EFFECTS OF RENT DEFAULT ON REAL ESTATE INVESTMENT RETURN IN NAIROBI COUNTY, KENYA

BY

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UNITED STATES INTERNATIONAL UNIVERSITY - AFRICA

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A Research Project Report Submitted to the Chandaria School of Business in Partial Fulfillment of the Requirements for the Degree of Masters in Business Administration (MBA)

UNITED STATES INTERNATIONAL UNIVERSITY-AFRICA

SUMMER 2019
STUDENT’S DECLARATION

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

Signed: ________________________  Date: ________________________

Thambu Elsie Kangai (ID 655522)

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

Signed: ________________________  Date: ________________________

Dr. Francis Gatumo

Signed: ________________________  Date: ________________________

Dean, Chandaria Business School
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DEDICATION

I dedicate this project to the memory of my dad, Mr. Thambu M’Murianki, who always motivated, loved, encouraged, cared and believed in my ability to be successful in academic arena. You are gone but your belief in me has made this journey possible.
ABSTRACT

The purpose of this study was to analyze the effects of rent default on real estate investments return in Nairobi County. The study addressed the three research questions; what are the causes of rent defaults among tenants in Nairobi County?; what is the effect of rent collection on real estate return on investment in Nairobi County?; and, what are the measures of real estate investments return in Nairobi County?

The study used an explanatory research design in its attempt to achieve the purpose of the study. The target population was all the 26 registered real estate firms in Nairobi County. All the 26 firms were applied in this study. Purposive sampling technique was used to select the sample size. The study used a sample size of 130 respondents where they were sampled using non-probability convenient sampling procedure. Data collection was carried out with the use of questionnaires and the data was later analyzed using inferential and descriptive statistics. A component factor analysis and regression analysis was also performed using the simple Ordinary Least Squares (OLS) with the help of SPSS. The results of the analysis were presented in the form of tables, charts and percentages in a manner that is both simple and comprehensive and then used to complete the research report as per the study’s purpose and research questions.

On the first research question to do with causes of rent defaults among tenants, the study revealed that the main course of rent default is economic conditions which are followed closely by tenants’ satisfaction. The results from the study revealed that that there is a significant fall in unemployment as more jobs are created due to the huge investments in capital goods to meet the rising demand in the market. Tenant satisfaction is a vital driving factor for rent collection and sustainable neighborhood management.

With regard to rent collection and real estate return on investments the findings showed that inability to meet maintenance costs affected their rent collection. Real estate returns were mostly affected by inability to meet maintenance costs and the total amount invested in real estate within a given period as a percentage of GDP. The study also indicated that inability to service loan facilities affected their rent collection. Majority of the investors’ borrowers credit score drops significantly after defaulting a loan which limits them on securing loans in future.
With regards to measures of real estate investment returns the findings revealed that total amount invested in real estate within a given period as a percentage of GDP. The study revealed that real estate was connected to others sector in the economy and a unit decrease in rent default causes decreases in ROI of real estate firms and hence all investments must have a measure.

The study concluded that economic conditions are one of the reasons they defaulted their rent, tenants were satisfied, unilateral rent increases, tenants’ selection criteria was not one of the reasons they defaulted their rents and poor management of real estate did not make them default rent payment. The study also concluded that with regards rent collection and real estate return on investments inability to meet maintenance costs and service loan facilities affected real estate rent collection. Lastly the study concluded that the total amount invested in real estate within a given period as a percentage of GDP and real estate investment returns contribute to GDP.

The study recommended that real estate should intensify efforts towards improving tenant satisfaction especially streamlining response to tenant requests. The study recommended that real estate must clearly and unequivocally stipulate in the tenancy agreement before the tenants takes possession of the property. Finally, the study recommended that real estate must establish a transparent profiling of tenants who are genuinely not in a position to pay rent by instituting mechanisms that will facilitate such households to participate in sweat for rent initiatives within the community.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>STUDENT DECLARATION</td>
<td>ii</td>
</tr>
<tr>
<td>COPYRIGHT</td>
<td>iii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENT</td>
<td>iv</td>
</tr>
<tr>
<td>DEDICATION</td>
<td>v</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>vi</td>
</tr>
<tr>
<td>TABLE OF CONTENTS</td>
<td>viii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>x</td>
</tr>
<tr>
<td>LIST OF ABBREVIATIONS</td>
<td>xi</td>
</tr>
</tbody>
</table>

## CHAPTER ONE ............................................................................ 1

1.0 INTRODUCTION ......................................................................... 1

1.1 Background of the Study .................................................. 1

1.2 Statement of the Problem .................................................. 5

1.3 Purpose of the Study ....................................................... 6

1.4 Research Questions ........................................................ 6

1.5 Significance of the Study .................................................. 6

1.6 Scope of the Study .......................................................... 7

1.7 Definition of Terms ........................................................ 7

1.8 Chapter Summary .................................................................. 8

## CHAPTER TWO ............................................................................ 9

2.0 LITERATURE REVIEW ........................................................... 9

2.1 Introduction ........................................................................ 9

2.2 Causes of Rent Defaults among Tenants .................................. 9

2.3 Rent Collection and Real Estate Return on Investment .............. 14

2.4 Measures of Real Estate Investments Returns .......................... 19

2.5 Chapter Summary .................................................................. 23
CHAPTER THREE .................................................................................................................. 24

3.0 RESEARCH METHODOLOGY ..................................................................................... 24
3.1 Introduction .................................................................................................................. 24
3.2 Research Design .......................................................................................................... 24
3.3 Population and Sampling Techniques ........................................................................ 25
3.4 Data Collection Methods ............................................................................................. 26
3.5 Research Procedures .................................................................................................... 27
3.6 Data Analysis Methods ............................................................................................... 27
3.7 Chapter Summary ......................................................................................................... 29

CHAPTER FOUR .................................................................................................................. 30

4.0 RESULTS AND FINDINGS ........................................................................................ 30
4.1 Introduction .................................................................................................................. 30
4.2 General Information and Response Rate ..................................................................... 30
4.3 Causes of Rent Defaults among Tenants ..................................................................... 32
4.4 Rent Collection and Real Estate Return on Investment .............................................. 36
4.5 Measures of Real Estate Investments Returns ........................................................... 40
4.6 Chapter Summary ......................................................................................................... 44

CHAPTER FIVE ................................................................................................................... 45

5.0 DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS .................................... 45
5.1 Introduction .................................................................................................................. 45
5.2 Summary ........................................................................................................................ 45
5.3 Discussion ..................................................................................................................... 46
5.4 Conclusions .................................................................................................................. 53
5.5 Recommendations ....................................................................................................... 54

REFERENCES ...................................................................................................................... 56

APPENDICES ...................................................................................................................... 61

APPENDIX I: RESEARCH QUESTIONNAIRE ...................................................................... 61
APPENDIX II: LIST OF REAL ESTATE FIRMS IN NAIROBI CITY COUNTY .................. 65
LIST OF TABLES

Table 4.1: Gender of Respondents ........................................................................... 30
Table 4.2: Position Held ......................................................................................... 31
Table 4.3: Length of Service .................................................................................. 31
Table 4.4: Highest Level of Education ................................................................... 32
Table 4.5: Descriptive Analysis for Causes of Rent Defaults among Tenants ........... 33
Table 4.6: Correlations for Causes of Rent Defaults among Tenants ...................... 34
Table 4.7: Model Summary for Causes of Rent Default among Tenants ................. 35
Table 4.8: Analysis of Variance for Cause of Rent Default among Tenants ............. 35
Table 4.9: Regression Coefficient for Cause of Rent Default among Tenants ........... 36
Table 4.10: Descriptive Analysis for Rent Collection and Real Estate Return on Investment ................................................................................................................. 37
Table 4.11: Correlations for Rent Collection and Real Estate Return on Investment ... 38
Table 4.12: Model Summary for Rent Collection and Real Estate Return on Investment ................................................................. 39
Table 4.13: Analysis of Variance for Rent Collection and Real Estate Return on Investment ................................................................................................................. 39
Table 4.14: Regression Coefficient for Rent Collection and Real Estate Return on Investment ................................................................................................................. 40
Table 4.15: Descriptive Analysis for Measures of Real Estate Investments Returns ...... 41
Table 4.16: Correlations for Measures of Real Estate Investments Returns ............... 42
Table 4.17: Model Summary for Measures of Real Estate Investments Returns ......... 43
Table 4.18: Analysis of Variance for Measures of Real Estate Investments Returns ..... 43
Table 4.19: Regression Coefficient for Measures of Real Estate Investments Returns ... 44
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAK</td>
<td>Architectural Association of Kenya</td>
</tr>
<tr>
<td>CBK</td>
<td>Central Bank of Kenya</td>
</tr>
<tr>
<td>FFO</td>
<td>Funds from Operations</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>NHC</td>
<td>National Housing Corporation</td>
</tr>
<tr>
<td>NPL</td>
<td>Non Performing Loans</td>
</tr>
<tr>
<td>NSE</td>
<td>Nairobi Stock Exchange</td>
</tr>
<tr>
<td>REIT</td>
<td>Real Estate Investment Trust</td>
</tr>
<tr>
<td>ROI</td>
<td>Return on Investment</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>USD</td>
<td>United States Dollars</td>
</tr>
</tbody>
</table>
CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Study

All forms of investment aim at earning an income from which returns are computed. The real estate sector is no exception as its return comes through periodic income collected as opposed to capital appreciation. Land and any fixture or venture attached to it that is immovable can be described as real estate. These immovable fixtures must be permanent and they include fences, shrubs and trees, sewers, structures and utility systems as well as buildings, walls and any permanent improvements (Ding, 2014).

The real estate market forms an important component of an economy’s income and wealth. Many investors use the periodic income collected in the form of rental income to discount future collections so as to come up with the appropriate payback period. According to Shin (2016), fifty percent of the global wealth is made up by the real estate sector. Unlike other forms of investment, the real estate is characterized by fixed location, heterogeneity, illiquidity and high unit value. These unique characteristics make it necessary to use valuations as measures to come up with the true value of real estate investments return. These unique characteristics also brought about the need to different treatment from other forms of investment especially on the statement of account which are commonly referred to as the balance sheet (Ding, 2014).

Real estate investments can distinctly be categorized into high, middle and low depending on the location of the property, income or rent payable and the physical outlook of the building (Hoxha, 2014). Availability of social amenities or the lack of it characterizes the real estate investments. In high income investments, amenities like good physical infrastructural including electricity, water and road network are usually abundant. On the other hand, the lack of such amenities or poorly built and maintained characterize the low-income investments (Ding, 2014). Further to the income and geographical location classification, real estate investments can be retail, office, residential, industrial or for special purpose like green houses. Such investments may be found in cities, rural areas, beaches, islands and urban centers (Mati & Makori, 2014).
The pricing of real estate globally has experienced fluctuations especially arising from economic turbulence as a result of technological advancements and increased competition from global firms. A good example is the United States where price fluctuations in real estate have seen an increase in defaults leading to negative mortgage values for many residential properties. In such cases, outstanding loan balances have turned out to be higher than property values (Hoxha, 2014). This is mainly the case in commercial real estate where the main aim of investing is to collect regular rental income.

Like normal investment projects where the value generally depends on the period of time in the future over which to expect cash flows, risks associated with interruptions in collection of the said cash flows, and the probability of coming up with a new stream of cash flow once the current stream ceases (Hoxha, 2014). The drivers to undertake real investment is the ability to generate returns inform of income, other intangible benefits and capital (Shin, 2016). Any investment can only reap maximum returns if they are optimally utilized. For real estate investment, optimum utilization includes 100% occupancy rates, maximum rent collections, good maintenance of the physical conditions of the building, maintaining good tenant relationships to ensure low turnover and an economy that supports such investments (Ouma, 2015).

Several scholars have examined different aspects of rent defaults and real estate investments from across the world. For instance, in China, Mak, Choy and Ho (2012) concentrated on the key determinants of real estate returns using a reduced form equilibrium model. The focus of the study was to identify key sources of differentials in prices and hence returns in twenty-two provinces and four municipalities over a period of five years starting 2001 to 2006. The results indicated that economic and planning factors formed key determinants followed by demographic factors. The changes in prices of real estate were significantly affected by factors that included stock market turbulence, fierce global competition and sub-prime crisis (Mak, Choy, & Ho, 2012). In London- UK, Bracke (2015), investigated on the house prices and rents revealing that prices are a factor of amenities, demand for housing as the population increases, the changes in stock market, building and construction costs and mortgage and loans interest rates.
All rational investments must generate good returns. Investors in real estate are motivated by various reasons that include precautionary future purposes, to boost personal egos and speculative or pure investments. Sale or lease is the sole purpose of real estate consumption. The investors undertake such risks in anticipation of future increases in prices and insulation against adverse economic conditions in future. Speculation in real estate investments is rare since they are usually long-term ventures (Ding, 2014).

According to Cytonn Investments (2017) the average residential market performance yields were 6%. Further in lower to mid investments, the developments recorded higher price appreciations due to high demands. On the other hand, demand was notably low in the high income segment due to the shrinking high end investments and demand. Whilst devolution was intended to stem rural-urban migration by expanding government services to the rural areas, the unabated rural-urban migration has led to housing demand far outstripping the country’s urban housing supply especially in Nairobi county (Cytonn Investments, 2017).

Every business is faced with challenges. In real estate investment, the investors face challenges in failure by tenants to pay rent in time, economic hardships and deteriorating price levels of real estate. Tenants usually pay rent at specified rates and time as per agreements or contracts signed between a landlord and the tenant referred to as leases (Ouma, 2015). Inability, delay or failure to pay rent, as and when it falls due as specified in the tenancy agreement refer to rent default. Rent default makes it difficult for the investors to harness their returns (Tampa Bay Times, 2017). Failure to keep pace with the changing demands, leads to higher dissatisfaction. Consumer dissatisfaction usually leads to poor purchasing habits (Baum & Crosby, 2007).

According to Mwangi (1997), default in rent payments is a global challenge to real estate investors. For instance, in the United Kingdom, the average rent arrears in local authorities is over 647M. In France, over 500,000 tenants were evicted due to nonpayment of rent. In Kenya, the NHC had loan arrears of 3.5B in the year 2003/04 as a result of local authorities failing to collect rent in time. The study revealed that rent arrears in public housing are very high. A number of studies have been conducted on the effects of rent default on real estate investments returns. For instance, using a unique 15-
year panel of Florida cities that includes detailed revenue and house price data. Doerner and Ihlanfeldt (2011), investigated the pathways where a change in house price may affect city revenue per capita and test for symmetric effects during housing booms and busts. Results indicated that movements in Florida housing markets are only weakly related to a city's property taxes and total revenues per capita.

According to Muli (2013), Kenya has a very high demand for real estate property due to the rapidly growing population, developed construction industry and the appreciation of quality affordable housing in residential, commercial and industrial property markets. The key factors that have led to an increase in the property market supply include income availability, the property and construction boom as well as availability of credit and being central in the governmental policy like affordable housing in Jubilee government’s big four (Hernando, 2018).

Over the last decade, the average spending power of the Kenyan household has been on an upward growth. Coupled with the ever increasing rural-urban migration, this has enabled consumers of real estate to demand more in housing units, due to a higher spending power, the segment has optimally operated with investors reporting more surpluses (Ouma, 2015). However, the continued glocalization of real estate firms and rapidly changing architectural designs coupled with the ever changing tastes, preferences and fashion within the middle income earners demand that property developers must keep pace with such changes in demand (Cytonn Investments, 2017).

In Kenya Ogutu (2013), studied the impact of tenant satisfaction on rent arrears in Kibera and found out that rent arrears in the Kenyan informal sector are quite high. Muli (2011), studied the relationship between property prices and mortgage lending. The findings indicated that housing prices were positively and significantly related to the long-term evolution of mortgage credit.

In another study, Mati and Makori (2014) studied on effect on economic indicator on presentation of real estate within Kenya with reconsidering these areas; inflation, interest rate, transaction cost and need for housing. The results indicated that interest rate, dealing cost, inflation and demand on real estate extremely control the representation on real
estate. Musyoki (2016), studied the influence of economic growth on the performance of real estate investment industry in Machakos Kenya. Findings show that there is a significant relationship between performance of real estate and the independent variables inflation, GDP, employment and foreign direct investment. This study investigated the effects of rent default on real estate return on investment in Nairobi County.

1.2 Statement of the Problem

Investment in real estate is undertaken for its ability to provide returns inform of capital, income and intangible benefits. However, maximum returns for residential properties can only be realized when there’s full occupancy, total rent collection, good physical condition of the building and low rate of tenant turnover (Mwathi & Karanja, 2017). According to Cynton Real Estate (2018), Nairobi County rental yields averaged 11.4% driven by rent escalations ranging between 2.7-13.3%. There is also a huge deficit in housing demand of 2M housing units with 26% being for low income and 71% being middle income houses.

However, as observed by Oni (2010), rent default is highest among the middle income and low income earners. With 97% of tenants within Nairobi County falling within the middle and low income earners, this study sought to establish the effect of rent default on real estate investment returns. According to Loyford and Moronge (2014), the real estate market faces several challenges but continues to contribute over 10% to the country’s gross domestic product. The huge importance played by the real estate market towards the economy lends credence to this study. With high yields reported in the global property market, investors are keen to receive their returns as and when they fall due. For instance, the gross average rental yields on Nairobi apartments are moderately good, at around 6.0% to 7%. Townhouses yield around 5.0% to 6.0%. Yields on detached houses are lower; at 4% to 5.5%. Default by tenants therefore is of major concern to real estate investors in Nairobi (Cytonn Investments, 2017).

According to the Central Bank of Kenya (2018), the real estate contributed the most to May 2018 increase in the stock of non-performing loans (NPLs). The ratio of the non-performing loans to gross loans increased to 12.4% in April from 11.4% in February 2018 largely due to increased NPLs in the real estate, trade and manufacturing sectors. An
investment that is repaying its initial funds outlay is able to meet its obligations. However, should collections fall short and the fundamental investment returns stagnate, the investment faced challenges in meeting its obligations as the case of real estate sector and the NPLs in the CBK. Nairobi property is attractive, with significant capital gains potential. The best combination of rental yield and capital gains seems likely to be offered by townhouses. However, with declining returns and unstable macro-economic environment, coupled with the shrinking per capita income, this study therefore sought to establish the effect of rent default on real estate return on investment in Nairobi County.

1.3 Purpose of the Study
The purpose of the study was to establish the effect of rent default on real estate investment return in Nairobi County.

1.4 Research Questions

1.4.1 What are the causes of rent defaults among tenants in Nairobi County?
1.4.2 What is the effect of rent collection on real estate return on investment in Nairobi County?
1.4.3 What are the measures of real estate investments return in Nairobi County?

1.5 Significance of the Study

1.5.1 Management of Real Estate Companies
To the managers of real estate firms, the findings of this study would be important ion that it will provide important statistics which will guide their future investments decisions in real estate. This would ensure that they invest in sectors that promise optimal returns.

1.5.2 Real Estate Investors
To the investors in the real estate industry, the findings of this study would be important ion that it would provide important statistics which would guide their future investments decisions in real estate. This would ensure that they invest in sectors that promise optimal returns.
1.5.3 Policy Makers

The findings of this study would be useful for the Architectural Association of Kenya (AAK) and other regulatory bodies in the real estate sector in Kenya. The findings and conclusions of the study would be helpful in the development of efficient guidelines and policies to regulate the operations in the real estate sector.

1.5.4 Academicians

To academicians and researchers, the results of this study would be of important in contributing to new knowledge on rent defaults and real estate investment performance in Kenya. The study would therefore be a source of reference material for future scholars as well as suggest areas where further research can be conducted.

1.6 Scope of the Study

The study was limited to real estate investments within Nairobi encompassing all the residential and commercial real estate firms within the Nairobi County. The population of the study comprised of twenty-six registered and practicing real estate agents or management firms and private developers within the study area. For the purposes of this study, the researcher purposely sampled various residential real estate companies within the city to ensure equitable representation.

1.7 Definition of Terms

1.7.1 Rent Default

Rent default refers to the failure of a tenant to timely pay rent due (Oni 2010). In this study failure to pay due rent is construed as a rent default.

1.7.2 Globalization

The tendency and practice of a business to exhibit both local and global perspectives in its undertaking and operations (Ding 2014).
1.7.3 Real Estate Investment

Real Estate investment refers to investments that involve the purchase, ownership, management, rental and/or sale of real estate for profit (Ajibola & Oletubo, 2011). In this study, real estate investment means commercial real estate as residential or business premises.

1.7.4 Return on Investment (ROI)

ROI refers to a performance measure for assessing the efficiency of an investment or comparing the efficiency of a number of different investments. It measures the amount of return/benefits on an investment, relative to the investment’s cost (Rosen, 2014). In this state return on investment means the surplus divided by the initial investment.

1.8 Chapter Summary

Chapter one presents the background information to the research problem, identifies the problem statement, states the purpose of the study and lists the research questions addressed in the research project. It also presents the scope and definition of terms used. Chapter two presents the literature review. Chapter three presents the research methodology, chapter four describes the data analysis while chapter five, discussion, conclusion and recommendations.
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter reviews studies relevant to study variables so as to bring out what other scholars have examined with the aim of informing the direction that the current study is to follow. It covers in depth the three research questions; What are the causes of rent defaults among tenants in Nairobi County?; What is the effect of rent collection on real estate return on investment in Nairobi County?; and, What are the measures of real estate investments return in Nairobi County?. These are discussed below.

2.2 Causes of Rent Defaults among Tenants

Real estate investments like all other types of investments require payment of a pre-determined sum in terms of lease charges, outright purchase in cash or in terms of periodic payments usually referred to as rent (Aondohemba & Lawrence, 2015). Available empirical evidence lists the following as the causes of rent default.

2.2.1 Poor Management of Real Estate

Property management not only determines the level of income from the real estate but also its real value (Ling & Archer, 2017). Like every other physical asset, the value of buildings tends to depreciate with time. Most of the external factors that cause depreciation could be mitigated in a variety of ways, although all property owners are susceptible to them. Such factors include acts of God such as earthquakes and rain, which affects building properties in a particular way. However, it is the human factors that usually count the most when it comes to real-time management of properties (Ling & Archer, 2017).

Meagre maintenance culture among landlords can significantly increase the rate of depreciation of a building consequently affecting its value and quality (Addo, 2014). According to Scott, Cotton and Khan (2013), tenants’ willingness to pay rent deteriorates with the physical conditions and habitability standards for rental property. Property
management process also includes handling of the tenants and relevant day-to-day activities. This is the role of a property manager and includes the property maintenance, seeking out for tenants for vacant spaces, collecting rental payments, among others (Ling & Archer, 2017).

When these managers fail to perform their duties competently and diligently, the can significantly affect the income level from the rent. Competent managers ensure that they allow in reliable tenants that rent longer, pay on time, responsible in all aspects including causing wear and tear to the property and problems with their neighbors that may be of legal nature (Hoesli & McGregor, 2014). These can be made possible through thorough screening exercise of new and existing tenants. Equipped with the landlord-tenant laws, a competent property manager will ensure that the lease-hold agreements are valid. With detailed information of tenants’ activity especially about the payment of rent, the manager can be able to distinguish between risky and non-risky ones. Non-risky are those that are highly susceptible to rent defaulting and thus should be monitored more closely (Hoesli & McGregor, 2014).

2.2.2 Tenant Satisfaction

Different social classes and groups have varying satisfaction and perception of the living environment. Life satisfaction is defined as the measure of independent satisfaction attained when the expectations and needs of individuals are entirely met. According to Brown, Malone and Jordan (2015), the initial grade indicators of tenant satisfaction that should be used to develop a life satisfaction index system are spiritual, material, and system satisfaction. The relationship of tenants with the neighborhood is linked with the spiritual satisfaction while that with physical components of the housing is linked with material satisfaction (Brown, Malone & Jordan 2015).

System satisfaction is directly associated with factors related with the systems and the management. Tenant satisfaction is a vital driving factor for rent collection and sustainable neighborhood management. Like in other business domains, consumer satisfaction is critical in real estate business and is a major goal of all property managers. The best measure of consumer satisfaction is the occupancy rate. Increased vacancy
therefore could imply that the management has set a higher price for inferior property (Brown, Malone, & Jordan, 2015).

A low rate or number of tenants’ complaints could also be an indication of higher customer satisfaction. As a consequence, able tenants will be willing to pay their rents and on time as a matter of obligation and not compulsion. In this study, Scott, cotton and Khan (2016), found that tenant satisfaction is a major factor that affect or influence the willingness to pay of the tenants. Property managers that intensify their efforts to improve this factor have few cases of rent defaulting than those that do not. Tight rent collection control process is nonetheless efficient and desirable for both the tenants and the owners Muli (2013), and Rosen (2014), ranks it as a best practice in property management.

2.2.3 Prevailing Economic Conditions

A boom occurs when the rate of growth of the economy is exceeded by the rising of the real national output. It is usually characterized by high growth of consumption primarily caused by surging of real incomes. There is a significant fall in unemployment as more jobs are created due to the huge investments in capital goods to meet the rising demand in the market. At this point, rising of house prices occurs but the market is able to easily adjust to it. The problem of rent defaulting is quite low during such a period in the economy (Borio, 2014).

A recession is defined as a period when the economy experiences a deceleration of the rate of growth even though the national output is increasing. Since the growth rate in the economy is negative, the real incomes decrease significantly as the of unemployment rises. Such a period is characterized by a decline in economic activity. During such a period, the contraction of employment in the economy and reduction in the real income affects the general population as whole especially the middle and low-income earners. Along with other general expenses, tenants within that level struggle to meet their rent obligations (Borio, 2014).
During certain periods in the past, cases of discontinuation from employment have been common in the Kenya especially in the banking industry (Njanja, 2018). Other personal economic or financial conditions may also cause rent defaulting among tenants. Prolonged sickness by a member of the family especially the bread winner falls under this category. Nairobi is also home to many graduated individuals from the major universities in the county but do not have any employment or are outright lacking of any income streams, thus they are likely to be candidates for rent default (Mwathi & Karanja, 2017).

2.2.4 Tenant-Selection Criteria

Landlords usually prepare some questionnaires for tenants. This is to help get enough information about the potential tenant as much as possible. To enable landlords, gain an insight of a particular potential tenant, and tenant screening is essential. Usually screening involves personal judgements about an applicant to formal procedures like providing background information about the potential applicant, despite every landlord having their own way of screening, the major traits looked at include financial capability and behavioral suitability (Aondohemba & Lawrence, 2015).

Landlords are usually on the look out to protect their investments. Potential tenants must always confidence to the landlord about their ability to pay rent when and as it falls due. The usual method used to gauge financial capability of a prospective tenant is by way of previous rent payment records, monthly expense outlay, lifestyle and utility bills. To arrive at the probability of financial suitability, landlords usually use mathematical predictions and models for instance a maximum of a third of gross monthly salary is assumed to represent the rent payable (Bodie, Kane & Marcus, 2013).

Reliability of the income despite being suitable must also be demonstrated. This is usually done through security deposits and insurance covers. Further landlords practice legal cushioning by way of tenancy agreements to insulate against potential defaults. On the other hand, any evidence of dwindling income stability usually is a cause for many landlords to reject tenants’ application. Legal cushioning through leases is another safeguard where a landlord may consider early terminations, claiming against damages caused and penalties and surcharges on late payments (Borio, 2014).
According to Hernando (2018), one of the major causes for default is financial challenges. Any landlord wishing to protect their investments is always keen on the financial suitability. This also will help the landlord spend less in collections and other expenses. Therefore, the ability to pay rent is the key to tenant screening. However, a predictable late payment of any debt or bills to utility companies and former landlords should form part of the screening.

Being able to satisfy the landlord in terms of early payment of rent, compliance with rules and policies as well as fulfilling non-financial obligations and harmonious coexistence with fellow tenants are key behavioral aspects all landlords look at. Usually, the behavioral aspect of a prospective tenant can be obtained from previous landlords, neighbors and workmates. The tendency by one to abide by rules and procedures dictate the potential default or compliance in terms of financial obligations. It is from the non-financial responsibilities that a landlord is able to gain a better insight of a potential tenant (Appelbaum, Batt, & Clark, 2013).

2.2.5 Unilateral Increase in Rent

The aspect of affordability is subject to tenants’ disposable incomes and housing prices (Mulliner & Maliene, 2011). This factor mostly affects people whose income is under the median household income. Since a majority of the population in Kenya lives below the median household income, the option of buying houses at the prevailing market prices is not viable for them. Most tenants live in houses that their prices are lower than their gross incomes and therefore find it reasonable to live in (Mikhed & Zemčík, 2009).

Landlords must consult their tenants before increase in rents in cases of the absence of a legal guideline. However, should there be a lease agreement, the landlords should notify their clients of their intention to increase rent and communicate the reason and justification of doing so (Ayemoba, 2017). Most tenants default should a landlord unilaterally increase rent since the Kenyan Jurisdiction as provided under the rent dispute and tribunal act is pro tenant. Therefore, landlords must be careful when they undertake rent reviews to avoid future default cases. Careful consideration includes undertaking market studies understand current trends, and market rates. The property developers may
also undertake a known pattern for review within the lease agreement for tenants to be able to understand when signing the agreement (Ogutu, 2013).

All businesses require discipline. Tenants as well as landlords will be required to observe simple business rules to keep a good relationship. The applicant has to follow certain policies and rules before being allowed to rent. As an investment, landlords need to ensure legal compliance and as such any criminal background, misbehaviors and suspicious economic activities are what landlords look at when reviewing applications of prospective tenants. Therefore, unilateral rent increment may lead to tenants’ revolt when it comes to rent payment (Brown, Malone, & Jordan, 2015).

2.3 Rent Collection and Real Estate Return on Investment

According to Aondohemba and Lawrence (2015), investment decisions are made on the basis of the effect on the shareholder’s wealth. The more a firm has free cash flows, the more a firm is able to invest in more profitable ventures. Shareholder’s wealth and firm value maximization is achieved by better cash flow management by the top management team. In real estate, cash flow is generated from rent and security deposits by tenants.

However; the share of profit on the rental payments is what constitutes free cash flows for real estate firms. With enough free cash flows, real estate firms are able to re-invest the funds into other profitable ventures. Consequently, capital expenditure is met with positive shareholder reactions, particularly when spending is dependent on cash flow, mostly to those who aspire for higher dividend in the future than those who want free cash flows distributed as dividends now (Bodie, Kane & Marcus, 2013).

Property maintenance is an essential and fundamental aspect of property management which property managers cannot take lightly (Ayemoba, 2017). Rent payment is an obligation by the tenants to their landlords enshrined in the tenancy agreement (Appelbaum, Batt, & Clark, 2013). The rental income is used to finance the maintenance and other activities pertaining the management of the property. In Nairobi and most parts of Kenya, rent is usually paid on monthly basis and in rare cases on weekly basis. Rent default therefore adversely affects the smooth running of the real estate business.
2.3.1 Inability to Recoup Initial Cost Outlay

Among the most apparent effect of rental default by tenants is the investors’ inability to recoup the initial property’s cost outlay. A common characteristic of real estate investment is the requirement of enormous capital to actualize it. In most cases, such investment has a huge opportunity cost (Borio, 2014). Real estate investors often divert large sums of capital away from other huge investment opportunities to the property. The landlords often price the rent according to the accommodation quality and that of the larger surrounding or environment from where the property is located (Baum & Crosby, 2007).

Further, the rental amount set by the landlord takes into account its ability to earn return on investment and substantial profit. In many cases, the amount earns returns more than the maintenance costs and the initial investment on construction. Property owners account all these benefits even before making the investment. Rent default by tenants frustrates the anticipation of property owners to recoup their investments (Baum & Crosby, 2007).

Most property owners usually expect to attain the fulfillment of having made the investment decision. As such, most of them do not take the rent default issue lightly. Others tend to believe that rent defaulting issue is as a consequent of Property Managers incompetence in performing their duties. According to Appelbaum, Batt and Clark (2013), the issue of rent default by tenants has lost many property owners their long-time clients.

In Kenya and mostly within the public housing, rent default is high and the number of defaults keeps on increasing. This is worse since the property managers’ lack the political support, coupled with negligence and public wastage, there is usually a high negligence of tenants hence default (Ouma, 2015). For instance, for the period between the 1983-84 and 1995-96 financial years, council tenants in Nakuru accumulated rent arrears of about Kshs10 million. Usually, public housing suffers from poor maintenance and a lack of proper improvement program means dilapidation over time. As such, there are fewer tenants or the tenants are usually civil servants, relatives and political relations to the
ruling class. These factors mean low quality services as well as high default rates (Mwathi & Karanja, 2007).

2.3.2 Challenges in Property Maintenance

Among the reasons why tenants default on their obligation to pay rent is when they believe that the property is not maintained according to the agreed conditions. However, most tenants misuse this reason as they only use it as defense for not paying their rent, but most often than not, it is only because they are unable to honor their obligation to pay their rent. Nonetheless, other tenants may have real maintenance issues that require timely solution. Such tenants may withhold their rents in attempt to push the property owners to quickly set the property in a better condition (Canesi, D'Alpaos, & Marella, 2016).

All businesses must monitor their costs and attempt to keep them minimal. In real estate and property management, the short run costs include repairs and maintenance as well utility costs. In the long run, the costs include capital improvements in terms of capital expenditure. Rent default makes it possible for landlords not to honor their maintenance schedules and obligations. Further, there are other costs that may come up for instance compliance costs by statutory bodies to enforce certain building codes (Bodie, Kane, & Marcus, 2013).

Better understanding of the maintenance costs will assist landlords in making future investments. On the other hand, the current investment requires regular and standard maintenance to enable property managers retains full occupancy. A poorly maintained building does not attract high quality tenants and as such higher default rates since the quality of tenants will be low. Increases in maintenance costs are consistent with increased age, higher tenant turnover rates, the presence of air conditioning, more bathrooms per unit, higher rent per square foot (Borio, 2014).

Defaulting tenants mean high costs and effort in collections. This means the landlords must hire management consultants, debt collectors, lawyers and auctioneers as well as investing in the property. Fees payable to his agents will automatically increase his outgoings. Collection and supervision fees and charges also increase. Usually
geographical dispersion is also a cause for increase in agency. A real estate owner whose investments are spread over a wider area will definitely require agents (Addo, 2014).

2.3.3 Income Loss

When tenants default, landlords are forced to outsource debt collection firms, lawyers, auctioneers and other agents with the aim of collection, or eviction. This and other operational costs are what are referred to as agency costs. A contract by third parties or separation of management from the owner bears agency costs. In real estate, this is usually through geographical separation or contracts to third parties to manage and run their investments on behalf of the owner (Canesi, D'Alpaos, & Marella, 2016).

Chatterjee and Eyigungor (2015), noted that income leakage will occur if default occurs. An investment experiencing high default rates will have a relatively poor maintenance schedule. Renovations and capital improvements will be limited. The property investor will be faced with high agency costs and operational costs. It will also reduce his margins and thus reduction in the business income. Continued default exposes the investor to high quality competition and therefore rent reviews to market rates cannot happen since the investment cannot offer what the market standards are offering (Bodie, Kane, & Marcus, 2013).

Essentially, profitability of real estate investments depends entirely on full and timely payment of rent by tenants (Muli, 2013). Income return stability is among the core elements of real estate as a security and more so as an investment. However, the stability of income return is endangered by rent defaulting which opens up the possibility of income loss. The loss not only accounts for the amount defaulted by also tenant inducements, legal fees, marketing costs, void periods, among others. In addition, the real estate investors may be forced to write off the debt entirely even after having undertaken all necessary steps for recovery.
2.3.4 Default on Repayment of Borrowed Capital and Loss on Market Value of the Investment

To consider a loan to be on default, different lenders ought to use their own guidelines to declare a loan as a deficit (Parlour & Winton, 2013). Majority of the lenders ought to auction collaterals of the investors if they have secured loans (Canesi, D’Alpaos & Marella, 2016). This negatively influences performance of the flats in Nairobi when the tenants’ default on their payments. On small business with no collaterals, lenders increase the interest rate of the loans making it impossible for the investors to pay. Majority of the investors’ borrowers credit score drops significantly after defaulting a loan which limits them on securing loans in future (Comeig, Del Brio & Fernandez-Blanco, 2014).

Managing cash flow is important for real estate investors as is the case with all other conventional investors. Investments are usually upon its ability to generate a certain level of income. A consistent stream of revenue is important for investors looking to refinance or sell a property. A bank will want evidence that the property is generating enough net income to cover debt service payments. Therefore, rent default will mean the landlord runs into debt servicing difficulties and incurring agency costs (Barkham, 2012). Property Managers account for the fact that rent default by a tenant is a loss of timely expected cash flow which they could otherwise have earned. With the high demand of housing in Nairobi, incidence of rent default means that investor unnecessarily lose incredibly large portion of income and further carry potential costs in following up on the defaulter to pay their dues (Muli, 2013).

Muli (2013), understands that source of livelihood of the property owners is at stake when tenants default on the rent. Most property managers employ strict and efficient methods and procedures of selecting tenants from the start to avoid cash flow difficulties arising due to rent collection challenges. According to the CBK, the real estate sector contributed to over 35% of the total 12B stock of NPLs (Central Bank of Kenya, 2018). Investments of value like real estate should be in a cashflow position to that can sustain debt repayments as well as other cash and operational obligations when they fall due. Tenant default means the loan stocks accumulated by real estate firms will continue to
accumulate with low rates of repayment as evidenced by auction notices in the daily newspapers.

2.4 Measures of Real Estate Investments Returns

The performance of real estate investments has been measured differently by different scholars. Some look at the change in realizable value while others look at it from the perspective of its contribution to economic growth (Aondohemba & Lawrence, 2015). Hoxha (2014), looked at performance of real estate in terms of total investment growth following new investment in a given period. All investments must have a measure. The most likely measure is the ROI and the financial ratios; however, there are non-financial measures as well.

2.4.1 Contribution to GDP

The real estate sector plays an important role in creation of employment and provision of returns for the investors. Li (2016), justifies investments in real estate arguing that the return to housing capital is about half that to non-housing capital. According to Brown, Malone and Jordan (2015), among the benefits of housing investment is its ability to stimulate the economy. Housing investment bears the ability to bring about the growth of GDP, although it is not caused by it, while non-housing investment does not cause the growth of GDP but is caused by it.

The inflation is one of the driving forces on real estate investment growth and as the inflation grows so that the value of real estate leading to high contribution to a country’s GDP through licenses and land and property rates (Ouma, 2014). Li (2016), studied the connection among commercial real estate from both public &private markets and price and bubbles. They found out that prices rise results in the increase of real estate. This research will hinge on economic factors that influence performance of real estate investment.
According to Mati and Makori (2014), real estate development is usually a factor of credit from the financial sector. The growth in investment is usually hinged in interest rates. From the supply side to the demand side, real estate grows with less inflationary pressures and affordable credit. The real estate sector contributed 8.8 percent to Kenya’s GDP in the year 2016 according to the Economic Survey Report released by Kenya National Bureau of Statistics. This was an increase from 7.2 percent realized in 2015 with the overall contribution to GDP by the real estate standing at 8.4 percent in 2016 compared to 8.2 percent in 2015.

2.4.2 Total Investments in Real Estate

The main goal of investments is to create or generate income (Bodie, Kane & Marcus 2013). Investors create their investments with a main objective of appreciation of the real estate. On the contrary due to rent default by the tenants, the expectation of the financial return fail and the aim of achieving significant influence in the society fail due to their increased zeal to tackle social and environmental challenges (Willcocks, 2013).

According to Epstein and Yuthas (2017) who carried a study on impact investors commit to measure performance using standardized metrics, established that majority of the investors invest in real estate business for its increased return on asset. The study stated that investors carry out monitoring and evaluation to measure and report against intended social environment impacts but this does not guarantee the investors on the risk associated to rent defaulters. This lowers the total investment income due to low net profit gained at end of the financial year (El-Wahed & Ali, 2013).

Direct real estate performance measurement may be carried out at property, portfolio or market level, or for any other grouping of property assets. The headline market returns reported in the indexes are based solely on directly owned standing investments in completed and lettable properties; these returns exclude assets held indirectly through investment funds and the impacts of debt, fund management fees, taxation and cash. Market measures are intended to reflect underlying market trends over the period of analysis. Some properties, such as those occupied by their owners, are screened out of market measures in all periods (Willcocks, 2013).
Portfolio and benchmark returns include all investment properties within the portfolio, including those bought, sold, and under development or major refurbishment during the measurement period. Performance measures therefore allow the comparison of property and portfolio investment returns relative to an appropriate benchmark, either for the whole investment market or a relevant sub-group of portfolios or properties. The headline measures which are most widely relied upon and used to document the investment performance of commercial real estate are total return and its income and capital components. They are value-weighted measures for each measurement period, meaning that the contribution of each asset is in proportion to its monetary weight (El-Wahed & Ali, 2013).

### 2.4.3 Connection with Other Sectors

The bust nature of the real estate price fluctuations plays a major role in business cycles in fueling the upswing and magnifying the downswing (Schoenmaker & Wierts, 2016). Falling low of real estate prices tend of put downward pressure on the banking sector due to rent evasion and bad debts expenses for real estate loans. Therefore, the interaction of the real estate prices influences financial sectors and the macro economy sectors (Mera, & Renaud, 2016). As advocated by Keynes, investments in real estate will affect money supply and demand due to spillover effects on economic factors like employment, better infrastructure and social amenities provision as well as increase in the per capita income.

On the other hand, according to Loyford and Moronge (2014), investments in the real estate may decrease due to poor economic conditions. This will also lead to a reduction in the investment levels hence contraction of money supply, deteriorating of living standards and lack or poor infrastructure. Real estate development drives the physical growth of a country. Inadequate investments mean inadequate physical development (Cummings, 2010). According to the Kenya National Bureau of Statistics (2017), the real estate sector was a major contributor towards the growth of GDP by 9%. Further, the report notes that the sector contributed to an estimated Kshs 76.2B in value of completed buildings in Nairobi as well as 156.5 B Kshs in road construction and maintenance. The report further noted that real estate sector contributed immensely in the general increase in performance of the ICT and financial industry.
According to Cytonn Investments (2017), the real estate sector has continued its growth despite a marginal decrease in margins by 2.8% in 2017 attributed to the General Elections. The real estate sector has had the greatest growth at 14.1% compared to other sectors like financial and agricultural industries which are facing decline and unstable environmental conditions. The average yields from real estate industry continues to outperform other investment options by generating returns of upto 30% thereby making it among the most lucrative business ventures (Cytonn Investments, 2017).

2.4.5 Funds from Operations (FFO)

According to Souza (2001), many securities analysts judge a Real Estate Investment’s performance according to it funds from operations growth. Fueled by an infusion of new capital, managers are looking to diversify into new asset classes, geographies and products. But it’s not as simple as identifying the best investment opportunities or new markets. Successful expansion requires the right operational support to ensure investment manager and investor transparency, and that reporting requirements are addressed, among other issues. Most REITs are measured for efficiency by FFO. It is an operating benchmark for real estate development companies on performance and it’s more efficient than the accounting methods.

In Kenya and other African countries however, FFO is still at its infancy. It is only used in the REITs segment at the securities exchange like the Nairobi Securities Exchange to measure the operating efficiency of the real estate stocks as the business’s operational efficiency or performance, especially for most REIT companies. The reason for this is that real estate values are proven to rise and fall with macroeconomic conditions, and any operating results computed when using the cost accounting method do not reflect the accurate measurement of performance (Souza, 2001).

According to the Ayemoba (2017), the NSE launched the REITs segment in 2013. In Africa; only five countries have operational REITs. They include Nigeria, South Africa, Tanzania, Ghana and Kenya. With a combined market capitalization of the real estate sector at USD 26.4B in Africa, the vast potential of a REIT is through its capacity to act as a vehicle through which construction and development finance can be sourced. For
instance, In Kenya, foreign firms like Old Mutual in the UK can partner with Centum Kenya and develop a 6.4B mall at Two Rivers. Other investments by foreign firms include the USD 200M AVIC towers in Westlands, Delta Africa Property, and Abland. The potential to pool funds and the tax benefits under REITS in Kenya may actually be the solution to the ever-increasing housing deficit in Kenya (Ayemoba, 2017).

2.5 Chapter Summary

This chapter has covered the literature review of the existing research literature on causes of rent defaults among tenants, effect of rent collection on real estate return on investment and, measures of real estate investments return. Chapter three presents the research methodology.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction

According to Ngechu (2004), a research methodology refers to the methods, means and ways a researcher undertakes in the pursuit of the objectives outlined in the research problem as well as the procedures and techniques of collecting, selecting, analyzing and representing the findings from the study’s data. This chapter aims at outlining in specific detail how the study was conducted and indicated the suitable research methodology that was used to determine the effect of rent default on investments return in Nairobi County. The chapter outlines a systematic description of the method that the researcher adopted in obtaining information that responded to the research questions. The chapter also identifies the procedures and techniques that was used in the collection, processing and analysis of data and it is structured under; the research design, population, sampling design, sample size, research procedure and analysis.

3.2 Research Design

Research design refers to the blueprint that guides the researcher in the activities done in an effort to collect information that answered the research questions (Creswell & Cresswell, 2017). This study adopted an explanatory research design in responding to the research question on the effects of rent default on real estate investment return in Nairobi County. According to Yin (2017), an explanatory research descriptive design is concerned with gaining deep insight into specific variables usually to enable a researcher explain in detail a certain variable where there is less or little information. This design looks at collecting flexible primary and secondary data to make clear and conclusive findings of a study variable. The selected research design helped the researcher provide a functional explanation as to the causes of rent default, effects of rent collection on real estate return on investment and the measures of real estate investment returns within Nairobi County in a better, clear and conclusive manner.
3.3 Population and Sampling Techniques

3.3.1 Population

Population is the set of all groups or elements which have common identifiable characteristics and attributes (Saunders, Lewis, & Thornhill, 2015). Population is also the total number of elements which have the desired information which the researcher is interested in and responds to the research questions (Yin, 2017). The population for this study included all 26 firms and registered and practicing real estate firms within Nairobi County. The property and estate management firms provided the necessary, relevant and accurate information on causes of rent default, its effects and measures taken in the real estate investment returns.

3.3.2 Sample Design

3.3.2.1 Sampling Frame

A sampling frame is a rundown of components, or individual individuals, of the general population from which the sample is drawn (Zikmund et al., 2011). A sampling frame is a list of elements from which the sample is actually drawn from and it is closely related to the population. In this study, the sampling frame consisted of a list of all the 26 senior level management employees of the real estate firms in Nairobi County as indicated on appendix iii. From each firm, the study purposively selected five respondents. The respondents were one chief executive officer, two real estate managers and finance managers who have information on rent default causes, effects, rates and measures taken to protect real estate investment. The sample frame consists of all current and relevant people wherein information was collected to respond to the research study objective (Kothari, 2009).

3.3.2.2 Sampling Technique

Determining the sample size is a complex task and involves much clarity with regard to the balance between the resources available and number or accuracy or information obtained (Flick, 2007). Qualitative factors must be considered including nature of the research, expected outcomes, importance of the findings, and number of variables to be
studied, nature of analysis and resource constraints. Quantitative factors include variability of the population characters hence a larger sample size due to high variability of the account holders.

For this study, the researcher adopted purposive sampling in selecting the finance managers and the real estate managers since they have information that responded to the research questions. Purposive sampling is sampling technique, also called judgment sampling, and is the deliberate choice of an informant due to the qualities the informant possesses. It is a non-random technique that does not need underlying theories or a set number of informants (Creswell & Cresswell, 2017). The finance managers and real estate managers had information on effect that rent default affects the investment made in the sector while the real estate managers have significant and important information on causes and rates of rent default amongst its tenants.

3.3.2.3 Sample Size

A sample size is a representation of the entire population wherein all the research findings was generalized. Smith (2015) asserts that, the sample must be carefully selected to be representative of the population and the researcher also needs to ensure that the subdivisions entailed in the analysis are accurately catered for. The study adopted a census to include all the 26 real estate firms in data collection and analysis. According to Yin (2017), a census is ideal as there is no generalization of findings since all the elements are included in the study. The information collected is more accurate as all the population elements participated in it.

3.4 Data Collection Methods

This study collected primary data using semi-structured questionnaire that was self-administered to the respondents. The secondary data was collected by means of a checklist from annual reports of five years from 2013-2017. The selected period was relevant because as the case in the global market, the real estate industry is cyclical and in Kenya, the cycle begins with the general election and ends during another election. The semi-structured questionnaire was developed to respond to the research questions in a clear and precise manner. According to Matthews and Ross (2015) the questionnaire is a
tool used in collecting important information about the study population and it is divided such that each section gives information about specific study objectives. The questionnaire was semi-structured and divided into four sections covering the background information of the respondents and the three study variables. A five-point Likert scale was used in rating the responses on each statement on the study objectives.

3.5 Research Procedures

The researcher developed the questionnaires and pilot tested it to ensure that it is valid and reliable to collect data that is accurate and verifiable. The pilot testing was done using 10% of the target population to test for any inconsistencies, ambiguity and incomprehension. The pre-test participants not participated in the final survey to avoid pre-emption and contamination of the findings. In the process of piloting, the researcher ensured that the rectification of any errors of ambiguity existing in the research instrument is made. After the amendment of the final questionnaire, the researcher explained the purpose of the research to the respondents and sought permission to carry out the research in the given topic.

The research used semi-structured questionnaires that were distributed to all the respondents in the real estate sector. The study adopted a drop and pick later method, where the research instrument, the questionnaire was dropped at the working place of the respondents to avoid inconveniencing them. According to Silverman (2014) the respondents should not be inconvenienced while in the process of data collection, allowing the respondents one week to fill them before they are collected for analysis. When dropping the questionnaire, the researcher obtained contact information of the respondents for reminding them to fill it and respond to any queries made on the question and the instrument. The collected information on primary data covered the causes, effects and measures of rent default on real estate investment.

3.6 Data Analysis Methods

Data analysis refers to analyzing information of what has been collected and making deductions, and interferences. It is extracting significant variables, detecting anomalies, and testing any assumptions (Bauer & Gaskell, 2014). Data processing entails editing,
classification and tabulation of data collected so that they are amenable to analysts (Kothari, 2009). The process of data analysis involves data cleaning and explanation. The collected data was checked for any errors and omissions, coded, refined and then entered into Statistical Package for Social Science (SPSS).

Before processing the responses, data preparation was done on the completed questionnaires by editing, coding, entering and cleaning the data (Patton, 2006). Data collected was analyzed using descriptive and inferential statistics. The descriptive statistical tools help in describing the data and determining the respondents’ degree of agreement with the various statements under each element of rent default.

For the purpose of data estimation, this study used the simple ordinary least squares (OLS) method. Before subjecting the data to a regression analysis, a normality test was conducted to provide a general view of the distribution and behavior of the variables in use. Residual test for normality of the data series was conducted and the Jacque Bera coefficient and its p-value observed for significance level at 0.05. Correlation analysis is therefore undertaken to examine short-run co-movements and multi-collinearity among the variables. If correlation is greater than 0.8, multicollinearity exists and the researcher therefore conducted further test for collinearity.

Assumptions of the OLS model are that the error term is free of autocorrelation, that is, the observations are independent of each other. Time series data are however prone to serial correlation problem. This may result into abnormal size of adjusted $R^2$ at values such as 95% which may render the test results insignificant and with no economic meaning. The presence of autocorrelation is detected by the Durbin Watson Statistic.

One of the major assumptions of OLS regression model is that the error term is homoscedastic, that is, the errors have the same variance throughout the sample. If the error variance is not constant, the data are said to be heteroscedastic. Heteroscedasticity causes the OLS estimates to be inefficient and can as well make the forecast error variance inaccurate since the predicted forecast variance is based on the average variance instead of the variability at the end of the series. The problem is often addressed by Breusch-Pagan-Godfrey test which revealed the error term to be homoscedastic.
The study proposed a linear model for establishing the effects of rent default on residential real estate investments returns in Nairobi County.

\[ \text{ROI} = \beta_0 + \beta_1 \text{RDFC} + \beta_2 \text{RDE} + \beta_3 \text{RDM} + \epsilon_1 \]

Where:
- ROI denotes the return on real estate investments,
- RDFC denotes rent default factors,
- RDE denotes effects of rent default and,
- RDM are the measures of rent default.
- \( \beta_0 \) captures all other explanatory variables which affect real estate investment returns but are not captured in the model, a constant.
- \( \beta_1, \beta_2, \beta_3 \) are the beta coefficients of the variables while;
- \( \epsilon_1 \) captures the error term in the model.

3.7 Chapter Summary

This chapter has covered the methods and designs that the researcher adopted during the course of identifying respondents and the data collection process. Chapter three gives a detailed analysis of the population and sampling methods adopted to get the sample size of respondents who participated in the study. Purposive sampling was used in getting the real estate managers and finance managers who have information on rent default and how it affects residential real estate investments in middle income residential flats in Nairobi County. Chapter four presents research results findings of the study.
CHAPTER FOUR
4.0 RESULTS AND FINDINGS
4.1 Introduction
The chapter details the findings of the analysis on the collected data.

4.2 General Information and Response Rate
4.4.1 Response Rate
A total of 130 questionnaires were distributed to chief executive officer, two real estate managers and finance managers of the real estate firms in Kenya. From these questionnaires, 103 of them were dully filled up and returned to the researcher representing a 79.2% response rate.

4.2.2 Gender of Respondents
Majority of the respondents were male with 67.0%, followed by female with 33.0% as shown in table 4.1. From this finding the study concluded that all the gender was represented adequately and the study was in accordance with the law on gender presentation therefore the respondent was adequate to make relevance conclusion on the study.

Table 4.1: Gender of Respondents

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>69</td>
<td>67.0</td>
</tr>
<tr>
<td>Female</td>
<td>34</td>
<td>33.0</td>
</tr>
<tr>
<td>Total</td>
<td>103</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Researcher (2019)

4.2.3 Position Held
The study sought to determine the position held by the study respondents. The finding indicated that majority of the respondents were in the senior management position with 51.5%, followed by supervisor role with 25.2% and lastly the respondents under other category of positions were 23.3% as shown in in table 4.2. The findings covered the
major job groups hence the findings would present the true situation on how the study affect all economic classification groups.

**Table 4.2: Position Held**

<table>
<thead>
<tr>
<th>Management</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Management</td>
<td>53</td>
<td>51.5</td>
</tr>
<tr>
<td>Supervisor</td>
<td>26</td>
<td>25.2</td>
</tr>
<tr>
<td>Other category</td>
<td>24</td>
<td>23.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>103</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

**Source: Researcher (2019)**

**4.2.4 Length of Service**

The study also sought to determine the length that the respondents have been working in the respective organization. From the findings, most of the respondents had been providing services in the respective organization for between 4-6 years with 40.8%, followed by between 7-10 years with 23.3% and more than 10 years with 23.3% as shown in table 4.3. From the findings the respondent had been involved with the respective organization to identify and understand rental default cases and understand how they have influenced their operation.

**Table 4.3: Length of Service**

<table>
<thead>
<tr>
<th>Years</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-6 years</td>
<td>42</td>
<td>40.8</td>
</tr>
<tr>
<td>7-10 years</td>
<td>37</td>
<td>35.9</td>
</tr>
<tr>
<td>More than 10 years</td>
<td>24</td>
<td>23.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>103</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

**Source: Researcher (2019)**

**4.2.5 Highest Level of Education**

The respondents also were required to indicate their education level. Table 4.4 presents the findings. The findings indicated that majority of the respondents were degree holders with 53.4, followed by diploma with 25.2% and lastly masters with 21.4% as shown in
Table 4.4. This finding clearly reveals that the respondents were having adequate academic background to effectively read, understand and provide answers to the research questions adequately. Therefore, the study data collected presented the true situation on the ground.

### Table 4.4: Highest Level of Education

<table>
<thead>
<tr>
<th>Education</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma</td>
<td>26</td>
<td>25.2</td>
</tr>
<tr>
<td>Degree</td>
<td>55</td>
<td>53.4</td>
</tr>
<tr>
<td>Masters</td>
<td>22</td>
<td>21.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>103</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Researcher (2019)

### 4.3 Causes of Rent Defaults among Tenants

#### 4.3.1 Descriptive Analysis for Causes of Rent Defaults among Tenants

From the findings in Table 4.5, the respondents revealed that poor management in real estate is not the cause of rental default 60.2% were neutral, disagreed by 32% and agreed by 7.7 (M=2.78, SD=.641). Tenants’ satisfaction is the cause of rental default agreed by 68.9%, 21.4% disagreed and 9.7% were neutral (M=3.63, SD=.990). Economic conditions are the cause of rental default agreed by 67%, 23.3% were neutral, 9.7% disagreed (M=3.72, SD=.833). Tenants’ selection criteria are the cause of rental default agreed by 54.4%, 30.1% were neutral and 15.5% disagreed (M=3.39, SD=.744).

Unilateral rent increases are the cause of rental default agreed by 61.2%, 23.3% disagreed and 15.5% were neutral (M=3.59, SD=1.070). Harsh landlord-tenant laws are the cause of rental default agreed by 69.9%, 18.4% were neutral, 11.7% disagreed (M=3.85, SD=.954). Invalid lease-hold agreements are the cause of rental default agreed by 72.8%, 15.5% disagreed and 11.7% were neutral (M=3.70, SD=.884). Poor landlord-tenants relationship is the cause of rental default agreed by 81.5%, 12.6% disagreed and 5.8% were neutral (M=4.01, SD=1.142). High pricing rates of properties is the cause of rental default agreed by 67%, 19.4% disagreed and 13.6% were neutral (M=3.68, SD=1.122).
Miserable house conditions are the causes of rental default agreed by 71.9%, 16.5% were neutral and 11.6% disagreed (M=3.79, SD=.946). Incompetent property managers are the cause of rental default agreed by 72.8%, 19.4% were neutral and 7.8% disagreed (M=3.87, SD=.848). Unemployment is the cause of rental default agreed by 52.4%, 24.3% disagreed and 23.3% were neutral (M=3.36, SD=1.028). Absence of legal guidelines for rent defaults is the cause of rental default agreed by 55.3%, 33% were neutral and 11.7% disagreed (M=3.51, SD=.839). Lack of consultations for rent increments is not the cause of rental default since 35.9% were neutral, 35% disagreed and 29.2% agreed (M=2.88, SD=1.132).

Table 4.5: Descriptive Analysis for Causes of Rent Defaults among Tenants

<table>
<thead>
<tr>
<th></th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor management of real estate</td>
<td>0</td>
<td>32</td>
<td>60.2</td>
<td>5.8</td>
<td>1.9</td>
<td>2.78</td>
<td>.641</td>
</tr>
<tr>
<td>Tenants’ satisfaction</td>
<td>0</td>
<td>21.4</td>
<td>9.7</td>
<td>53.4</td>
<td>15.5</td>
<td>3.63</td>
<td>.990</td>
</tr>
<tr>
<td>Economic Conditions</td>
<td>0</td>
<td>9.7</td>
<td>23.3</td>
<td>52.4</td>
<td>14.6</td>
<td>3.72</td>
<td>.833</td>
</tr>
<tr>
<td>Tenants’ selection criteria</td>
<td>0</td>
<td>15.5</td>
<td>30.1</td>
<td>54.4</td>
<td>0</td>
<td>3.39</td>
<td>.744</td>
</tr>
<tr>
<td>Unilateral Rent Increases</td>
<td>0</td>
<td>23.3</td>
<td>15.5</td>
<td>39.8</td>
<td>21.4</td>
<td>3.59</td>
<td>1.070</td>
</tr>
<tr>
<td>Harsh landlord-tenant laws</td>
<td>0</td>
<td>11.7</td>
<td>18.4</td>
<td>42.7</td>
<td>27.2</td>
<td>3.85</td>
<td>.954</td>
</tr>
<tr>
<td>Invalid lease-hold agreements</td>
<td>0</td>
<td>15.5</td>
<td>11.7</td>
<td>60.2</td>
<td>12.6</td>
<td>3.70</td>
<td>.884</td>
</tr>
<tr>
<td>Poor landlord-tenants relationship</td>
<td>6.8</td>
<td>5.8</td>
<td>5.8</td>
<td>42.7</td>
<td>38.8</td>
<td>4.01</td>
<td>1.142</td>
</tr>
<tr>
<td>High pricing rates of properties</td>
<td>3.9</td>
<td>15.5</td>
<td>13.6</td>
<td>42.7</td>
<td>24.3</td>
<td>3.68</td>
<td>1.122</td>
</tr>
<tr>
<td>Miserable house conditions</td>
<td>1.9</td>
<td>9.7</td>
<td>16.5</td>
<td>51.5</td>
<td>20.4</td>
<td>3.79</td>
<td>.946</td>
</tr>
<tr>
<td>Incompetent property managers</td>
<td>0</td>
<td>7.8</td>
<td>19.4</td>
<td>50.5</td>
<td>22.3</td>
<td>3.87</td>
<td>.848</td>
</tr>
<tr>
<td>Unemployment</td>
<td>2.9</td>
<td>21.4</td>
<td>23.3</td>
<td>41.7</td>
<td>10.7</td>
<td>3.36</td>
<td>1.028</td>
</tr>
<tr>
<td>Absence of legal guidelines for rent defaults</td>
<td>1</td>
<td>10.7</td>
<td>33</td>
<td>46.6</td>
<td>8.7</td>
<td>3.51</td>
<td>.839</td>
</tr>
<tr>
<td>Lack of consultations for rent increments</td>
<td>13.6</td>
<td>21.4</td>
<td>35.9</td>
<td>21.4</td>
<td>7.8</td>
<td>2.88</td>
<td>1.132</td>
</tr>
</tbody>
</table>

4.3.2 Correlations for Causes of Rent Defaults among Tenants

The study sought to determine the correlation between the study variables. This finding was presented in terms of significance and was as indicated in Table 4.6. The findings in
Table 4.6 indicate that the causes of rent default were significant to the real estate investment return ($r=0.883$, $p<0.5$). Poor management was significant to the real estate investment return ($r=0.413$, $p<0.5$). Tenant satisfaction was insignificant to the real estate investment return ($r=0.099$, $p>0.5$). Economic conditions were significant to the real estate investment return ($r=0.221$, $p<0.5$). Tenants selection was significant to the real estate investment return ($r=0.254$, $p<0.5$). Unilateral rental increase was significant to the real estate investment return ($r=0.314$, $p<0.5$).

**Table 4.6: Correlations for Causes of Rent Defaults among Tenants**

<table>
<thead>
<tr>
<th>Causes</th>
<th>RE Invest Return</th>
<th>Default Causes</th>
<th>Poor Mgt</th>
<th>Tenant Satis’</th>
<th>Econ Condition</th>
<th>Tenant Selection</th>
<th>Unilateral Rent Incr</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE Investment Return</td>
<td>1</td>
<td>.883**</td>
<td>1</td>
<td>.413**</td>
<td>.338**</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Default Causes</td>
<td>.883**</td>
<td>1</td>
<td>.338**</td>
<td>.000</td>
<td>.000</td>
<td>.240*</td>
<td>1</td>
</tr>
<tr>
<td>Poor Management</td>
<td>.413**</td>
<td>.338**</td>
<td>1</td>
<td>.000</td>
<td>.000</td>
<td>.015</td>
<td>.015</td>
</tr>
<tr>
<td>Tenant Satisfaction</td>
<td>.099</td>
<td>.180</td>
<td>.240*</td>
<td>.074</td>
<td>.380**</td>
<td>1</td>
<td>.010</td>
</tr>
<tr>
<td>Economic Conditions</td>
<td>.320</td>
<td>.069</td>
<td>.460</td>
<td>.015</td>
<td>.010</td>
<td>.921</td>
<td>.460</td>
</tr>
<tr>
<td>Tenants Selection</td>
<td>.254**</td>
<td>.152</td>
<td>.251*</td>
<td>.428**</td>
<td>.415**</td>
<td>1</td>
<td>.011</td>
</tr>
<tr>
<td>Unilateral Rental Increase</td>
<td>.314**</td>
<td>.248*</td>
<td>.354**</td>
<td>.014</td>
<td>.525**</td>
<td>.321**</td>
<td>1</td>
</tr>
</tbody>
</table>

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

* Correlation is significant at the 0.05 level (2-tailed)
4.3.3 Regressions for Causes of Rent Defaults among Tenants

4.3.3.1 Model Summary

The study sought to determine the total variation between the study variables. This finding was presented in terms of R and R^2. From the findings the R^2 was .779. This finding indicates that there are other factors apart from causes of rent default that affect real estate investment returns, since causes of rent default only account for 0.779 in terms of mean.

Table 4.7: Model Summary for Causes of Rent Default among Tenants

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.883^a</td>
<td>.779</td>
<td>.777</td>
<td>.20801</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Causes of Rent Default

4.3.3.2 Analysis of Variance

From Table 4.8, the overall model was significant in determining the effect of cause of rent default on real estate investment returns. This is presented by significance values of 0.000 which is less than 0.05. The finding also indicates that the F calculated value was 356.089, this value is more than the F tabulated values which is 15.407. These findings show that the overall model was fit in determining the effect of cause of rent default on real estate investment returns in Nairobi County.

Table 4.8: Analysis of Variance for Cause of Rent Default among Tenants

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>15.407</td>
<td>1</td>
<td>15.407</td>
<td>356.089</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>4.370</td>
<td>101</td>
<td>.043</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>19.777</td>
<td>102</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Causes of Rent Default
b. Dependent Variable: Real Estate Investment Return

4.3.3.3 Regression Coefficients

Table 4.9 presents the findings on regression coefficients for cause of rent default among tenants and its relation to real estate investment return and the beta coefficient and significance values. The overall regression function as presented by the beta coefficient is: \[ Y = 0.233 + 0.937 \text{ Cause of Rent Default} + e \]
From the regression function, holding all factors constant, cause of rent default; the coefficient for real estate investment return would be at 0.233. The study further identified that holding others factors constant, a unit increase in cause of rent default factors would lead to 0.937 increases in real estate investment return. This indicates a significant and positive influence of real estate investment return from cause of rent default.

Table 4.9: Regression Coefficient for Cause of Rent Default among Tenants

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Unstandardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.233</td>
<td>.171</td>
<td>1.363</td>
<td>.176</td>
</tr>
<tr>
<td>Cause of Rent Default</td>
<td>.937</td>
<td>.050</td>
<td>.883</td>
<td>18.870</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Real Estate Investment Return

4.4 Rent Collection and Real Estate Return on Investment

4.4.1 Descriptive Analysis for Rent Collection and Real Estate Return on Investment

From the findings in Table 4.10, the respondents revealed that inability to recoup amount invested affected real estate return on investment agreed by 48.5%, 35.9% disagreed and 15.5% were neutral (M=3.13, SD=.915). Inability to meet maintenance costs affected real estate return on investment agreed by 31.1%, another 31.1% disagreed and 37.9% were neutral (M=3.10, SD=.955). Frequent loss of income affected real estate return on investment agreed by 74.8% and 25.2% were neutral (M=3.96, SD=.685).

Inability to service loan facilities affected real estate return on investment agreed by 67% and 33% disagreed (M=3.71, SD=1.273). Lack of better cash flow management affected real estate return on investment agreed by 68.9%, 21.4% disagreed and 9.7% were neutral (M=3.63, SD=.990). Inconsistency on rental income affected real estate return on investment agreed by 67%, 23.3% were neutral and 9.7% disagreed (M=3.72, SD=.833). High cost of property management affected real estate return on investment agreed by 54.4%, 30.1% were neutral and 15.5% disagreed (M=3.39, SD=.744).
Property managers negligence affected real estate return on investment agreed by 61.2%, 23.3% disagreed and 15.5% were neutral (M=3.59, SD=1.070). Presence of income leakage affected real estate return on investment agreed by 69.9%, 18.4% were neutral and 11.7% disagreed (M=3.85, SD=.954). Increase in property investment competition affected real estate return on investment agreed by 72.8%, 15.5% disagreed and 11.7% were neutral (M=3.70, SD=.884). Loss on property market value affected real estate return on investment agreed by 81.5%, 12.6% disagreed and 5.8% were neutral (M=4.01, SD=1.142).

Table 4.10: Descriptive Analysis for Rent Collection and Real Estate Return on Investment

<table>
<thead>
<tr>
<th></th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inability to recoup amount invested</td>
<td></td>
<td>0</td>
<td>35.9</td>
<td>15.5</td>
<td>48.5</td>
<td>0</td>
<td>3.13</td>
</tr>
<tr>
<td>Inability to meet maintenance costs</td>
<td></td>
<td>0</td>
<td>31.1</td>
<td>37.9</td>
<td>21.4</td>
<td>9.7</td>
<td>3.10</td>
</tr>
<tr>
<td>Frequent loss of income</td>
<td></td>
<td>0</td>
<td>25.2</td>
<td>53.4</td>
<td>21.4</td>
<td>3.96</td>
<td>.685</td>
</tr>
<tr>
<td>Inability to service loan facilities</td>
<td></td>
<td>0</td>
<td>33</td>
<td>0</td>
<td>30.1</td>
<td>36.9</td>
<td>3.71</td>
</tr>
<tr>
<td>Lack of better cash flow management</td>
<td></td>
<td>0</td>
<td>21.4</td>
<td>9.7</td>
<td>53.4</td>
<td>15.5</td>
<td>3.63</td>
</tr>
<tr>
<td>Inconsistency on rental income</td>
<td></td>
<td>0</td>
<td>9.7</td>
<td>23.3</td>
<td>52.4</td>
<td>14.6</td>
<td>3.72</td>
</tr>
<tr>
<td>High cost of property management</td>
<td></td>
<td>0</td>
<td>15.5</td>
<td>30.1</td>
<td>54.4</td>
<td>0</td>
<td>3.39</td>
</tr>
<tr>
<td>Property managers negligence</td>
<td></td>
<td>0</td>
<td>23.3</td>
<td>15.5</td>
<td>39.8</td>
<td>21.4</td>
<td>3.59</td>
</tr>
<tr>
<td>Presence of income leakage</td>
<td></td>
<td>0</td>
<td>11.7</td>
<td>18.4</td>
<td>42.7</td>
<td>27.2</td>
<td>3.85</td>
</tr>
<tr>
<td>Increase in property investment competition</td>
<td></td>
<td>0</td>
<td>15.5</td>
<td>11.7</td>
<td>60.2</td>
<td>12.6</td>
<td>3.70</td>
</tr>
<tr>
<td>Loss on property market value</td>
<td>6.8</td>
<td>5.8</td>
<td>5.8</td>
<td>42.7</td>
<td>38.8</td>
<td>4.01</td>
<td>1.142</td>
</tr>
</tbody>
</table>

4.4.2 Correlations for Rent Collection and Real Estate Return on Investment

The study sought to determine the correlation between the study variables. This finding was presented in terms of significance and was as indicated in Table 4.11. The findings in Table 4.11 indicate that rent collection was significant to the real estate investment return ($r=0.368$, $p<0.5$). Inability to recoup initial cost outlay was significant to the real estate investment return ($r=0.210$, $p<0.5$). Challenges in property maintenance was significant to the real estate investment return ($r=0.210$, $p<0.5$). Income loss was significant to the
real estate investment return \((r=0.411, p<0.5)\). Default on repayment of borrowed capital and loss on market value of the investment was significant to the real estate investment return \((r=0.277, p<0.5)\).

**Table 4.11: Correlations for Rent Collection and Real Estate Return on Investment**

<table>
<thead>
<tr>
<th></th>
<th>RE Investment Return</th>
<th>Rent Collection</th>
<th>Inability to Recoup</th>
<th>Property Mgt Challenge</th>
<th>Income Loss</th>
<th>Borrowed Capital Default</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE Investment Return</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rent Collection</td>
<td>.368**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inability to Recoup</td>
<td>.210*</td>
<td>.641**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.033</td>
<td>.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property Mgt Challenge</td>
<td>.210*</td>
<td>-.436**</td>
<td>-.923**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.033</td>
<td>.000</td>
<td>-.923**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income Loss</td>
<td>.411**</td>
<td>-.223*</td>
<td>-.633**</td>
<td>.485**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>.000</td>
<td>.023</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Borrowed Capital Default</td>
<td>.277**</td>
<td>-.644**</td>
<td>-.727**</td>
<td>.629**</td>
<td>.185</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>.005</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.061</td>
</tr>
</tbody>
</table>

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

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

4.4.3 Regressions for Rent Collection and Real Estate Return on Investment

4.4.3.1 Model Summary

The study sought to determine the total variation between the study variables. This finding was presented in terms of \(R\) and \(R^2\). From the findings the \(R^2\) was .135. This finding indicates that there are other factors apart from rent collection that affects real estate investment returns, since rent collection only accounts for 0.135 in terms of mean.
Table 4.12: Model Summary for Rent Collection and Real Estate Return on Investment

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.368a</td>
<td>.135</td>
<td>.127</td>
<td>.41145</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Rent Collection

4.4.3.2 Analysis of Variance

From Table 4.13, the overall model was significant in determining the effect of rent collection on real estate investment returns. This is presented by significance values of 0.000 which is less than 0.05. The finding also indicates that the F calculated value was 15.822, this value is more than the F tabulated values which is 2.679. These findings show that the overall model was fit in determining the effect of rent collection on real estate investment returns in Nairobi County.

Table 4.13: Analysis of Variance for Rent Collection and Real Estate Return on Investment

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>2.679</td>
<td>1</td>
<td>2.679</td>
<td>15.822</td>
<td>.000b</td>
</tr>
<tr>
<td>Residual</td>
<td>17.099</td>
<td>101</td>
<td>.169</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>19.777</td>
<td>102</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Rent Collection
b. Dependent Variable: Real Estate Investment Return

4.4.3.3 Regression Coefficients

Table 4.14 presents the findings on regression coefficients for rent collection and its relation to real estate investment return and the beta coefficient and significance values. The overall regression function as presented by the beta coefficient is: \( Y = 2.175 + 0.394 \) Rent Collection + e

From the regression function, holding all factors constant, rent collection; the coefficient for real estate investment return would be at 2.175. The study further identified that holding others factors constant, a unit increase in rent collection would lead to 0.394
increase in real estate investment return. This indicates a significant and positive influence of real estate investment return from rent collection.

**Table 4.14: Regression Coefficient for Rent Collection and Real Estate Return on Investment**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Unstandardized Coefficients</th>
<th>Unstandardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>2.175</td>
<td>.394</td>
<td>.320</td>
<td>6.791</td>
<td>.000</td>
</tr>
<tr>
<td>Rent Collection</td>
<td>.394</td>
<td>.099</td>
<td>.368</td>
<td>3.978</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Real Estate Investment Return

**4.5 Measures of Real Estate Investments Returns**

**4.5.1 Descriptive Analysis for Measures of Real Estate Investments Returns**

From the findings in Table 4.15, the respondents revealed that contribution to GDP affected real estate return on investment agreed by 68.9%, 21.4% disagreed and 9.7% were neutral (M=3.63, SD=.990). The total amount invested in real estate within a given period as a percentage of GDP affected real estate return on investment agreed by 84.5% and 15.5% were neutral (M=4.00, SD=.560). The connectivity of the sector with other sectors in the economy affected real estate return on investment agreed by 67% and 33% disagreed (M=3.55, SD=1.161).

Funds from operations (FFOs) affected real estate return on investment although 47.6% were neutral, 31.1% agreed and 21.4% disagreed (M=3.10, SD=.721). Outperforming other investment options affected real estate return on investment agreed by 54.4%, 30.1% were neutral and 15.5% disagreed (M=3.39, SD=.744). Consistency growth of real estate sector affected real estate return on investment agreed by 61.2%, 23.3% disagreed and 15.5% were neutral (M=3.59, SD=1.070). Annual rental yield affected real estate return on investment agreed by 69.9%, 18.4% were neutral and 11.7% disagreed (M=3.85, SD=.954).
Increase of real estate company shares affected real estate return on investment agreed by 72.8%, 15.5% disagreed and 11.7% were neutral (M=3.70, SD=.884). Annualized price appreciation affected real estate return on investment agreed by 81.5%, 12.6% disagreed and 5.8% were neutral (M=4.01, SD=1.142). Increase in occupancy rate affected real estate return on investment agreed by 67%, 19.4% disagreed and 13.6% were neutral (M=3.68, SD=1.122).

Table 4.15: Descriptive Analysis for Measures of Real Estate Investments Returns

<table>
<thead>
<tr>
<th>Measure</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>The contribution to GDP</td>
<td>0</td>
<td>21.4</td>
<td>9.7</td>
<td>53.4</td>
<td>15.5</td>
<td>3.63</td>
<td>.990</td>
</tr>
<tr>
<td>The total amount invested in real estate within a given period as a percentage of GDP</td>
<td>0</td>
<td>0</td>
<td>15.5</td>
<td>68.9</td>
<td>15.5</td>
<td>4.00</td>
<td>.560</td>
</tr>
<tr>
<td>The connectivity of the sector with other sectors in the economy</td>
<td>0</td>
<td>33</td>
<td>0</td>
<td>45.6</td>
<td>21.4</td>
<td>3.55</td>
<td>1.161</td>
</tr>
<tr>
<td>Funds from Operations (FFOs)</td>
<td>0</td>
<td>21.4</td>
<td>47.6</td>
<td>31.1</td>
<td>0</td>
<td>3.10</td>
<td>.721</td>
</tr>
<tr>
<td>Outperforming other investment options</td>
<td>0</td>
<td>15.5</td>
<td>30.1</td>
<td>54.4</td>
<td>0</td>
<td>3.39</td>
<td>.744</td>
</tr>
<tr>
<td>Consistency growth of real estate sector</td>
<td>0</td>
<td>23.3</td>
<td>15.5</td>
<td>39.8</td>
<td>21.4</td>
<td>3.59</td>
<td>1.070</td>
</tr>
<tr>
<td>Annual rental yield</td>
<td>0</td>
<td>11.7</td>
<td>18.4</td>
<td>42.7</td>
<td>27.2</td>
<td>3.85</td>
<td>.954</td>
</tr>
<tr>
<td>Increase of real estate company shares</td>
<td>0</td>
<td>15.5</td>
<td>11.7</td>
<td>60.2</td>
<td>12.6</td>
<td>3.70</td>
<td>.884</td>
</tr>
<tr>
<td>Annualized price appreciation</td>
<td>6.8</td>
<td>5.8</td>
<td>5.8</td>
<td>42.7</td>
<td>38.8</td>
<td>4.01</td>
<td>1.142</td>
</tr>
<tr>
<td>Increase in occupancy Rate</td>
<td>3.9</td>
<td>15.5</td>
<td>13.6</td>
<td>42.7</td>
<td>24.3</td>
<td>3.68</td>
<td>1.122</td>
</tr>
</tbody>
</table>

4.5.2 Correlations for Measures of Real Estate Investments Returns

The study sought to determine the correlation between the study variables. This finding was presented in terms of significance and was as indicated in Table 4.16. The findings in Table 4.16 indicate that measures of real estate investments returns were significant to the real estate investment return ($r=0.606, p<0.5$). Contribution to GDP was insignificant to the real estate investment return ($r=0.142, p>0.5$). Total investments in real estate was significant to the real estate investment return ($r=0.592, p<0.5$). Connection with other
sectors was significant to the real estate investment return ($r=0.645$, $p<0.5$). Funds from operations was significant to the real estate investment return ($r=0.552$, $p<0.5$).

**Table 4.16: Correlations for Measures of Real Estate Investments Returns**

<table>
<thead>
<tr>
<th>RE Invest Return</th>
<th>RE Measures</th>
<th>GDP Contribution</th>
<th>RE Total Investment</th>
<th>Sector Connection</th>
<th>FFO</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE Invest Return</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RE Measures</td>
<td>.606**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP Contribution</td>
<td>.142</td>
<td>.326**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.151</td>
<td>.001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RE Total Investment</td>
<td>.592**</td>
<td>-.987**</td>
<td>-.323**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>.000</td>
<td>.000</td>
<td>.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sector Connection</td>
<td>.645**</td>
<td>-.154</td>
<td>-.285**</td>
<td>.159</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>.000</td>
<td>.119</td>
<td>.004</td>
<td>.109</td>
<td></td>
</tr>
<tr>
<td>FFO</td>
<td>.552**</td>
<td>-.416**</td>
<td>.279**</td>
<td>.430**</td>
<td>-.263**</td>
</tr>
<tr>
<td></td>
<td>.000</td>
<td>.000</td>
<td>.004</td>
<td>.000</td>
<td>.007</td>
</tr>
</tbody>
</table>

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

**4.5.3 Regressions for Measures of Real Estate Investments Returns**

**4.5.3.1 Model Summary**

The study sought to determine the total variation between the study variables. This finding was presented in terms of $R$ and $R^2$. From the findings the $R^2$ was .367. This finding indicates that there are other factors apart from measures of real estate investment returns that affects real estate investment returns, since measures of real estate investment returns only account for 0.367 in terms of mean.
Table 4.1: Model Summary for Measures of Real Estate Investments Returns

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.606a</td>
<td>.367</td>
<td>.361</td>
<td>.35205</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Measures of Real Estate Investment Returns

4.5.3.2 Analysis of Variance

From Table 4.18, the overall model was significant in determining the effect of the measures of real estate investment returns on real estate investment returns. This is presented by significance values of 0.000 which is less than 0.05. The finding also indicates that the F calculated value was 58.572, this value is more than the F tabulated values which is 7.259. These findings show that the overall model was fit in determining the effect of measures of real estate investment returns on real estate investment returns in Nairobi County.

Table 4.18: Analysis of Variance for Measures of Real Estate Investments Returns

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>7.259</td>
<td>1</td>
<td>7.259</td>
<td>58.572</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>12.518</td>
<td>101</td>
<td>.124</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>19.777</td>
<td>102</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Measures of Real Estate Investment Returns
b. Dependent Variable: Real Estate Investment Return

4.5.3.3 Regression Coefficients

Table 4.19 presents the findings on regression coefficients for measures of real estate investment returns and its relation to real estate investment return and the beta coefficient and significance values. The overall regression function as presented by the beta coefficient is: \[ Y = 1.297 + 0.610 \text{Measures of Real Estate Investment Returns} + e \]

From the regression function, holding all factors constant, measures of real estate investment returns; the coefficient for real estate investment return would be at 1.297. The study further identified that holding others factors constant, a unit increase in measures of real estate investment returns would lead to 0.610 increase in real estate
investment return. This indicates a significant and positive influence of real estate investment return from rent collection.

**Table 4.19: Regression Coefficient for Measures of Real Estate Investments Returns**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Unstandardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.297</td>
<td>.610</td>
<td>.282</td>
<td>.606</td>
</tr>
<tr>
<td>Measures of Real Estate</td>
<td>.610</td>
<td>.080</td>
<td>.606</td>
<td>7.653</td>
</tr>
<tr>
<td>Investment Returns</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Real Estate Investment Return

**4.6 Chapter Summary**

In this chapter, the key descriptive analysis has been presented in order of the three objectives of this study. Inferential statistics were also presented in order of the research questions: causes of rent defaults among tenants, effect of rent collection on real estate return on investment and, measures of real estate investments return. The next chapter is the discussions, conclusions and recommendations of the study.
CHAPTER FIVE
5.0 DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the key findings and discusses the results in relation to prior similar research studies. The current chapter also includes the conclusions and recommendations of the present research study.

5.2 Summary

The purpose of this study was to analyze the effects of rent default on real estate investments return in Nairobi County. Summary of this study was done in terms of study questions. What are the causes of rent defaults among tenants in Nairobi County?; What is the effect of rent collection on real estate return on investment in Nairobi County?; and, What are the measures of real estate investments return in Nairobi County?

Explanatory research design was used in this study. 26 registered real estate firms in Nairobi County were targeted and all the 26 firms were applied in conducting the study. Purposive sampling technique was used to select the sample size and a size of 130 respondents were sampled using non-probability convenient sampling procedure. Primary data was collected through structured questionnaire and the data was analyzed using inferential and descriptive statistics. A component factor analysis and regression analysis were also performed using the simple ordinary Least Squares (OLS) with the help of SPSS. The results of the analysis were presented in the form of tables, charts and percentages.

From the analysis of the first research question rent defaults among tenants, the study revealed that the main course of rent default is economic conditions which are followed closely by tenants’ satisfaction. The results from the study revealed that that there is a significant fall in unemployment as more jobs are created due to the huge investments in capital goods to meet the rising demand in the market.
Analysis on the second research question the study showed that real estate return was mostly affected by inability to meet maintenance costs, followed by inability to service loan facilities, the study also identified that there is no effect of inability to recoup amount invested on return rate. Majority of the investors’ borrowers credit score drops significantly after defaulting a loan which limits them on securing loans in future.

Finally, an analysis of the last research question on measures of real estate investment returns the study revealed that total amount invested in real estate within a given period as a percentage of GDP. The study revealed that real estate was connected to others sector in the economy and a unit decrease in rent default causes decreases in ROI of real estate firms and hence all investments must have a measure.

5.3 Discussion

The purpose of the study was to establish the effect of rent default on real estate investment returns within Nairobi City County. This section provides a detailed discussion of the study findings while comparing the same to the study’s literature review.

5.3.1 Causes of Rent Defaults among Tenants

The first research question was to provide causes of rent default among tenants in Nairobi County. The findings indicated that economic conditions are one of the reasons they defaulted their rent. This finding is concurrent with Borio (2014) who revealed that there is a significant fall in unemployment as more jobs are created due to the huge investments in capital goods to meet the rising demand in the market. At this point, rising of house prices occurs but the market is able to easily adjust to it. The problem of rent defaulting is quite low during such a period in the economy.

The study indicated that tenants were satisfied. This finding is in line with Brown, Malone, and Jordan (2015) who established that system satisfaction is directly associated with factors related with the systems and the management. Tenant satisfaction is a vital driving factor for rent collection and sustainable neighborhood management. Like in other business domains, consumer satisfaction is critical in real estate business and is a major
goal of all property managers. The best measure of consumer satisfaction is the occupancy rate. Increased vacancy therefore could imply that the management has set a higher price for inferior property.

The study also indicated that unilateral rent increases. This finding is in line with Ogutu (2013) who established that Most tenants default should a landlord unilaterally increase rent since the Kenyan Jurisdiction has provided under the rent dispute and tribunal act is pro tenant. Therefore, landlords must be careful when they undertake rent reviews to avoid future default cases. Careful consideration includes undertaking market studies to understand current trends, and market rates. The property developers may also undertake a known pattern for review within the lease agreement for tenants to be able to understand when signing the agreement.

The study identified that tenants’ selection criteria was not one of the reasons they defaulted their rents. This finding is supported by Bodie, Kane, & Marcus (2013) who revealed that Landlords are usually on the look out to protect their investments. Potential tenants must always confidence to the landlord about their ability to pay rent when and as it falls due. The usual method used to gauge financial capability of a prospective tenant is by way of previous rent payment records, monthly expense outlay, lifestyle and utility bills. To arrive at the probability of financial suitability, landlords usually use mathematical predictions and models for instance a maximum of a third of gross monthly salary is assumed to represent the rent payable.

The study revealed that poor management of real estate did not make them default rent payment. This finding is concurrent with Scott, Cotton and Khan (2013) who stated that tenants’ willingness to pay rent deteriorates with the physical conditions and habitability standards for rental property. Similarly supported by Ling and Archer (2017) who noted that property management process also includes, handling of the tenants and relevant day-to-day activities. This is the role of a property manager and includes the property maintenance, seeking out for tenants for vacant spaces, collecting rental payments, among others.
The study determined that a unit decrease in default factors would lead increases in ROI of real estate and it is a significant predictor of the ROI of the real estate. This finding is in line with Aondohemba and Lawrence (2015) who established that real estate investments like all other types of investments require payment of a pre-determined sum in terms of lease charges, outright purchase in cash or in terms of periodic payments usually referred to as rent. Hoxha (2014) also looked at performance of real estate in terms of total investment growth following new investment in a given period. All investments must have a measure. The most likely measure is the ROI and the financial ratios; however, there are non-financial measures as well.

The study showed that a myriad of other factors such as harsh landlord-tenant laws, in valid lease-hold agreements, poor landlord-tenants relationship, high pricing rates of properties, miserable house conditions, incompetent property managers, unemployment, absence of legal guidelines for rent defaults and lack of consultations for rent increments also played a vital role on the cause of rent payment default. These findings are supported by Hoesli and McGregor (2014) who state that, equipped with the landlord-tenant laws, a competent property manager will ensure that the lease-hold agreements are valid. With detailed information of tenants’ activity especially about the payment of rent, the manager can be able to distinguish between risky and non-risky ones. Non-risky are those that are highly susceptible to rent defaulting and thus should be monitored more closely.

5.3.2 Rent Collection and Real Estate Return on Investment

The second research question was to provide effect of rent collection on real estate investments returns. The findings indicated that inability to meet maintenance costs affected their rent collection. This finding is in line with Mwathi and Karanja (2007) noted that usually, public housing suffers from poor maintenance and a lack of proper improvement program means dilapidation over time. As such, there are fewer tenants or the tenants are usually civil servants, relatives and political relations to the ruling class. These factors mean low quality services as well as high default rates.
The study also indicated that inability to service loan facilities affected their rent collection. This finding is concurrent with Comeig, Del Brio and Fernandez-Blanco (2014) who revealed that on small business with no collaterals, lenders increase the interest rate of the loans making it impossible for the investors to pay. Majority of the investors’ borrowers credit score drops significantly after defaulting a loan which limits them on securing loans in future.

The study revealed that inability to recoup amount invested did not affect their rent collection. This finding is in line with Baum and Crosby (2007) who established that, the rental amount set by the landlord takes into account its ability to earn return on investment and substantial profit. In many cases, the amount earns returns more than the maintenance costs and the initial investment on construction. Property owners account all these benefits even before making the investment. Rent default by tenants frustrates the anticipation of property owners to recoup their investments.

The study established that inability to meet maintenance costs did not affect their rent collection. The study identified that a unit decrease in effect of rent default would lead increase in ROI and the overall factor was a significant predictor of the ROI of the real estate Aondohemba and Lawrence (2015) who established that Shareholder’s wealth and firm value maximization is achieved by better cash flow management by the top management team. In real estate, cash flow is generated from rent and security deposits by tenants.

The study revealed that inconsistency on rental income affected rent collection. This finding is in line with Appelbaum, Batt, and Clark (2013) who state that the rental income is used to finance the maintenance and other activities pertaining the management of the property. In Nairobi and most parts of Kenya, rent is usually paid on monthly basis and in rare cases on weekly basis. Rent default therefore adversely affects the smooth running of the real estate business.

The study revealed that high cost of property management affected rent collection. The finding is supported by Ayemoba (2017) who observed that, property maintenance is an essential and fundamental aspect of property management which property managers
cannot take lightly. Appelbaum, Batt, and Clark (2013) also state that, rent payment is an obligation by the tenants to their landlords enshrined in the tenancy agreement and the rental income is used to finance the maintenance and other activities pertaining the management of the property.

The study showed that property managers negligence affected rent collection. This finding is in line with Appelbaum, Batt, and Clark (2013) who note that, most property owners usually expect to attain the fulfillment of having made the investment decision. As such, most of them do not take the rent default issue lightly. Others tend to believe that rent defaulting issue is as a consequent of Property Managers incompetence in performing their duties. According to Appelbaum, Batt and Clark (2013), the issue of rent default by tenants has lost many property owners their long-time clients.

The study showed that presence of income leakage affected rent collection. This is supported by Chatterjee and Eyigungor (2015) who noted that, income leakage will occur if default occurs. An investment experiencing high default rates will have a relatively poor maintenance schedule. Renovations and capital improvements will be limited. The property investor will be faced with high agency costs and operational costs. It will also reduce his margins and thus reduction in the business income.

The study showed that the increase in property investment competition affected real estate investment income. This finding is supported by Bodie, Kane, and Marcus (2013) who state that, continued default exposes the investor to high quality competition and therefore rent reviews to market rates cannot happen since the investment cannot offer what the market standards are offering. The study also showed that the loss on property market value affected real estate investment income. This finding is in line with Souza (2001) who observed that, the reason for this is that real estate values are proven to rise and fall with macroeconomic conditions, and any operating results computed when using the cost accounting method do not reflect the accurate measurement of performance.
5.3.3 Measures of Real Estate Investments Returns

The third research question was to provide measures of real estate investments return. The findings established that total amount invested in real estate within a given period as a percentage of GDP. This finding is in line with Brown, Malone and Jordan (2015) revealed that among the benefits of housing investment is its ability to stimulate the economy. Housing investment bears the ability to bring about the growth of GDP, although it is not caused by it, while non-housing investment does not cause the growth of GDP but is caused by it.

The study also revealed that real estate investment returns contribute to GDP. This finding is supported by Epstein and Yuthas (2017) who stated that investors carry out monitoring and evaluation to measure and repot against intended social environment impacts but this does not guarantee the investors on the risk associated to rent defaulters. Malone and Jordan (2015) also add that, among the benefits of housing investment is its ability to stimulate the economy. Housing investment bears the ability to bring about the growth of GDP, although it is not caused by it, while non-housing investment does not cause the growth of GDP but is caused by it.

The study revealed that real estate was connected to others sector in the economy. This finding is in line with Loyford and Moronge (2014), established that investments in the real estate may decrease due to poor economic conditions. This will also lead to a reduction in the investment levels hence contraction of money supply, deteriorating of living standards and lack or poor infrastructure. Real estate development drives the physical growth of a country. Inadequate investments mean inadequate physical development.

The study revealed that Funds from Operations (FFOs) was not part of their investment returns measure. This finding is concurrent with Souza (2001) who established that FFOs is only used in the REITS segment at the securities exchange like the Nairobi Securities Exchange to measure the operating efficiency of the real estate stocks as the business’s operational efficiency or performance, especially for most REIT companies. The reason for this is that real estate values are proven to rise and fall with
macroeconomic conditions, and any operating results computed when using the cost accounting method do not reflect the accurate measurement of performance.

The study revealed that a unit decrease in rent default measures would lead to increase in ROI and it is a significant predictor of the ROI of the real estate. This finding is supported by Hoxha (2014) who looked at performance of real estate in terms of total investment growth following new investment in a given period. All investments must have a measure. The most likely measure is the ROI and the financial ratios; however, there are non-financial measures as well. Aondohemba and Lawrence (2015) who established that Shareholder’s wealth and firm value maximization is achieved by better cash flow management by the top management team. In real estate, cash flow is generated from rent and security deposits by tenants.

The study revealed that outperforming other investment options was a measure of ROI. The result findings are supported by Cytonn Investments (2017) that indicates, that the real estate sector has had the greatest growth at 14.1% compared to other sectors like financial and agricultural industries which are facing decline and unstable environmental conditions, and that the average yields from real estate industry continues to outperform other investment options by generating returns of upto 30% thereby making it among the most lucrative business ventures.

The study revealed that there was a consistency in terms of growth of the real estate sector. The findings are in line with Mati and Makori (2014) who state that, from the supply side to the demand side, real estate grows with less inflationary pressures and affordable credit. Cytonn Investments (2017) also support this by indicating that, the real estate sector has continued its growth despite a marginal decrease in margins by 2.8% in 2017 attributed to the General Elections. Souza (2001) also states that, many securities analysts judge a Real Estate Investment’s performance according to it funds from operations growth.
The study revealed that annual rental yield, increase of real estate company shares, annualized price appreciation and increase in occupancy rate were measures used in real estates’ ROI. These findings are in line with Bodie, Kane and Marcus (2013) who state that, the share of profit on the rental payments is what constitutes free cash flows for real estate firms. With enough free cash flows, real estate firms are able to re-invest the funds into other profitable ventures. Consequently, capital expenditure is met with positive shareholder reactions, particularly when spending is dependent on cash flow, mostly to those who aspire for higher dividend in the future than those who want free cash flows distributed as dividends now.

5.4 Conclusions

The study has drawn several conclusions regarding effect of rent default on real estate investment returns in Nairobi County.

5.4.1 Causes of Rent Defaults among Tenants

The first research question was to provide causes of rent default among tenants in Nairobi County. The study concluded economic conditions are one of the reasons they defaulted their rent, tenants were satisfied, unilateral rent increases, tenants’ selection criteria was not one of the reasons they defaulted their rents and poor management of real estate did not make them default rent payment.

5.4.2 Rent Collection and Real Estate Return on Investment

The second research question was to provide effect of rent collection on real estate investments returns. The study concluded that inability to meet maintenance costs affected real estate rent collection, inability to service loan facilities affected real estate rent collection, inability to recoup amount invested did not affect their rent collection and inability to meet maintenance costs did not affect real estate rent collection.
5.4.3 Measures of Real Estate Investments Returns

The third research question was to provide measures of real estate investments return. The study concluded that total amount invested in real estate within a given period as a percentage of GDP, real estate investment returns contribute to GDP, real estate was connected to others sector in the economy and Funds from Operations (FFOs) was not part of their investment returns measure.

5.5 Recommendations

5.5.1 Recommendations for Improvement

5.5.1.1 Causes of Rent Defaults among Tenants

The study established that the main course of rent default is economic conditions which are followed closely by tenants’ satisfaction. The study lastly determined that a unit decrease in default factors would lead increases in ROI of real estate and it is a significant predictor of the ROI of the real estate. The study therefore recommend that real estate should intensify efforts towards improving tenant satisfaction especially streamlining response to tenant requests as other studies has proven that tenant’s satisfaction factor also influences tenant’s willingness to pay their rents.

5.5.1.2 Rent Collection and Real Estate Return on Investment

The study indicated that real estate return was mostly affected by inability to meet maintenance costs, followed by inability to service loan facilities, the study also identified that there is no effect of inability to recoup amount invested on return rate. The study recommended that real estate must clearly and unequivocally stipulate in the tenancy agreement before the tenants takes possession of the property, the consequences of refusing to pay rent and accompanying this with firm legal mechanisms for enforcement of relevant laws and regulations.

5.5.1.3 Measures of Real Estate Investments Returns

The findings indicated that the total amount invested in real estate within a given period as a percentage of GDP, followed by contribution to GDP, lastly a unit decrease in rent
default measures would lead to increase in ROI and it is a significant predictor of the ROI of the real estate. The study therefore recommended that the real estate must establish a transparent profiling of tenants who are genuinely not in a position to pay rent either due to shocks such as death in the household, prolonged sickness, abrupt discontinuation form employment or outright lack of income streams and institute mechanisms for facilitating such households to participate in sweat for rent initiatives within the community which may involve such tenants working within the community for some periods in areas such as waste management, cleaning. This system is widely practiced in developed countries.

5.5.2 Suggestions for Further Research

The current research concentrated on the effect of rent default on real estate investment returns in Nairobi County. The study there recommended that future studies should be conducted on other factors that affect rate of return on real estate investment. The Population of the study was on real estate investment returns in Nairobi County. Future studies need more variability with different denominations to investigate effect of rent default on real estate investment returns in Nairobi County. For more detailed analysis of participants and overcoming the limitation of survey methods, a qualitative research method or mixed method research method is recommended. The researcher used only their factors of religiosity: rent default and rent collection and measures of return. According to literature, there are many other factors. It is recommended that those other factors need to become predictor variables for future studies.
REFERENCES


APPENDICES
APPENDIX I: RESEARCH QUESTIONNAIRE

SECTION A: BACKGROUND INFORMATION

1. Kindly indicate your gender
   Male [ ]
   Female [ ]

2. What is your position in the organization?
   Senior Management [ ]
   Supervisor [ ]
   Other category [ ]

3. How long have you been working at real estate sector?
   Less than 3 years [ ]
   4-6 years [ ]
   7-10 years [ ]
   More than 10 years [ ]

4. What is your highest level of education?
   Certificate [ ]
   Diploma [ ]
   Degree [ ]
   Masters [ ]
   PhD [ ]
   Other (Please specify) ________________________________
5. Below are several statements on the causes of rent defaults among tenants in Nairobi County. Kindly indicate the extent of your agreement with each statement. Use a scale of 1-5 where 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = Agree and 5 = strongly agree.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
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</thead>
<tbody>
<tr>
<td>1. Poor management of real estate</td>
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<td>2. Tenants’ satisfaction</td>
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<td>3. Economic Conditions</td>
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<td>4. Tenants’ selection criteria</td>
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<td>5. Unilateral Rent Increases</td>
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<td>6. Harsh landlord-tenant laws</td>
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<td>7. Invalid lease-hold agreements</td>
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<td>8. Poor landlord-tenants relationship</td>
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<td>9. High pricing rates of properties</td>
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<td>10. Miserable house conditions</td>
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<td>11. Incompetent property managers</td>
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<td>12. Unemployment</td>
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<td>13. Absence of legal guidelines for rent defaults</td>
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<td>14. Lack of consultations for rent increments</td>
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Any other causes. Please enumerate.

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SECTION C: EFFECTS OF RENT COLLECTION ON REAL ESTATE INVESTMENTS RETURNS

Below are several statements on the effects of rent default on middle income flats investments. Kindly indicate the extent of your agreement with each statement. Use a scale of 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4 = Agree and 5 = strongly agree

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
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</thead>
<tbody>
<tr>
<td>1. Inability to recoup amount invested</td>
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<td>2. Inability to meet maintenance costs</td>
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<td>3. Frequent loss of income</td>
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<td>4. Inability to service loan facilities</td>
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<td>5. Lack of better cash flow management</td>
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<td>6. Inconsistency on rental income</td>
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<td>7. High cost of property management</td>
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<td>8. Property managers negligence</td>
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<td>9. Presence of income leakage</td>
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<td>10. Increase in property investment competition</td>
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<td>11. Loss on property market value</td>
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Any other. Please enumerate.

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B) What are the average rates of default for any given month?

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SECTION D: MEASURES OF REAL ESTATE INVESTMENT RETURNS

6. Below are several statements on the measures of residential real estate investments. Kindly indicate the extent of your agreement with each statement. Use a scale of 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4 = Agree and 5 = strongly agree.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The contribution to GDP</td>
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<tr>
<td>2. The total amount invested in real estate within a given period as a percentage of GDP</td>
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<tr>
<td>3. The connectivity of the sector with other sectors in the economy</td>
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<td>4. Funds from Operations (FFOs)</td>
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<td>5. Outperforming other investment options</td>
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<td>6. Consistency growth of real estate sector</td>
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<td>7. Annual rental yield</td>
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<td>8. Increase of real estate company shares</td>
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<td>9. Annualized price appreciation</td>
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<td>10. Increase in occupancy Rate</td>
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Any other causes. Please enumerate.

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### APPENDIX II: LIST OF REAL ESTATE FIRMS IN NAIROBI CITY COUNTY

<table>
<thead>
<tr>
<th>No.</th>
<th>Firm Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Knight Frank Kenya Ltd</td>
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<tr>
<td>2</td>
<td>Broll Kenya Ltd</td>
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<tr>
<td>3</td>
<td>Crystal Valuers Ltd</td>
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<td>4</td>
<td>Gimco Ltd</td>
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<td>5</td>
<td>Tysons Ltd</td>
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<td>6</td>
<td>Nw Realite Ltd</td>
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<tr>
<td>7</td>
<td>Amalgamated Properties Ltd</td>
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<td>8</td>
<td>Value Zone Ltd</td>
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<tr>
<td>9</td>
<td>Villa Care</td>
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<td>10</td>
<td>Landmark Realtors Ltd</td>
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<td>11</td>
<td>Ark Consultants Ltd</td>
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<td>12</td>
<td>Advent Valuers Ltd</td>
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<tr>
<td>13</td>
<td>Alliance Realtors Ltd</td>
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<tr>
<td>14</td>
<td>Cushman &amp; Wakefield</td>
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<td>15</td>
<td>Llyod Masika Ltd</td>
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<td>16</td>
<td>Regent Management Ltd</td>
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<tr>
<td>17</td>
<td>Axis Ltd</td>
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<tr>
<td>18</td>
<td>Kiragu &amp; Mwangi Ltd</td>
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<tr>
<td>19</td>
<td>Hass Consult Ltd</td>
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<td>20</td>
<td>Ryden International Ltd</td>
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<tr>
<td>21</td>
<td>Ebony Estates</td>
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<tr>
<td>22</td>
<td>Wainaina Real Estates</td>
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<tr>
<td>23</td>
<td>Vaal Real Estate</td>
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<tr>
<td>24</td>
<td>RE/MAX Real Estate</td>
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<tr>
<td>25</td>
<td>SEB Estates</td>
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<tr>
<td>26</td>
<td>Pam Golding Properties Kenya</td>
</tr>
</tbody>
</table>
TO WHOM IT MAY CONCERN.

1st February, 2019

Dear Sir/Madam,

REF: PERMISSION TO CONDUCT RESEARCH – ELSIE THAMBU
STUDENT ID. NO. 655522

The bearer of this letter is a student of United States International University (USIU) -Africa pursuing a Master of Business Administration.

As part of the program, the student is required to undertake a dissertation on “Effects of Rent Default on Real Estate Investment Returns in Nairobi County, Kenya” which requires her to collect data.

Please note that information provided will be treated with utmost confidentiality and will only be used for academic purposes.

Kindly assist the student get the appropriate data and should you have any queries contact the undersigned.

Yours Sincerely,

[Signature]

Prof. Amos Njuguna,
Dean – School of Graduate Studies, Research and Extension
Tel: 730 116 442
Email: amnjuguna@usiuc.ke
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471, 2241349, 3310571, 2219420
Fax: +254-20-318245, 318249
Email: dj@nacosti.go.ke
Website: www.nacosti.go.ke
When replying please quote

Ref. No: NACOSTI/P/19/37693/31890

Elsie Kangai Thambu
United States International University
P.O. Box 14634 – 00800
NAIROBI

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on “Effects of rent default on real estate investment return in Nairobi County, Kenya” I am pleased to inform you that you have been authorized to undertake research in Nairobi County for the period ending 25th July, 2020.

You are advised to report to the County Commissioner and the County Director of Education, Nairobi County before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit a copy of the final research report to the Commission within one year of completion. The soft copy of the same should be submitted through the Online Research Information System.

GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO

Copy to:
The County Commissioner
Nairobi County.

The County Directors of Education
Nairobi County.
THIS IS TO CERTIFY THAT:

MS. ELISIE KANGAI THAMBU
of UNITED STATES INTERNATIONAL
UNIVERSITY-AFRICA, 17100-100
NAIROBI, has been permitted to conduct research in Nairobi County
on the topic: EFFECTS OF RENT DEFAULT ON REAL ESTATE INVESTMENT RETURN IN NAIROBI COUNTY, KENYA
for the period ending: 25th July, 2020

[Signature]

Director General
National Commission for Science, Technology & Innovation

68