of interest, dividend, premiums, pension benefits or appreciation in the value of their capital. Deciding where to focus investment is an essential part of making the most potential. Copeland et al. (2005) argue that investors are primarily concerned with expectations about the future, considering earnings projection and historical financial data to be of high interest to investors and that the general public faces problems in understanding financial reporting in the corporate sector.

All investors should understand a few essential investment concepts, including how to evaluate investment performance. Choosing investments is just the beginning of work as an investor (Gotze, Northcott, and Schuster, 2015). As time goes by, there is need to monitor the performance of these investments to see how they are working together in a portfolio to help progress towards goals. Progress means that portfolio value is steadily increasing, even though one or more of investments may have lost value. If investments are not showing any gains or account value is slipping, there is need to determine why,

and decide on next move. In addition, because investment markets change all the time, there is need to be alert to opportunities to improve portfolio's performance, perhaps by diversifying into a different sector of the economy or allocating part of portfolio to international investments (Reilly and Brown, 2012).

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The second key investment concept is asset allocation. Assets are allocated, usually on a percentage basis with portions of total portfolio to invest in different asset classes, like stocks, bonds, and cash or cash equivalents. Building a more extensive portfolio, may also include other asset classes, such as real estate, which can help to spread out, and thus moderate, investment risk (Gotze, Northcott, and Schuster ,2015). Asset allocation is a useful tool to manage systematic risk because different categories of investments respond to changing economic and political conditions in different ways. Including different asset classes in a portfolio, increases the probability that some of investments will provide satisfactory returns even if others are flat or losing value. This is known as diversification.

The third key investment concept is diversification. When diversifying, the aim is to manage risk by spreading out investments. Diversification can take place both within and among different asset classes. These smaller groups are called sub-classes. For example, within the stock category one might choose sub-classes based on different market capitalizations. Some large companies or funds that invest in large companies, some mid-sized companies or funds that invest in them, and some small companies or funds that invest in them (Kolaksazov, 2015). They might also include securities issued by companies that represent different sectors of the economy, such as technology companies, manufacturing companies, pharmaceutical companies, and utility companies. Similarly, if one is buying bonds, they might choose bonds from different issuers such as the national government, county and local governments and corporations as well as those with different terms and different credit ratings.

The fourth key concept is portfolio balance. As market performance alters the values of asset classes, one may find that asset allocation no longer provides the balance of growth and return that they want. In that case, they may want to consider adjusting holdings and rebalancing the portfolio. Assets grow at different rates, meaning that a portfolio might end up out of line with the allocations chosen (Lumby and Jones, 2001). For example, some assets might recently have grown at a much faster rate. To compensate, one might

reallocate some of the value of fast-growing assets into assets with slower recent growth, which may now be poised to pick up steam while recent high-performers slow down. Otherwise, one might end up with a portfolio that carries more risk and provides a smaller long-term return than intended. Although there's no official timeline that determines when one should rebalance their portfolio, one may want to consider whether they need to rebalance once a year as part of an annual review of investments. Rebalancing portfolio can be done in different ways to bring it back in line with the allocation balance one intends it to have (Reilly and Brown,2012). Common approaches to rebalancing are; redirecting money to the lagging asset classes until they return to the percentage of total portfolio that they held in original allocation, adding new investments to the lagging asset classes, concentrating a larger percentage of contributions on those classes and; selling off a portion of the holdings within the asset classes that are outperforming others. Reinvestment can then be done to improve the profits in the lagging asset classes. All three approaches work well, but some people are more comfortable with the first two alternatives than the third. They find it hard to sell off investments that are doing well in order to put money into those that are not.

The last key concept of investment is the role risk plays in virtually all aspects of investing. All investments carry some degree of risk. Stocks, bonds, mutual funds and exchange-traded funds can lose value, even all their value, if market conditions sour (Agar, 2007). Even conservative, insured investments, such as certificates of deposit (CDs) issued by a bank or credit union, come with inflation risk. They may not earn enough over time to keep pace with the increasing cost of living.

When investment decision is made, choices about what to do with financial assets are considered. Risk is any uncertainty with respect to the investments that has the potential to negatively affect the financial welfare (Kolaksazov, 2015). For example, investment value might rise or fall because of market conditions. Corporate decisions, such as whether to expand into a new area of business or merge with another company, can affect the value of investments. There are other types of risk. How easy or hard is it to cash out of an investment when need to is called liquidity risk. Another risk factor is tied to how many or how few investments hold. Generally speaking, the more financial eggs you have in one basket, say all money in a single stock, the greater risk take In short, risk is the

possibility that a negative financial outcome that matters to might occur. There are other several key concepts that should be understood when it comes to investment risk.

2.1.3 The Concept of Investment Appraisal

Investment appraisal is a process and technique used to identify the attractiveness of an investment. An evaluation of the attractiveness of an investment proposal, using methods such as average rate of return, internal rate of return (IRR), net present value (NPV), or payback period. Investment appraisal is an integral part of capital budgeting and is applicable to areas even where the returns may not be easily quantifiable such as personnel, marketing, and training. The purpose of investment appraisal is to assess the viability of project, programme or portfolio decisions and the value they generate (Kolaksazov, 2015). In the context of a business case, the primary objective of investment appraisal is to place a value on benefits so that the costs are justified.

There are many factors that can form part of an appraisal. These include non-financial factor appraisal such as legal, which is the value of an investment enabling an organization to meet current or future legislation; environmental, which is the impact of the work on the environment and; social factor for charitable organizations. In this regard, return on investment could be measured in terms of 'quality of life' or even 'lives saved'; operational benefits may be expressed in terms of 'increased customer satisfaction', 'higher staff morale' or 'competitive advantage'; risk in terms of business and operational risk. An investment decision may be justified because it reduces risk. The other is financial factor appraisal. A financial appraisal is the most easily quantifiable approach but it can only be applied to benefits that produce financial returns (Gotze, Röhrich, 2007). The simplest financial appraisal technique is the payback method. The payback period is the time it takes for net cash inflow to equal the cash investment. This is a relatively crude assessment and is often used simply as an initial screening process.

A better way of comparing alternative investments is the accounting rate of return (ARR) which expresses the 'profit' as a percentage of the costs. However, this has the disadvantage of not taking into account the timing of income and expenditure. This makes a significant difference on all but the shortest and most capital-intensive of projects. In most cases, discounted cash flow techniques such as net present value (NPV) or internal rate of return (IRR) are appropriate to evaluate the value of benefits and alternative ways

of delivering them (Gotze, Northcott, and Schuster, 2015). NPV calculates the present value of cash flows associated with an investment; the higher the NPV the better. This calculation uses a discount rate to show how the value of money decreases with time. The discount rate that gives an investment a NPV value of zero is called the IRR. NPV and IRR can be compared for a number of options.

Appraisal of capital-intensive projects and programmes should take into account the whole-life costs across the complete product life cycle as there may be significant termination costs. In the case of the public sector, where income is usually zero, it is common practice to identify the option with the lowest whole-life cost as the option that offers the best value for money (Lumby and Jones, 2001). The appraisal on less tangible and non-financial factors is more subjective. In some cases, a financial value may be calculated by applying a series of assumptions. For example, work that improved staff morale may lead to lower staff turnover and reduce recruitment costs. A financial appraisal of this benefit would have to include assumptions about the numerical impact of increased morale on staff turnover and the estimated costs of recruitment. Where benefits cannot be quantified then scoring methods may be used to compare the subjective value of benefits.

2.1.4 Investment Appraisal Factors

Different appraisal factors will allow assessment of the effects an investment will have on cash flow. It is possible to compare the expected return to the cost of funding and to the returns offered by other potential investments. The assessment should consider all the financial consequences of an investment. For example, buying more expensive machinery might be worthwhile if it is more efficient and uses cheaper supplies. As well as the financial impact, calculations should also consider any indirect effects (Reilly and Brown, 2012)

Identifying these soft benefits is often as important as the financial evaluation and may help in decision-making. Soft benefits could be; greater flexibility and quality of production, faster time-to-market resulting in a bigger market share, improved company image, better staff morale and job satisfaction, leading to greater productivity, quicker decisions due to better availability of information, It is also important to evaluate these benefits. For example, a manufacturer of machine parts could take a general benefit such

as quality and break it down with estimated savings (Gotze, Northcott, and Schuster, 2015). It is also important to evaluate these benefits. It is important to estimate the benefits of the investment in financial terms wherever possible.

2.1.5 The Concept of Investment Choice

An investor has to choose proper avenues from among others depending on his preferences, needs and ability to assume risk (Brigham et al., 2001). These investment avenues or areas include: equity shares, corporate bonds, real estates, government securities and bank cash and deposits (Sharpe *et al.*, 2001). Other authors categorize investment choices as agriculture, real estate and construction, energy, ICT, banking and insurance, tourism, hotel and accommodation, telecommunications, entertainment, art and culture, health, education, merchandising and consumer goods. Real estate refers to investment in land and other immovable properties such as a residential house, agricultural land, semi-urban land, commercial property or resort home (Sharpe *et al.*, 2001).

2.2 Empirical Literature Review

2.2.1. Financial Factors and Investment Choice

Mutwiwa and Fondo (2014) investigated the factors that influence investment in the mining sector in Kenya. This is because mining in Kenya contributes about 1% (one percent) to the country's GDP despite the potential in the sector. Statistics show that the mining sector production in Kenya is way below its potential. The real potential predicted by analysts should be close to 10 % (ten percent) of the GDP. The research largely dwells on the factors for production that is land, labor, capital and entrepreneurship and how they impact on investment in the mining sector in Kenya. It also assesses the country's risks that influence investment in the mining sector. The research design will be descriptive design that will demonstrate relationships and associations between the variables, which will be used to make some conclusions, linkages and recommendations. The target population will be investors in sub sectors in the mining sector in the country. The researcher used Base Titanium Ltd employee register, maintained by the organization's Human Resource and administration division to come up with a sampling frame containing a total of 164 members. The study used stratified random sampling with a sample of 49. The data collected was processed and analyzed using SPSS version 20.0. The findings were presented using frequency tables and percentages. Based on the findings of this study, the following conclusions were drawn. The results reveal that

labour related issues, capital investment decision and country's risk have significant and positive effects on investment in mining, while land tenure administration and entrepreneurship have insignificant effects on investment in mining in Kenya.

Kadiyala and Rau (2004) in India investigated investor reaction to corporate event announcements. The findings were that investors appear to under-react to prior information as well as to information conveyed by the event, leading to different patterns. The study confirmed one of the behavioral finance models of irrational investor behavior which postulates that investors have a tendency to under-react to information, leading to long-term return continuations when firms announce corporate events such as open-market share repurchases or cash-financed tender offers. However, the study was an event study opposed to checking the role of financial information influencing choice of investment products; studies on listed firms also remain unknown. It also used an event study methodology as opposed to panel methodology, implying that behavioral models cannot explain the long-run abnormal return evidence since the overreaction of investors to some events and under-reaction to others implies that, on average, investors are unbiased in their reaction to financial information.

Chege (2014) focused on investigating the factors influencing the choice of investment options by registered fund managers in Kenya. The fund managers were selected for the study because they have the expertise on investments, that being their core business. The study was guided by three objectives, namely: to find out the influence on choice of investment options, of the expected returns from an investment, the risks associated with an investment and the need to maintain liquidity. The population of study comprised the sixteen registered fund managers in Kenya in 2013 and the descriptive research design was employed. Primary data was used and was collected from the respondents using questionnaires. Analysis of the data was by use of descriptive statistics and inferential statistics, in particular correlation analysis in case of the latter. Results were presented in the form of charts and narrative explanations. The study found out that both the expected return from investments and the liquidity of the investments influence the manager's choice of investment. The risk of investments does not influence the choice of the investment.

Ojwang' (2015) aimed at establishing behavioral factors that influence investment decisions by investors trading in Kibuye market, Kisumu Town. A descriptive survey

design was adopted to help address study objective. The study populations were 400 traders who subscribe for annual trade licenses to operate in Kibuye market. This is according to the Kisumu County, Ministry of Trade Registry data (2015). A sample size representative of the population for the study consisted of 196 determined using Krejcie & Morgan (1970) predetermined table of sample sizes for different population sizes. The study employed stratified random sampling technique to select the sample members. Purposive sampling was also used to identify the traders (respondents) of the selected businesses in the market during data collection. The study collected primary data using questionnaires containing a mixture of structured and a 5-point likert scale questions. Descriptive statistics and factor analysis were used to analyze the collected data with the help of SPSS 20.0 software. The findings are presented in tabular forms and complemented by discussions. The findings showed that investment decisions of traders in Kibuye market is significantly influenced by: over-confidence and market information (at mean of 4.01 each), availability/ anchoring bias (mean of 3.72), loss-aversion and mental accounting (mean of 3.60), representativeness bias (3.37), risk-aversion (3.06) and herd behavior (3.00) in that order.

Maingi (2011) aimed at identifying the capital budgeting techniques employed by commercial banks in Kenya and to establish the factors influencing the choice of capital budgeting techniques used by commercial banks in Kenya. To satisfy the research objective the researcher used descriptive research design. The sampling framework included all commercial banks in Kenya. The Kenya commercial banking sector has only 43 financial institutions. Due to the size of the banking industry, the whole population on banking institutions was included in this study. Thus, no sampling procedures were conducted. It was noted that in comparison to similar studies conducted elsewhere, the size of the population in this study was small. Primary data was collected from 22 respondents using structured questionnaires. Analysis was done using frequency tables, percentages, mean scores and cross tabulations and where appropriate the results were presented in form of pie charts and bar graphs. The findings from the responding commercial banks in Kenya indicate that net present value method is the primary criterion for commercial banks long-term projects and level of education, management experience and size of the bank among other factors influence the choice of capital budgeting techniques.

Karanja (2007) aimed at identifying factors influencing investment companies portfolio choice. To facilitate attainment of the objective this research was designed as a survey study. The population of interest comprised all fund managers registered by capital market authority in Kenya. The respondents were the fund managers and the research used primary data gathered using a questionnaire. The response rate for questionnaires administered was 80%. Data was presented using tables, graphs and charts. Both descriptive and inferential statistics was used to analyze the data. Descriptive statistics such as weighted mean and. proportion was used to bring out the relationship of variables under the study. Correlation analysis was used to test the degree of relationship between consideration of factors influencing portfolio choice and importance of the same amongst investment companies. The findings from this research indicated that investment objective and regulatory framework are the most important factors influencing portfolio choice amongst investment companies. These factors were consistently ranked as very important by all respondents without any deviation of opinion. Factors like risk tolerance, liquidity preference, time horizon, ability to rebalance and availability of personnel were rated differently by different respondents they were important but at varying degrees.

Another study by Nagy and Obenberger (1994) in Jordan investigates the extent to which listings of 34 factors influence shareholders' perception and provide evidence of a role for a mix of financial and non-financial factors in choosing investment products to invest in. The findings were that investor's behavior is influenced by available accounting and financial information, investment returns, neutral information, individual risk profile, market characteristics and self image/firm image coincidence.

Epstein (1994) in the United Kingdom examined the social information disclosure and individual investor behavior using descriptive research design. The results indicated the annual reports were extremely useful to corporate shareholders. Furthermore, a majority of the shareholders surveyed also indicated that they would want the company to report on corporate ethics, employee relations and community involvement.

Wambua (2013) in Kenya studied the relationship between the profitability and the liquidity of commercial banks using descriptive research design for 44 commercial banks operating in the years 2008 to 2012. The study found a positive insignificant relationship between profitability and liquidity of commercial banks in Kenya. However, finance

managers of commercial banks need to maintain a balance between the level of liquid assets and long term assets to reinforce each of the conflicting objectives of maintaining adequate liquidity and sustainable profitability. However, the study only focused on investment liquidity and profitability of commercial banks in Kenya.

Using descriptive and regression analyses, a study by Muraguri (2014) on the effect of liquidity on the investments in the deposit-taking Saccos in Nairobi, found a positive and significant relationship between liquidity and the return on investments in the Saccos while capital adequacy had a negative but insignificant influence on the return on investments. The study recommendations were that the regulations regarding management of liquidity in the deposit-taking Saccos be reviewed to allow the Saccos diversify their investments in high earning portfolios such as listed companies and a central depository fund for Saccos be set up to help Saccos have a cheaper avenue for short term borrowing to help address seasonal liquidity challenges. However, liquid assets such as cash and government securities generally have a relatively low returns, hence holding them imposes an opportunity cost.

Using exploratory research design, Krishnan and Brooker (2002) analyzed the factors influencing the decisions of investor who use analysts' recommendations to arrive at a short-term decision to hold or sell a stock. The results indicate that a strong form of the analyst summary recommendation report, i.e. one with additional information supporting the analysts' position further, reduces the disposition error for gains and also reduces the disposition error for losses as well.

Another study by Merikas *et. al.* (2003) analyzed factors influencing Greek investor behavior on the Athens Stock Exchange. The results indicated that individuals base their stock purchase decisions on economic criteria combined with other diverse variables. The authors did not rely on a single integrated approach, but rather on many categories of factors. The results also revealed that there is a certain degree of correlation between the factors that behavioral finance theory and previous empirical evidence identify as the influencing factors for the average equity investor, and the individual behavior of active investors in the Athens Stock Exchange (ASE) influencing by the overall trends prevailing at the time of the survey in the ASE.

Fisher and Statman (2000) studied the sentiments of Wall Street strategists and revealed that the strategists' sentiments were unrelated to the sentiment of individual investors or that of newsletter writer (another category of investors provided by them), although the sentiment of the individual investors and newsletter writers groups were closely related. They concluded that sentiment can be useful for tactical asset allocation and that a negative relationship between the sentiment of each of these three groups and future stock returns and the relationship will be strategically significant for Wall Street strategists and individual investors.

A study by Fischer and Gerhardt (2007) in Germany analyzed individual investor investment decision making process and found that individual investor investment decisions deviate from recommendations of financial theory. They show that these deviations lead to considerable welfare losses. The study conclusions were that financial advice is potentially correcting factor in investment decision making process, there will be no support for the overreaction hypothesis, and investor over-reaction to a long series of bad news could produce predictable mispricing of Stock, classical wealth-maximization criteria are important to investors, the recommendations of brokerage houses, individual stock brokers, family members and Co-workers go largely unheeded, investors exhibit a strong demand for information about product safety and quality and about the company's environmental activities and there exist strong forms of the analyst summary recommendation report

A study by Dimitrios (2007) on determinants of investors behavior in the Athens Stock Exchange using descriptive research design and random sampling technique found that individual investors rely more on newspapers/media and noise in the market when making their investment decisions, while professional investors rely more on fundamental and technical analysis and less on portfolio analysis. Market participants are exposed to a constant flow of information, ranging from quantitative financial data to financial news in the media, and socially exchanged opinions and recommendations. However, the study focused on individual investors as opposed to listed firms, used descriptive research design as opposed to correlational research design which has been employed in this study.

Greenwood (2014) analyzed time series of investor expectations of future stock market returns from six data sources between 1963 and 2011 and found that the six measures of

expectations are highly positively correlated with each other, as well as with past stock returns and with the level of the stock market. Further however, investor expectations are strongly significantly negatively correlated with model-based expected returns. The study concluded that any investment's return prospects should be judged in a way that incorporates all knowledge, including historical experience, financial and behavioral theories, and current market conditions, without being overly dependent on any of these.

A study by Lubos and Stambargh (2001) on the relationship between market wide liquidity and investment pricing using descriptive research design found that expected stock returns are related to the sensitivities of returns to fluctuations in aggregate liquidity. The monthly measure, an average of individual stock measure estimated with daily data relied on the principle that order flow induces greater returns reversals when liquidity is lower. Over 34 year's period, the average return on stock with high sensitivities to liquidity exceeds that from stocks with low sensitivities by 7.5% annually. Now expected return frequently trips people up in two ways. I.e. it may have been estimated poorly in the first place, using poor estimates of probability for each outcome; or even if it will be calculated correctly, outcomes that are dramatically different from the expected return can still occur. The study concluded that the expected outcomes become more and more likely over longer periods and that no matter how fancy our calculations there's no way to truly calculate the probability of any given outcome.

Using exploratory research design, Krishnan and Brooker (2002) analyzed the factors influencing the decisions of investor who use analysts' recommendations to arrive at a short-term decision to hold or sell a stock. The results indicate that a strong form of the analyst summary recommendation report, i.e. one with additional information supporting the analysts' position further, reduces the disposition error for gains and also reduces the disposition error for losses as well. However, the study looked at investment decisions at household level as opposed to firm level, did not cover listed firms and did not employ correlational research design to relate investment returns and choice of investment products among listed firms.

Mutwiwa and Fondo (2014) investigated the factors that influence investment in the mining sector in Kenya. On the other hand, Krishnan and Brooker (2002) analyzed the factors influencing the decisions of investor who use analysts' recommendations to arrive

at a short-term decision to hold or sell a stock. While Lubos and Stambargh (2001) studied relationship between market wide liquidity and investment pricing, Greenwood (2014) analyzed time series of investor expectations of future stock market returns from six data sources between 1963 and 2011 and found that the six measures of expectations are highly positively correlated with each other, as well as with past stock returns and with the level of the stock market. Dimitrios (2007) worked on determinants of investors behavior in the Athens Stock Exchange using descriptive research design and random sampling technique and found that individual investors rely more on newspapers/media and noise in the market when making their investment decisions, while professional investors rely more on fundamental and technical analysis and less on portfolio analysis On the contrary, Wambua (2013) in Kenya studied the relationship between the profitability and the liquidity of commercial banks using descriptive research design for 44 commercial banks operating in the years 2008 to 2012. Karanja (2007) identified factors influencing investment companies portfolio choice among fund managers at capital markets authority.

The studies above concentrate on several areas of investment decisions. They dwell on factors influencing investment choices focusing on various contexts and various study areas. However, none of the studies was interested in real estate investors. Knowledge is therefore lacking on factors influencing choice of investments among real estate investors. It is not known how financial factors separately contribute to choice of investment among real estate investors in Kisumu City. Moreover, knowledge is lacking on whether the real estate investors in Kisumu City, even after considering financial factors, have invested in other areas and the extent to which this is done.

2.2.2 Non-financial Factors and Investment Choice

Jagongo and Mutswenje (2014) sought to establish the factors influencing investment decisions at the Nairobi Stock Exchange. The study was conducted on the 42 investors out of 50 investors that constituted the sample size. To collect data the researcher used a structured questionnaire that was personally administered to the respondents. The questionnaire constituted 28 items. The respondents were the individual investors. In this study, data was analyzed using frequencies, mean scores, standard deviations, percentages, Friedman's test and Factor analysis techniques. 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.

Using exploratory research design, a study by Francis and Soffer (1997) examined how the type of analyst and the nature of the analyst report affect investor behavior and the study found that because of the existence of incentives for analysts to issue favorable recommendations, investors weight other information in the analyst report more heavily when they observe a buy rather than a sell recommendation. This factor includes purchase recommendations from brokerage houses and individual stock brokers. Recommendations from friends or coworkers marginally loaded on this factor as well. However, the study used exploratory research design as opposed to correlational research design.

Using exploratory research design, Malmendier and Shanthikumar (2003) tried to answer the question: Are small investors naïve? They found that large investors generate abnormal volumes of buyer initiated trades after a positive recommendation only if the analyst is unaffiliated. Small traders exert abnormal buy pressure after all positive recommendations, including those of affiliated analysts. Using the NYSE Traders and Quotations Database, they found that large traders adjust their trading response downward. However, the study did not explore whether financial information determines investment product choice. There is also need to conduct similar researches on listed firms in Kenya and to employ correlational research design.

Fischer and Gerhardt (2007) in Germany analyzed individual investor investment decision making process and found that individual investor investment decisions deviate from recommendations of financial theory in that the recommendations of brokerage houses, individual stock brokers, family members and co-workers go largely unheeded. However, the fate of listed firms in Kenya in relation to third party opinion using correlational research design remains unknown.

Epstein (1994) in the United Kingdom examined the social information disclosure and individual investor behavior using descriptive research design. The results indicated the annual reports were extremely useful to corporate shareholders. Furthermore, a majority of

the shareholders surveyed also indicated that they would want the company to report on corporate ethics, employee relations and community involvement. However, the study explored social information as opposed to third party opinion.

A study by Hodge (2003) analyzed investors' perceptions of earnings quality, auditor independence, and the usefulness of audited financial information. He concluded that lower perceptions of earnings quality are associated with greater reliance on a firm's audited financial statements and fundamental analysis of those statements when making investment decisions. However, the study did not cover listed firms in Kenya and did not employ correlational research design. Another study by Brown and Cliff (2004) in India investigated investor sentiment and its relation to near-term stock market returns. They find that many commonly cited indirect measures of sentiments are related to direct measures (surveys) of investor sentiment. However, past market returns are also an important determinant of sentiment. Although sentiment levels and changes are strongly correlated with contemporaneous market returns, the tests in this study show that sentiment has little predictive power for near-term future stock returns. Finally, the evidence does not support the conventional wisdom that sentiment primarily affects individual investors. However, the study did not employ correlational research design.

Mbugua (2011) examined the factors affecting the choice and growth of SMEs in motor vehicle spare parts in Kenya. The study targeted SMEs along Kirinyaga Road Nairobi due to their high preference in dealing with motor vehicle spare parts. Fifty (50) SMEs out of 137 were purposively selected to participate in the study. Data was collected through uses of questionnaires and analysis done using Statistical Package for Social Sciences computer Software. Entrepreneurial education, demographic and economic factors, technological factors, independent lifestyles and considering entrepreneurs as heroes was found to influence choice into small and medium enterprise. Proximity to market, competition, infrastructure and operating costs was among the consideration made before locating SMEs. Resource requirement for startup capital, structure network to locate venture, market size and competition affected initiation of new business ventures. Among the development strategies adopted by SMEs examined was opening of branches, and offering special discounts to customers in new markets .Stiff competition was as a result of larger firms, and existed among SMEs examined. Inadequate finances hindered growth of SMEs in motor vehicle parts, most SMES requires managerial skills and expertise in financial

management to facilitate growth and that government did not have large influence on availability of finances to SMEs in motor vehicle spare parts. Technology among SMEs in motor vehicle parts was an important factor in growth of SMEs, However, most SMEs were found to have slow technology adoption. Managerial training and expertise affected sustainability of employees in motor vehicle parts business, employees' understandings as a result of educational background and consequently growth of the business. Finances were found to be a large contributory factor in choice of SMEs among motor vehicle parts entrepreneurs.

While Mbugua(2011) studied factors affecting the choice and growth of SMEs in motor vehicle spare parts in Kirinyaga Road, Nairobi, Kenya and found inadequate finances and managerial skills hindered growth, Francis and Soffer, 1997 and Nagy and Obenberger, 1994 showed that favorable third party opinions and recommendations influenced the choice of investment product. While, some studies use descriptive research or exploratory research designs to investors behavior(Malmendier and Shanthikumar, 2003), Others (Hodge, 2003) employ random sampling techniques to investigate investors' perceptions of earnings quality, third party information from auditors and the usefulness of audited financial information but fail focus on listed firms in Kenya using correlational research design. On the contrary, others (Fischer and Gerhardt, 2007; Krishnan and Brooker, 2002 and Brown and Cliff, 2004) study individual investor investment decision making processes using exploratory research design in the developed economies of Jordan, UK and Germany as opposed to listed firms in Kenya. Jagongo and Mutswenje (2014) on the other hand sought to establish the factors influencing investment decisions at the Nairobi Stock Exchange.

The studies cover investment decisions. They also cover factors influencing investment choices focusing on various contexts and various study areas. None of the studies cover real estate investors. Knowledge is therefore lacking on factors influencing choice of investments among real estate investors. It is not known how non-financial factors separately contribute to choice of investment among real estate investors in Kisumu City. Further, it is not known whether the real estate investors in Kisumu City, with non-financial factors in mind, have invested in other areas and the extent to which this is done.

CHAPTER THREE
METHODOLOGY

This chapter provides study design, study area, population sample size and sampling techniques and data collection and; data analysis and presentation approaches. The study will follow both quantitative and qualitative approaches.

3.1 Study Design

This applies course descriptive survey design. The study will use sample survey technique where a sample of elements is drawn from the population of interest and also a method of collecting information by interviewing or administering a questionnaire to a sample of individuals. This is in line with Mugenda and Mugenda (2003).

3.2 Study Area

The study was conducted in Kisumu City. Kisumu (formerly known as Port Florence) is a port city in Kisumu County, Kenya. It is at an elevation of 1,131 m (3,711 ft). It is the third largest city in Kenya, the principal city of western Kenya, the immediate former capital of Nyanza Province and the headquarters of Kisumu County. It has a municipal charter but no city charter. It is the largest city in Nyanza region and second most important city after Kampala in the greater Lake Victoria basin.

3.3 Target Population

The population of this study comprised all the 9900 city of Kisumu real estate investors categorized as follows:

Table 3.1: Population distribution of Real Estate Investors in Kisumu

Category of Investors	**Population Distribution**
Individual real estate investors	6700
Corporate real estate investors	3200
TOTAL	**9900**

Source: City of Kisumu, 2017

3.4 Sample Size and Sampling Technique

The sample size was determined as follows according to Yamen:

$n= N/(1+N (e)^2)$

Where, n= the sample size,

N =is the size of population

E= error of 5% points

n=9900(1+(9900x0.05 x 0.05) = 385

Table 3.2: Sample Distribution

Category of Investors	Population Distribution	Sample Distribution
Individual real estate investors	6700	260
Corporate real estate investors	3200	125
TOTAL	9900	385

Source: Adapted from City of Kisumu, 2017

3.5 Data Type and Source

Both primary and secondary data was used. Primary data was obtained from respondents while secondary data was collected from documents in the custody of the county government and city management concerned. The researcher gathered secondary data from the government's records and related reports.

3.6 Data Collection

Primary data was collected using self-administered structured and semi structured questionnaire. Interview guide was also be used to collect data from key informants. Secondary data was collected through document review.

3.7 Instrument Validation and Reliability Test

Expert opinion was sought on the data collection instruments. The researcher's supervisors and real estate investment experts provided this opinion. This helped in checking face, construct and content validity. Data collection instrument was also pre-tested on 10 conveniently chosen respondents to check for reliability. Reliability test was be ascertained through Cronbach's Alpha determination at a coefficient of 0.7 and above. The pilot test will be conducted in Kisumu City.

Table 3.4: Summary of Pilot Results Based on Cronbach's Alpha Reliability Test

Variables	No. of Items	Cronbach's Alpha
Choice of investments	12	0.713
Non-financial appraisal factors	4	0.723
Financial appraisal factors	4	0.750

Source: Field Data, 2017

All the variables had alpha values of above 0.701, indicating strong internal consistency among measures of variable items.

3.8 Data Analysis and Presentation

Descriptive statistics such as means, percentages, standard deviation and frequencies were used to analyse the three objectives. Results are presented in tables and graphs.

CHAPTER FOUR
RESULTS AND DISCUSSIONS

4.1 Response Return Rate

The researcher administered the questionnaires in person to the respondents. Out of the 375 questionnaires administered to the respondents, 350 of them were returned constituting a response rate of 93.33 % of the administered questionnaires.

4.2 Demographic Characteristics of the Sample

The study sought to establish the background of the respondents in the study in terms of period invested in Kisumu, highest education level attained and experience in investment. The results were as shown in the following sections.

Table 4.1: Period invested in Kisumu

Period invested	Frequency	Percent	Valid Percent	Cumulative Percent
1 year	96	27.4	27.4	27.4
2 years	124	35.4	35.4	62.9
3 years	130	37.1	37.1	100.0
Total	**350**	**100.0**	**100.0**	

Source: Field Data, 2017

Table 4.1 shows that 37.1 % of respondents had invested in Kisumu for 3 years which therefore indicates stability in investment horizon, 35.4 % had invested for a period 2 years and only 27.4 % had invested in Kisumu for a period of 1 year. This implies that the data was obtained from respondents who are experienced in investment environment and are also more familiar with the investment dynamics in Kisumu.

Table 4.2: Highest Education level

Education level	Frequency	Percent	Valid Percent	Cumulative Percent
Primary	80	22.9	22.9	22.9
Secondary	140	40.0	40.0	62.9
Tertiary	130	37.1	37.1	100.0
Total	**350**	**100.0**	**100.0**	

Source: Field Data, 2017

The findings in the Table 4.2 show that 40.0% of the respondents have secondary school level of education, 37.1 % have attained tertiary education while 22.9 % have attained primary level of education. This implies that data for the study was obtained from financially literate respondents who have easily adapted to investment matters hence the reliability of the data.

Table 4.3: Experience in Investment

Experience	Frequency	Percent	Valid Percent	Cumulative Percent
3 years and below	55	15.7	15.7	15.7
4-6 years	66	18.9	18.9	34.6
7-9 years	104	29.7	29.7	64.3
10 years and above	125	35.7	35.7	100.0
Total	**350**	**100.0**	**100.0**	

Source: Field Data, 2017

Table 4.3 indicates that majority (35.7%) of respondents' experience in investment was 10 years and above 7-9 years which therefore indicates that the data was obtained from respondents who are professionally experienced in investments and are also more familiar with investment options in Kisumu.

4.3: Choice and extent of investments by real estate investors in Kisumu City

The choice and extent of investments by real estate investors in the sample was measured using five items. Respondents were asked to rate the choice and extent of investments by real estate investors in Kisumu. Responses were elicited on a 5-point scale (1-very low, 2-low, 3-moderate, 4-high, and 5-very high). These responses were then analyzed using frequencies, means and standard deviations.

Table 4.4: Rating of Choice and Extent of Investments by real estate investors in Kisumu (n = 350)

Constructs	5	4	3	2	1	Mean	Std. Dev
Overall Mean = 3.000							
a. Agriculture	28(8%)	65(18.6%)	60(17.1%)	107(30.6%)	9(2.57%)	3.00	1.27
b. Real estate & Construction	76(21.7%)	115(32.9%)	59(16.9%)	63(18.0%)	37(10.6%)	3.00	1.27
c. Energy	22(6.3%)	49(14.0%)	66(18.9%)	133(38.0%)	8(2.29%)	2.00	1.29
d. ICT	19(5.4%)	35(10.0%)	62(17.7%)	108(30.9%)	126(36.0%)	2.00	1.167
e. Banking & Insurance	24(6.9%)	54(15.4%)	59(16.9%)	130(37.1%)	83(23.7%)	3.00	1.18
f. Tourism	15(4.3%)	28(8.0%)	71(20.3%)	110(31.4%)	126(36.0%)	2.00	1.20
g. Hotel & Accommodation	22(6.3%)	44(12.6%)	59(16.9%)	136(38.9%)	89(25.4%)	3.00	1.12
h. Entertainment, art & culture	25(7.1%)	48(13.7%)	71(20.3%)	127(36.3%)	79(22.6%)	3.00	1.17
i. Health	15(4.3%)	33(9.4%)	46(13.1%)	123(35.1%)	133(38.0%)	2.00	1.18
j. Telecommunications	15(4.3%)	30(8.6%)	62(17.7%)	130(37.1%)	113(32.3%)	2.00	1.13
k. Education	18(5.1%)	42(12.0%)	81(23.1%)	134(38.3%)	75(21.4%)	3.00	1.099
l. Merchandise & consumer goods	17(4.9%)	45(12.9%)	70(20.0%)	115(32.9%)	103(29.4%)	2.00	1.52
							1.16

Key: *Very high=5, High =4, Moderate=3, Low=2, Very low=1*

Source: Field data, 2017

Results presented in Table 4.4 suggest that the choice and extent of investments by real estate investors in Kisumu is moderate. The overall mean response score for all the investments was 3.000, coded as moderate meaning that the extent of investment is moderately practiced by real estate investors in Kisumu. The most moderately rated investments were agriculture (Mean = 3.000, Std. Dev =1.27), real estate & construction (Mean = 3.00, Std. Dev = 1.29), banking & insurance (Mean = 3.00, Std. Dev = 1.20), hotel & accommodation (Mean = 3.00, Std .Dev = 1.17), entertainment, art and culture (Mean = 3.00, Std. Dev = 1.18) and education (Mean =3.00, Std. dev = 1.52) while the least invested options were energy (Mean = 2.00, Std. Dev = 1.167) and tourism (Mean = 2.00, Std. Dev = 1.12) among others. Besides, the small values of the standard deviations imply that there were minimal variations in the responses on the items that were rated. This result is in tandem with the finding of Fischer and Gerhardt, 2007and Mbugua (2011) who document that investment intensity in agriculture, real estate and construction, hotel and accommodation was moderate. On the contrary, the finding is at variance with that of Mutwiwa and Fondo (2014) who found that real estate and agriculture were highly practiced.

4.4: Contribution of non-financial appraisal factors in choice of investments by real estate investors in Kisumu City

Contribution of non-financial appraisal factors in choice of investments by real estate investors in the sample was measured using five items. Respondents were asked to rate choice and extent of investments by real estate investors in Kisumu. Responses were elicited on a 5-point scale (1-very low, 2-low, 3-moderate, 4-high, and 5-very high). These responses were then analyzed using frequencies, means and standard deviations.

Table 4.5: Rating of Contribution of Non-financial appraisal factors in choice of investments by real estate investors (n = 350)

Constructs	5	4	3	2	1	Mean	Std. Dev
Overall Mean = 3.000							
a. Legal	34(9.7%)	36(10.3%)	38(10.9%)	66(18.9%)	176(50.3%)	2.00	1.38
b. Environmental	20(5.7%)	28(8.0%)	37(10.6%)	105(30.0%)	160(45.7%)	2.00	1.18
c. Social	6(1.7%)	30(8.6%)	79(22.6%)	125(35.7%)	110(31.4%)	2.00	1.01
d. Operational benefits	165(47.1%)	99(28.3%)	10(2.9%)	41(11.7%)	35(10.0%)	4.00	1.37
e. Risks	131(37.4%)	209(59.7%)	10(2.9%)	0(0.0%)	0 (0.0%)	4.00	.533
f. Public Image	57(16.3%)	145(41.4%)	132(37.7%)	10(2.9%)	6(1.7%)	4.00	.840
g. Power & Prestige	0 (0.0%)	198(56.6%)	134(138.3%)	16(4.6%)	2(.006%)	4.00	.614

Key: *Very high=5, High =4, Moderate=3, Low=2, Very low=1*

Source: Field data, 2017

Results presented in Table 4.5indicate that the rating of contribution of non-financial appraisal factors in choice of investments by real estate investors in Kisumu is moderate. The overall mean response score for all the factors was 3.000, coded as moderate meaning that contribution of non-financial appraisal factors is moderately used by real estate investors in Kisumu. The highly rated factors were operational benefits (Mean = 4.000, Std. Dev =1.37), risks (Mean = 4.00, Std. Dev = .533), public image(Mean = 4.00, Std. Dev = .840), and power and prestige (Mean = 4.00, Std. dev = .614) while the least rated non-financial appraisal factors were legal (Mean = 2.00, Std. Dev = 1.38), environmental (Mean = 2.00, Std Dev = 1.18 and social (Mean = 2.00, Std. Dev = 1.01). This result is in tandem with the finding of Chege, 2014; Ojwang' 2015 and Maingi, 2012who found non-financial appraisal factors were moderately considered by investors in choosing their investment portfolios. On the contrary, the finding is at variance with that of Mutwiwa and Fondo (2014) who found that non-financial appraisal factors were highly considered in making investment choices.

4.5: Contribution of financial appraisal factors in choice of investments by real estate investors in Kisumu City

Contribution of financial appraisal factors in choice of investments by real estate investors in the sample was measured using five items. Respondents were asked to rate choice and extent of investments by real estate investors in Kisumu. Responses were elicited on a 5-point scale (1-very low, 2-low, 3-moderate, 4-high, and 5-very high). These responses were then analyzed using frequencies, means and standard deviations.

Table 4.6: Rating of Contribution of financial appraisal factors in choice of investments by real estate investors (n = 350)

Constructs	5	4	3	2	1	Mean	Std. Dev
Overall Mean = 3.000							
a. Profit	52(14.9%)	148(42.3%)	59(16.9%)	75(21.4%)	16(4.6%)	3.00	1.11
b. Payback period	134(38.3%)	108(30.9%)	40(11.4%)	38(10.9%)	30(8.6%)	4.00	1.29
c. Capital outlay invested	108(30.9%)	112(32.0%)	48(13.7%)	44(12.6%)	38(10.9%)	4.00	1.32
d. Present value of revenue	40(11.4%)	80(22.9%)	52(14.9%)	112(32.0%)	66(18.9%)	3.00	1.31
e. Opportunity cost	22(6.3%)	58(16.6%)	92(26.3%)	104(29.7%)	0 (0.0%)	3.00	1.17
f. Industry returns	56(16.0%)	98(28.0%)	122(34.9%)	32(9.1%)	42(12.0%)	3.00	1.19

Key: *Very high=5, High =4, Moderate=3, Low=2, Very low=1*

Source: Field data, 2017

Table 4.6 indicates that the rating of contribution of financial appraisal factors in choice of investments by real estate investors in Kisumu is moderate. The overall mean response score for all the factors was 3.000, coded as moderate meaning that contribution of financial appraisal factors is moderately used by real estate investors in Kisumu. The highly rated factors were payback period (Mean = 4.000, Std. Dev =1.29) and capital outlay invested (Mean = 4.00, Std. dev = 1.32) while the least rated financial appraisal factors were profit (Mean = 3.00, Std. Dev = 1.11), present value of revenues (Mean = 3.00, Std Dev = 1.31, opportunity cost (Mean = 3.00, Std Dev =1.17 and industry returns (Mean = 3.00, Std. Dev = 1.19). This result is in tandem with the finding of Jagongo and Mutswenje, 2014; Mbugua, 2011 who document that financial appraisal factors were moderately considered by investors in choosing their investment options.

CHAPTER FIVE
SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents a summary of the study's findings, conclusions and recommendations based on the major findings.

5.1 Summary of Findings

Based on descriptive statistics, objective one found that the choice and extent of investments by real estate investors in Kisumu is moderate. The overall mean response score for all the investments was moderate, meaning that the extent of investment is moderately practiced by real estate investors in Kisumu. The most moderately rated investments were agriculture, real estate & construction, banking & insurance, hotel & accommodation, entertainment, art and culture and education while the least invested options were energy and tourism.

Objective two found out that the rating of contribution of non-financial appraisal factors in choice of investments by real estate investors in Kisumu is moderate. The overall mean response score for all the factors was moderate, meaning that contribution of non-financial appraisal factors is moderately used by real estate investors in Kisumu. The highly rated factors were operational benefits, risks, public image and power and prestige while the least rated non-financial appraisal factors were legal, environmental and social.

Lastly, the findings of objective three were that the rating of contribution of financial appraisal factors in choice of investments by real estate investors in Kisumu is moderate. The overall mean response score for all the factors was moderate, meaning that contribution of financial appraisal factors is moderately used by real estate investors in Kisumu. The highly rated factors were payback period and capital outlay invested while the least rated financial appraisal factors were profit, present value of revenues, opportunity cost and industry returns.

5.2 Conclusions of the Study

From the findings of objective one, it is concluded that the choice and extent of investment is moderately practiced by real estate investors in Kisumu. From the findings of objective two, it can be concluded that contribution of non-financial appraisal factors in

choice of investments by real estate investors in Kisumu is moderate. Lastly, from the findings of objective three, it can be concluded that rating of contribution of financial appraisal factors in choice of investments by real estate investors in Kisumu is moderate.

5.3 Recommendations of the Study

Based on the conclusion of objective one, investors in Kisumu should continue investing in agriculture, real estate & construction, banking & insurance, hotel & accommodation, entertainment, art and culture and education. From the conclusion of objective two, investors in Kisumu should continue considering non-financial appraisal factors namely operational benefits, risks, public image and power and prestige. Similarly, from conclusion of objective three, investors in Kisumu should continue embracing financial appraisal factors in choosing investments.

5.4 Limitations of the Study

The outcome of the study cannot be generalized to all cities in Kenya since the study was limited to Kisumu and did not incorporate all investors in Kenya. The study adopted a correlation research design. The use of predetermined questions may have forced respondents to give skewed responses.

5.5 Suggestions for Further Research

In order to improve this study, the researcher would like to suggest the following for further investigation. An exclusive study on the financial and non-financial constraints facing investors in Kenya should be carried out. Future research should be conducted on determinants of investment choice in Kenya. Future studies could also explore the relative importance of financial and non-financial appraisal factors. Lastly, future research efforts could dwell on comparative analysis of factors affecting investment choice among investors in Kenya and use more robust research designs such panel methodology.

REFERENCES

Wisconsin School of Business (January 3, 2017). New York continues to outrank London James A. Graaskamp Center for Real Estate, Washington DC.

Okumu, R (February 13, 2017) Real Estate Sector in Kenya: A Review of 2016 and Forecast for 2017. http://www.buyrentkenya.com

Reilly, F. K., & Brown, K.C.(2012). *Investment analysis and portfolio management.* South Western Cengage Learning

Gotze U., Northcott, D., & Schuster P. (2015). *Investment appraisal: Methods and models* (Springer Texts in Business and Economics) 2nd Edition, Kindle Edition, Springer

Lumby, S.& Jones, C.(2001). *Fundamentals of investment appraisal.* Paper Back

Röhrich, M.(2007). Fundamentals of investment appraisal: An illustration based on a case study. Oldenbourg Verlag

Agar C.f. (2007).Capital investment & financing: a practical guide to financial evaluation. Butterworth-Heinemann.

Kolaksazov, A.(2015). *Risk Management in Investment Decisions: Real Options Approach.* Anchor Academic Publishing

Brigham, M. & Friend, I. (2001).*The changing role of the individual investor: A twentieth century fund report*, Wiley, New York, NY.,

Brown, F. and C. Carland, 'Differentiating Entrepreneurs from Small Business Owners: A Conceptualisation', *Academy of Management Review 9* (2004), pp. 354 – 359.

Copeland, K. O'Neill and S. Cromie, (2005). *Financial management theory* . London: Macmillan.

Dimitrios,I. M., (2007). Investors' behavior in the Athens Stock Exchange (ASE). *Journal of Accountancy*, (*vol 11*), 120, 67-72.

Epstein,M.J. (1996).Social disclosure and the individual investor. *Accounting, Auditing & Accountability Journal*, 4, 94-109.

Fisher, K. L., & Statman, M. (2000). Investor sentiment and stock returns. *Association for*

Investment Management and Research, 7, 16-23.

Fischer, R.& Gerhardt, R. (2007). Investment mistakes of individual investors and the impact of financial advice. *European Business School Working Paper*

Elton, E.J., Gruber, M.J., Brown, S.J. & Goetz Mann, W.N. (2011). *Modern portfolio theory and investment analysis international student version*, 8th Edition.Wiley & Sons.

Greenwood and D. L. Sexton, 'An Interactive Model of New Venture Creation', *Journal of Small Business Management* 26 (1988), pp. 1 - 7.

Hodge, F. D. (2003). Investors' perceptions of earnings quality, auditor independence and the usefulness of audited financial information. Accounting Horizons, 17, 37-48.

Hussein, A.H (2007). Factors influencing individual investor behavior in the UAE financial markets. *Journal of Business*, 92, 23-35.

Kadiyala, P. &Rau, R. (2004). Investor reaction to corporate event announcements: Under- reaction or over-reaction? *Journal of Business*, 77, 357-386.

Kanhneman, D. & Tversky, A. (1979). Prospect theory: An analysis of decision under risk, *Econometrica*, March 1979.

Kanhneman, D. & Tversky, A. (1973). Availability: A heuristics for judging frequency and probability, *Cognitive Psychology*, 5, 207-232.

Krishnan, R. & Brooker, D.M (2002). Investors use of analysts' recommendations. *Behavioral Research in Accounting*, 14, 129-158.

Kothari, C.R. (2003). *Research methods.* New Delhi: Naeage International.

Malmendier, U & Shanthikumar, D. (2003). Are small investors naïve? *Stanford University Working Paper.*

Merilkas,A.,& Prasad, D.(2003). Factors influencing Greek investor behavior on the Athens Stock Exchange. *Journal of Business*, 66, 34-40.

Mugenda, O.M., &Mugenda, A.G. (2000).*Research methods: Quantitative and qualitative approaches*. Nairobi: Acts Press.

Nagy, R. A. & Obenberger, R. W. (2000). Factors influencing investors behavior. *Financial Analyst Journal* , 50, 63-68.

Nunnally, C. J. (1976). *Psychometric theory*, McGraw Hill: New York.
Pandey M. I. (2006). *Financial Management*, Vikas Publishing House Ltd, 9th Ed.

Pandey M. I. (2008). *Financial Management*, Vikas Publishing House Ltd, 9th Ed.

Pareto N., *Entrepreneurship and Small Firms* (London: McGraw-Hill, 2005).

Potter, R.E. (2005).An empirical study of motivations of common stock investors. *Southern Journal of Business, 6*(1),41-44.

Shanthikumar,D. & Malmendier, H.(2003) Are small investors naive?, *Stanford University Working Paper*

Sharp. J. A., Peters, (2002*). The management of a student's research project.* Aldershot. England: Gower

Tapia, W & Yermo J. (2007). Implications of behavioural economics for mandatory individual account pension systems (OCED). *Working papers on insurance and private pensions No 11.*

Thaler (2001). *Theory of mental accounting*. New York: Academic Press.

Ndiege C.O.(2012). Factors influencing investment decision in equity stocks at the Nairobi securities exchange among teachers in Kisumu Municipality, Kenya. http://erepository.uonbi.ac.ke/handle/11295/10773

Mutwiwa, T.M. , & Fondo, F.K. (2015) Factors influencing investment in the mining sector in Kenya: A Case Study of Base Titanium in Kwale, County. *International Journal of Science and Research, 4*(10), 27-33

Jagongo, A. & Mutswenje, V.S. (2014) A Survey of the factors influencing investment decisions: The case of individual investors at the NSE. *International Journal of Humanities and Social Science. 4* (4),92-101

Ojwang', P.A. (2015). Behavioral factors and investment decisions by traders in Kibuye Market, Kisumu Town, Kenya. http://erepository.uonbi.ac.ke/bitstream/handle

Maingi, I. K(2011) A survey of factors that influence capital budgeting techniques among commercial banks in Kenya. http://erepository.uonbi.ac.ke:8080/handle

Mbugua, J.N.(2011). Factors influencing business choice by small and medium sized enterprises in motor spares businesses along Kirinyaga Road in Nairobi http://erepository.uonbi.ac.ke/bitstream/handle/11295/12376/Mbugua_

Katabi ,R. J.& Dimoso, R. L.(2016) The Effect of small business characteristics on the choice of investment evaluation techniques for SMEs in Tanzania *Journal of Business and Management, 18* (4), 11-18.

Chege, A. M.(2013). Factors influencing the choice of investment options by registered fund managers in Kenya. http://business.ku.ac.ke/images/stories/research

Kiget, D. (2014). Capital budgeting techniques adopted by companies listed at the Nairobi Securities Exchange. http://erepo.usiu.ac.ke/bitstream/handle

Karanja, J.P.K. (2007). A survey of factors influencing investment companies portfolio choice. http://erepository.uonbi.ac.ke:8080/xmlui/handle

Omboi, B. M. & Kigige A. M.(2011). Factors influencing real estate property prices a survey of real estates in Meru Municipality, Kenya. *Journal of Economics and Sustainable Development,2*(4), 34-43.

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APPENDICES

Appendix I: Introduction Letter

C/O DEPT. OF ACCOUNTING AND FINANCE
SCHOOL OF BUSINESS AND ECONOMICS
MASENO UNIVERSITY
PRIVATE BAG, MASENO

DATE_____

TO WHOM IT MAY CONCERN
Dear Sir/Madam,

RE: ACADEMIC RESEARCH

I am a student of Maseno University, pursuing Master of Science in Finance course. As part of the requirements I am carrying out this research entitled **"Contribution of Investment Appraisal Factors in Investment Choices by Real Estate Investors in Kisumu City, Kenya"**

Your assistance is requested in sparing a few minutes to answer the questions provided in the attached questionnaire. Your identity is not required and the information you provide will be treated in strict confidence.

Thank you.

Yours faithfully,

Florence Akinyi Odhiambo
MSC/BE/00042/2015

Appendix II: Questionnaire for Respondents

SECTION A: GENERAL INFORMATION

a) General Information

1. Period invested in Kisumu City 1 year ( ) 2years( ) 3years( ) 4 years ( )

2. Highest education level of respondent Primary ( ) Secondary ( ) Tertiary ( )

3. Experience in investment 3 years and below ( ) 4-6 years( ) 7-9 years( ) 10 years and above

b) Choice and Extent of investment

To what extent have you invested in the following categories of investments.

Categories of Investment	**EXTENT**				
	Very High (5)	**High (4)**	**Moderate (3)**	**Low(2)**	**Very low(1)**
Choice of Investment					
• Agriculture					
• Real estate, and construction					
• Energy					
• ICT					
• Banking an d Insurance					
• Tourism					
• Hotel and Accommodation					
• Telecommunications					
• Entertainment, Art and Culture					
• Health					
• Education					
• Merchandising and consumer goods					

c) To what extent do you consider the following non-financial factors when making a choice on investment (Tick one box to indicate extent)

Non Financial Factor	**EXTENT**				
	Very High(5)	**High (4)**	**Moderate (3)**	**Low (2)**	**Very low (1)**
Legal: Value of an investment enabling the investor to meet current or future legislation					
Environmental: the impact of the investment on the physical environment					
Social: Quality of life or even lives saved by investment					
Operational benefits: increased customer satisfaction					
Risk in terms chances of losses occurring					
Public image: In terms of the feeling that the public will have on the investment					
Power and Prestige: The feeling of achievement and social ranking that will be obtained from investment					

c) To what extent do you consider the following financial factors when making a choice on investment (Tick one box to indicate extent)

Financial Factor	**EXTENT**				
	Very High(5)	**High (4)**	**Moderate (3)**	**Low (2)**	**Very low (1)**
Profits likely to be generated					
How fast the investment is likely to pay back					
Amount of financial undertaking required					
The present value of the revenues associated with the investment					
Opportunity cost associated with investment					
Industry returns					

Appendix III: Map of City of Kisumu