DETERMINANTS OF REAL ESTATE FINANCING BY MICROFINANCE INSTITUTIONS IN 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 Fulfilment of the Requirements of Master in Business Administration (MBA)

UNITED STATES INTERNATIONAL UNIVERSITY - AFRICA

SUMMER 2018
STUDENT DECLARATION

I declare this work has not been submitted to any other university other than United States International University-Africa, it’s my original work which has been submitted for the academic purposes.

Signature __________________________                 Date____________________

Treasy Maryann Wira Muriuki (ID NO: 652644)

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

Signature __________________________                 Date____________________

Dr. Elizabeth Kalunda

Signature __________________________                 Date____________________

Dean, Chandaria School of Business
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ABSTRACT

The general objective of the study was to examine the determinants of real estate financing by micro financing in Kenya. The study was guided by the following research objectives; the effect of borrower’s characteristics on access to real estate financing by microfinance institutions in Kenya, effect of lending policies on access to real estate financing by microfinance institutions in Kenya, and to determine the effect of interest rate on access to real estate financing by microfinance institutions in Kenya.

The study adopted the use of descriptive research design. The study was based on micro financing and the population of interest was clients and individuals who have taken real estate financing loans from micro finance institutions in Kenya. The study population was 218 clients. The sample size for the study was 141 clients who have taken loans to finance real estate development from various micro-finance institutions. Quantitative data was used to undertake data analysis with help of Statistical Package for Social Sciences (SPSS ver.24). Descriptive statistics and multiple regression analysis were undertaken to establish the relationship between, borrower characteristics, lending policies and interest rate and access to real estate finance loans in Kenya. The data was presented inform of graphs, pie charts, and tables.

The study results revealed that there was a weak positive correlation between borrowers’ characteristics and access to financing indicating that there was an insignificant relationship. On the second objective the relationship between lending policies and access to financing which indicated a strong positive correlation between lending policies and access to financing that there was a significant relationship. Lastly there was a strong positive correlation between interest rate and access to financing where it indicated that there was a significant relationship between interest rate and access to financing from the micro-financing institutions.

In conclusion on the first objective the age, gender and sources of income of a client do not influence the access of real estate micro financing. The borrower’s characteristics do not influence on the accessibility to real estate financing among clients by the micro-financing institutions. Secondly the study concludes that collateral substitutes and third-party guarantees affect the access to real estate micro financing. On the repayment policies on access to real estate financing had an influence on the how clients access financing and the regular loan repayments policies positively makes borrowers to be
committed and prioritize repayments which contributes to low default rates realized by micro-finance institutions. On the last objective the study concludes that High transaction costs of real estate microfinance loans affect the access to real estate loan on the clients which makes the cost of the loan to be high, higher administrative costs, costs of funds, competition from other providers, number of deposits are key items that influence the inaccessibility of the loan. The results showed that interest was highly correlated to access to real estate loans on accessibility by the clients from the micro-finance institutions.

On the recommendations on the last objective the study recommends that the government of Kenya should create the enabling environment to facilitate real estate financial accessibility to enhance growth in the sector. Secondly the study recommends that management of micro-finance institutions should remove strict compliance of the lending policies so that to create investment for the real estate developers in Kenya. Lastly the study recommends that MFIs should charge reasonable premiums which borrowers can afford and at the same time mitigate default risk. The government through the Central bank of Kenya should enforce guidelines on how the microfinance should charge premiums on borrowers, so that access to real estate financing is easily accessible among clients. And on the further studies the study recommends can be conducted on determinants of real estate financing by commercial banks so that to ascertain if the interest rates, borrowers’ characteristics, and lending polices has an influence on accessibility of the real estate financing.
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To my family members for the support and encouragement accorded to me, Words cannot express the gratitude I have for you.

Finally, to my classmates and colleagues who encouraged me when I felt I was not equal to the task, thank you so much and may God bless you all.
DEDICATION

The research project is dedicated to my late dad for always believing in me, but unfortunately never lived to see the fruits of his effort and sacrifice.
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<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ANOVA</td>
<td>Analysis of Variance</td>
</tr>
<tr>
<td>CETZAM</td>
<td>Christian Enterprise Trust of Zambia</td>
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<tr>
<td>HMF</td>
<td>Housing Microfinance</td>
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<tr>
<td>KWFT</td>
<td>Kenya Women Finance Trust</td>
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<td>MFI</td>
<td>Micro-finance Institutions</td>
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<td>NGOs</td>
<td>Non-Governmental Organizations</td>
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<td>SPSS</td>
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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Study

Microfinance institutions are institutions that provide banking services to individuals with no employment and/or have a low income to enable them access bigger financial services (Manoj, 2015). Microfinance institutions therefore offer services which include; small loans, micro-leasing, saving opportunities and insurance covers to the low-income holders, with an aim of helping them to establish and expand their own businesses. In developing economies, micro financing is popular and it ensures that the majority of the people who cannot afford bigger sources of capital can still access small financial services within their capability (Aturamu & Wood, 2017). Such institutions in most cases target the self-employed business entrepreneurs whose income is relatively low.

As compared to other financial institutions, microfinance institutions are the most reliable financial resources (International Finance Corporation, 2018). Their terms of lending are favourable in the terms of cost to the customers. For institutions whose scope extends beyond the limits of microfinance industry, there are normally no legal bindings to the clients and as a result there is likelihood that lenders may shift the location before the expected time. As opposed to this, microfinance work alongside the larger international organizations and within the policy regulations of the government in control. Microfinance have also innovated modern technologies such as credit cards and mobile banking services (Malkins, 2008).

Microfinance institutions exit in a variety of sizes depending on their focused scope of operation. While some of them focus exclusively on microfinances, others extend their scope to investing in large banks. According to the International Finance Corporation (2018), over three billion people in developing countries are still without effective access to loan and deposit services. The problem is particularly acute in Sub-Saharan Africa, where only between five and twenty-five Percent of households have a formal relationship with a financial institution. The region is also home to just two Percent of the world’s microfinance institutions. Lack of access to financial services is therefore one of the largest constraints to real estate development in the world today.
According to Squires (2015), the scale of the challenge in financing real estate development allied with capital budget constraints has meant that the appetite for innovative finance instruments has gained considerable momentum. The restructuring of financial responsibility has driven increased participation of private actors in real estate development and “more innovative and entrepreneurial modes of infrastructure provision” (Strickland, 2013, p.387). Microfinance approaches to development and regeneration have been increasingly used in the real estate financing. Moreover, the intense pressures from accelerating growth worldwide require innovative funding mechanisms to support sustainable redevelopment (Medda, Caschili, & Modelewska, 2011). In real estate development, micro financing mechanisms have been used in areas such as funding transport and energy infrastructure.

Real estate financing has over the years been a preserve of mortgage financing companies but with time, microfinance institutions have started engaging in real estate financing. An efficient housing finance system has significant importance both in meeting the housing needs of individuals and in reinforcing the development of the construction, finance and other related sectors of an economy. International experience suggests that, the widespread availability of residential mortgages has favourable impact on poverty alleviation, quality of housing, infrastructure, and urbanization (Erbas, 2010). Developed countries currently have very advanced housing finance systems in which funds flow from people with fund surpluses to the ones that have deficits and need the funds through the various channels provided by the mortgage markets.

According to Karley, Biitir and Adjei-Twum (2016), real estate microfinance is becoming an increasingly attractive and innovative source of low income housing finance for low-income households in developing countries to meet their housing needs. Many countries in the developing world such as India, Bangladesh among others are developing housing finance policies that recognised the role and importance of such innovative mechanisms. It is a known fact that traditional mortgage finance is often not only inaccessible but poorly designed and does not suit the financing strategies and situations of low income households in many developing countries. Thus, mortgage companies look for regular monthly payments from a regular stream of verifiable income for long periods, formal employment, market interest rates, and registered land title (Ferguson & Haider, 2000; Ferguson & Navarrete, 2003).
Real estate financing has been observed to require huge initial capital outlay which can be obtained from various sources. It is often difficult to finance large scale investment in real estate from personal savings. Hence, the need for other sources of finance such as equity or self-financing, micro financing institutions commercial banks, and mortgage institutions (Otrok & Terrones, 2015). The sourcing of funds for investment in real estate development poses a great deal of problem for the developer. This is largely due to economic instability and stringent measures imposed by most financial institutions. This is compounded by the fact that the interest rate structure has had an unfavourable impact on funding the development of real estate. Since the financing of real estate development is a long-term project, it has necessitated the high interest rate that is being charged on the funds provided for such development purposes (Tyson, 2015).

Hines (2015) in his study revealed that six major real estate financing methods are used across the world namely; joint venture, equity and debt financing, sale-lease back financing, advance payment of key money and sale of securities. However, micro financing has emerged as one of the other methods that individuals have turned to in order to access finances for real estate development. Real estate financing is the provision of finance or capital for purchase of housing or for own construction. Dymski (2007) defines real estate finance as the capital required for construction of housing or the resources required to acquire or access housing project by household or the credit supplied by housing finance institutions against some collateral. Unlike unsecured loans, real estate financing is a form of a secured loan whereby the mortgaged property acts as the security for the loan extended by the lending institution.

A study by Bondinuba (2017) aimed at assessing the role of microfinance in the low housing market in Ghana identified the critical role that microfinance plays in the development of real estate in Ghana. The study findings indicated that there is a strong positive relationship between micro financing and real estate development in Ghana. The study concluded that besides providing financial lending services for business development in Ghana, micro finance institutions through the strong housing microfinance (HMF) could help to regularise land tenure, acquire building materials and tools, acquire building designs and skills development, housing infrastructure delivery, finance new and home improvements, improve low-income housing governance and encourage community partnerships and development.
The situation in some developing countries is however very different in that real estate has remained largely under-developed despite the fact that sector players recognise the economic and social importance of the sector. This has been attributed to the unstable inflation rates experienced and the unfavourable factors that inhibit access to financing. Real estate financing is the provision of finance or capital for purchase of housing or for own construction. Nabutola (2004) commented that one third of Kenyans don’t have access to affordable, decent and modern housing. In addition, Arvanitis (2013) emphasized that private sector in Kenya aims at providing cheaper and affordable housing units to low and middle income earners thus bridging the supply and demand gap.

The government of Kenya recognizes that access to financial services is key to growth and development in any enterprise and especially real estate development for low income earners through affordable housing financing sources (Munene, 2014). This is because micro financing has been seen as tools to eradicate poverty in the sub-Saharan Africa. As microfinance becomes more widely accepted and moves into the main stream, the supply of services to the poor might increase, improving efficiency and outreach while lowering costs for real estate development. The greatest contribution of MFIs is that it empowers people both financially and boosts their self-esteem as well as confidence.

The Kenyan microfinance sector is one of the most vibrant in Sub-Saharan Africa. It includes a diversity of institutional forms and a fairly large branch network to serve the poor. However, microfinance activities have been regulated in Kenya only since 2006. The absence of regulation has allowed innovations to take place: institutions were set up easily without any barriers, such as minimum capital requirements. The microfinance industry has thrived in this environment (Nyaga, 2008). The Kenya microfinance sector began in the late 1960s with NGOs setting up pilot programs providing donor funded credit services. Some of the organizations have evolved over time to become commercialized, self-sustaining and hugely profitable institutions with over 100,000 citizens (Njoroge, 2008). These MFIs are regulated by the Central Bank of Kenya. There are twelve licensed MFIs in Kenya. These include Choice Microfinance Bank, Faulu, Kenya Women Microfinance bank limited, SMEP, REMU, Rafiki, Uwezo, Century, Sumac, U&I, Daraja and Caritas.
1.2 Problem Statement

In recent years the population of Kenya has steadily increased, resulting to the urban population in Nairobi to a record of 3 million, whereby all these people need shelter, hence the real estate industry is doing well and contributing to the economy (Ganiyu, Muzliu, & Elumah, 2018). Despite recent indication that the real estate business in Kenya is performing well, there is evidence that certain challenges still persist. These include amongst others, social, economic, cultural, legal and personal factors. This has led to stalled projects and unoccupied complete properties. This being an important industry that makes enormous contribution to the Kenyan economy, there are some gaps in the literature that ought to be filled, these includes: the available literature has not indicated ways in which real estate enterprises can be empowered to compete on equal levels with established businesses and also where the booming housing development is the city has been sourcing its financing (Mwangi, 2011).

There exist very few studies regarding access to financing real estate through micro financing across the world. Brown, Guin and Krischenmann (2015) while reviewing financial flow in the microfinance institutions concluded that a vast majority of small scale real estate developers have opted for microfinance banks for soliciting money to establish their housing projects in Nigerian capital. The effects of micro financing on the access to real estate financing on the economy as well as on the performance of the financial sector in general has not been given a lot of focus by researchers in Kenya. A search for empirical literature on the determinants of performance of banks in general and the effect of real estate financing on the performance of banks in Kenya revealed the existence of very few studies. Macharia (2013) evaluated the effects of global financial crisis on the financial performance of banks offering mortgage finance and Ndururi (2012) evaluated the effects of mortgage on the financial performance of all commercial banks in Kenya.

Various economists, researchers and academicians have studied real estate financing in different economies and they have drawn divergent conclusions. Real estate development is a critical driver in economic development of a country and is significantly affected by interest rates and macro-economic factors. A gap in the reviewed literature exists as far as addressing the effect of micro financing to the access to real estate finance in Kenya.
The aim of this study is therefore to establish the effect of micro financing on the access of real estate finance in Kenya.

1.3 General Objective
The general objective of the study was to determine the determinants of real estate financing by micro financing in Kenya.

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

1.4.1 To analyse the effect of borrower’s characteristics on access to real estate financing by microfinance institutions in Kenya

1.4.2 To determine the effect of lending policies on access to real estate financing by microfinance institutions in Kenya

1.4.3 To determine the effect of the effects of interest rate on access to real estate financing by microfinance institutions in Kenya.

1.5 Significance of the Study

1.5.1 Microfinance Institutions
The study findings will be very important in enabling microfinance institutions to better understand their role they play in providing access to real estate financing in Kenya. When this comes to their knowledge, they would possibly improve their existing structures and implement more effective real estate financing strategies in their operations.

1.5.2 The Government
To the government of Kenya, findings from this study will aid in setting up relevant policy programmes yield more effective and sustainable management of microfinance institutions especially when it come to the provision of large- and small-scale financing of real estate.

1.5.3 Real Estate Investors
Potential investors in real estate sector will find this study relevant in seeking for financial capital for their enterprises. Most of the business people not yet aware of the benefits and roles of the micro financing on real estate will have light and necessary information
regarding them. Data obtained from this study will also ease sound decision making on part of real estate investors in future.

1.5.4 Academicians

The findings of this study will be significant to scholars as it will add to the knowledge of the researchers in this field of study. This study will be a source of reference material for future researchers and academicians who would study on related topics hence it formulates a basis for further research.

1.6 Scope of the Study

The study focused on the individual investors and clients have relied on micro financing to access to real estate financing in Kenya. With respect to time span, the study was limited to the duration in which the clients and investors have taken microfinance loans to finance their real estate projects. The period of the study was as from January to August 2018. The role of micro finance institutions was examined in detail. Lending policies and regulations were also be of great concern. Besides these, borrower characteristics and interest rates risks that have so far set back the operations of micro financing in implementing the real estate financing was of interest.

1.7 Definition of Terms

1.7.1 Investors

Investors are businesspeople who spend available financial capital on a given project. Investors referred to in the study involve purchase and development of real estates (Coleman, 2017).

1.7.2 Micro financing

Micro financing is the provision of savings accounts, loans, insurance, money transfers and other banking services to customers that lack access to traditional financial services (Mbegue, 2015).

1.7.3 Microfinance Institutions

These are financial institutions that that provide financial services and products to small income entrepreneurs who cannot afford financial resources from higher institutions (Tyson, 2015).
1.7.4 Real Estate

A real estate is a collective term referring to land and all the fixed property on it, which can only be traded without shifting from one location to another (Deng & Liu, 2008).

1.8 Chapter Summary

This chapter has given a broad introduction on the relationship between micro financing and access to real estate financing in Kenya. The chapter has highlighted the background of the study based on the research topic also indicating the research gap from the problem statement. The chapter has also highlighted the specific study objectives, the significance of the study and the key terms that will be used in the study. The next chapter gives a review of the existing literature revolving about the research objectives. The third chapter will examine the study approach to be employed. The fourth chapter analyses the research findings while the last chapter will discuss the results and provide relevant recommendations for further study.
CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction
The literature review in the study discusses the study objectives with the aim of determining the effects of micro financing on the access to real estate financing in Kenya. The literature discussed is based on the specific research objectives which are to analyse the effects of borrower’s characteristics on access to real estate financing in Kenya; to determine the effect of lending policies on the access to real estate financing in Kenya and to determine the effects of the effects of interest rate on the access to real estate financing in Kenya.

2.2 Borrower Characteristics and the Access to Real Estate Financing

2.2.1 Age Differences and the Access to Real Estate Financing
Various studies have showed that there is a close relationship between the age differences and the access to real estate financing from microfinance institutions. Housing policies in developing countries have long supported home ownership yet access to purchase financing by individual of different age categories continues to be a mirage. According to Erbas and Nothaft (2005), Middle East and North African countries which share a number of attributes with other developing countries that have affordability problems regarding real estate financing for individuals of various age characteristics. Augsburg, Hass, Harmgart and Meghir (2012) also contends that age differences can also affect access to real estate financing especially for those who are young in societal hierarchy.

A study conducted by Opoku and Abdul-Muhimin (2013) in determining the various micro finance options of real estate financing for young individuals in Saudi Arabia, based on a sample of 800 young employed individuals, concluded that individuals who are younger than 30 years were more likely to be denied microfinance loans for real estate development compared individuals who were older than 30 years. The study adopted a survey research design in determining the respondents in the study. In addition, the study also indicated that majority of the individuals in Saudi Arabia preferred to access financing for real estate development form commercial banks and Savings and Credit Cooperatives compared to microfinance institutions due to strict finance restrictions by majority of micro finance institutions in Saudi Arabia.
According to Iqbal and Mirakhor (2017), the main focus of most real estate financial innovations in the financial markets are because of the youthful population. Olaosebikan and Adams (2014) when analysing the prospects for micro-finance in promoting real estate financing among youths in Sub-Sahara Africa adopted a case study research design in their study. Their study results indicated that that the mutual (cooperative) structure of microfinance institutions is likely to be the most cost-efficient and effective organizational form for reducing information asymmetries, agency problems and transaction costs thus promote real estate financing access by young individuals from microfinance institutions.

Gakure, Waithaka, Wanjau and Omboi (2012) conducted a research to analyse the salient characteristics of microfinance institutions in Kenya. The study majorly focused on age as a major demographic characteristic and how it affected the access to real estate financing and mortgage loans. The study adopted descriptive design with BIMAS being the study’s organization. The research findings indicated that mortgage financing is the most used source of financing, with equity and venture capital being the least source of financing used. The findings also indicated that there is a significantly positive relationship between age of individuals and real estate financing by microfinance institutions in Kenya. The study also recommended that to increase use of micro financing as a source of real estate financing among individuals of various age brackets, it will require microfinance institutions to promote their mortgage services to individuals at all levels of the economy.

According to Mwathi and Karanja (2014), while discussing the effects of financing sources on real estate development in Kenya, analysed all real estate firms in Nairobi. The research also adopted a descriptive survey design. Like Gakure et.al. (2012) in their study findings indicated that age significantly affected the number of real estate financing activities by micro finance institutions in Nairobi. In addition, a study conducted by Kamau (2011) indicate that there is growing competition for funding of real estate development due to competing needs for using the same funds to finance other productive sectors of the economy. As a result age becomes one of the key determinants to access of real estate financing by microfinances institutions.

2.2.2 Gender and the Access to Real Estate Financing

According to Blanchard, Zhao and Yinger (2008), difference in gender is among the cornerstones of the empirical literature on financial discrimination in the financial
industry. Studies have been conducted and models developed for detecting financial discrimination based on race, gender, or ethnicity. Women are typically more risk averse than men in financial decision making (Barber & Odean, 2001; Jianakopolos & Bernasek, 1998). Additionally, Schick (2014) in his study indicate that there exist differences in borrowing trends for real estate financing among males and females in the United Kingdom. They indicate that females refrain from requesting real estate loans that would put at risk their financial situation within their household. Such rationale would be in line with the findings that micro financing increases the women's financial vulnerability.

Moreover, the beneficial impact of gender diversity on firm governance and firm value has been largely acknowledged by microfinance institutions. Morduch (2015) argues that one of the main reasons for the success of microfinance in India is because the targeting of women. Indeed, Micro Finance Institutions (MFIs) do target women. Daley- Hariss (2014) study which aimed at determining the role of gender and access to micro finance loans, dataset covering 350 MFIs from 70 countries indicate women represent 73% of microfinance customers on average thus making them major sources and borrowers of real estate finance. However due to them being risk averse in nature, majority prefer not to borrow from micro finance institutions. This study finding is similar to what has been found in previous literature and research topics.

Various arguments that relate to both supply and demand for microfinance with the aim of real estate financing explain the targeting of women compared to men by microfinance institutions (Armendariz & Morduch, 2005). According to the World Bank (2007), demand and access to microfinance for real estate development is probably higher among women for a number of reasons. In many countries, women are more credit constrained than men thus they are more restricted in their access to finance and control over land and capital. Consequently they are considered less creditworthy by commercial banks. Lower education levels, as well as limited time and mobility also prevent them from engaging with the complex and lengthy procedures usually requested by the formal banking sector. The relation between gender and repayment of real estate loans from micro finance institutions has been analysed in a number of studies. However, the findings are mixed and very limited in geographical and/or institutional scope.
According to Cozarenco and Szafarz (2013) while determining the factors that influence gender diversity access to microfinance loans in Senegal indicate that women outperform men in paying microfinance loans with the aim of a higher access to micro financing. Their study was based on random sampling with a majority of the respondents being individuals operating small and medium enterprises in Dakar. On the other hand, a number of studies find that there is no significant relation between gender and repayment of microfinance real estate loans. In Malawi, the analysis carried out by Godquin (2014) shows that correlation between gender and microfinance real estate loans is positive but not significant.

According to Mathenge and Mathenge (2016), in determining the patterns microfinance institutions use in Kenya with the aim of providing access to real estate financing is difficult to test directly because microfinance institutions are required not to release individual data. Mkazoya (2011), in her study adopted an indirect identification strategy while analysing the impact of gender diversity on the uptake of real estate loans from microfinance banks in Mombasa. The study found that microfinance institutions such as Kenya Women Finance Trust (KWFT) has easier procedure of obtaining loans from MFIs than conventional banking thus has the most significant effects empowerment to women in lower class income individuals. The microfinance institution also empowers on entrepreneurship which in turn increases employment opportunities as a result a higher uptake of real estate loans.

2.2.3 Source of Income and Access to Real Estate Financing

Mosley and Hulme (2015) in their study to determine whether individual borrower characteristics affects access to microfinance real estate loan found evidence of a trade-off between occupation and access to real estate financing among microfinance banks. They found that financing programs that targeted higher-income households has a higher possibility of uptake. Those with low incomes in the study were identified as averse to risk-taking. They also used their loans for working capital or to maintain consumption levels rather than for fixed capital such as real estate development. Since, microcredit programs typically require loan repayment on a weekly basis; some critics argue that repayment comes from selling assets rather than from their income sources.
In Zambia, Tembo (2014) conducted a study to determine effects of salary-based microfinance lending on public service workers in selected government ministries of Lusaka City. The study employed both qualitative and quantitative techniques to obtain data on the effects of salary-based microfinance lending on public service workers. The major finding of the study was that public service workers had experienced serious problems of indebtedness due to their continuous interactions with MFIs. The study further revealed that loans from MFIs attracted an interest rate of over 100 per cent at the end of the repayment period. The study concluded that, while salary-based microfinance lending is ideal for solving urgent problems, it is not an effective tool for development as it forces beneficiaries into severe indebtedness thus worsening their financial strength.

Copestake (2002) undertook a study to show how impact on income distribution depends upon who obtains loans, who graduates to larger loans, who exits and group dynamics on the Copperbelt Province in Zambia. The study sought to specifically examine the impact of micro-credit on inequality by using data from a microfinance project created by the Christian Enterprise Trust of Zambia (CETZAM). In terms of poverty status, the study by Copestake shows a decrease in poverty for those involved with CETZAM. Copestake reports results from a sample survey showing that 65 percent of borrowers were living under the poverty line and 50 percent were within the standards of extreme poverty when they joined CETZAM. However these rates at the time of the study were shown to be 59 percent and 39 percent respectively, suggesting CETZAM had an impact in reaching those with low income sources.

In Kenya, Wanambisi and Bwisa (2013) in their study to determine the impact of salary scale on the access to microfinance loans in Kenya based on a case study of K-Rep Bank. The study concluded that salary-based lending is normally provided to those with a relatively stable employment history. With consumer loans the direct lending relationship is usually partly replaced by a corporate relationship between the head office and the private company or government department. The study also revealed that microfinance institutions despite their importance are faced with lots of challenges; key among them is loan defaults by customers and inadequate capital to sustain and cater for the growing number of clients. The study also recommended that MFIs should design appropriate products reflecting an understanding of the reality of the market they are operating in, lack of customizing products as to the desires of the clients.
2.3 Lending Policies and Access to Real Estate Financing

2.3.1 Collateral Requirement and Access to Real Estate Financing

According to Bond and Rai (2012), collateral is closely tied to access to finance particularly in formal credit markets. One of the primary constraints in access to formal real estate loans or finance amongst the low income groups in is their inability to meet the collateral requirements of commercial banks. A study by Aslam and Azamat (2012) to determine the level of collateral requirements by micro finance institutions in Pakistan for small scale real estate development indicated that asset leasing, group guarantee, personal guarantor, promissory notes and gold were the major types of collateral used by Pakistan micro finance institutions for real estate financing as opposed to joint ownership.

According to Kaplan and Warren (2007), on entrepreneurship patterns, there is flexibility in the amounts loaned as it depends on borrower’s ability to pay and the lenders level of liquidity. In addition, social groups and networks nurture trust which is very vital in business relationships as it creates social collateral for use in accessing finance in micro finance institutions. A key factor as to whether a borrower will access certain structured credit such as real estate financing depends on who has introduced the borrower or guaranteed the loan. Thus credit only revolves around a group with mutual interests and one cannot easily leave such a group due to family, business or professional affiliations. Fellow Sacco members, friends and family, presumably have good information concerning the characteristics of the potential borrower.

According to Kanayo, Jumare and Nancy (2013), in their study of analysing the challenges of access to micro finance loans for real estate development in Nigeria adopted a descriptive research design. The study findings indicate that microfinance institutions in Osun State of Nigeria inadequately financed real estate development due to factors such as the main one being lack of collateral, unfavourable government policies, money lenders high rate of interest and low personal savings. It also reveals that micro-enterprises are poorly financed because most of the entrepreneurs do not have the necessary collateral to access to real estate loans. It concludes that this low funding is responsible for the poor real estate development in Osun State and Nigeria in general. Microfinance institutions, therefore, requires specialized skills which are presently lacking in Nigeria.
According to Lore (2011), on his study on enhancing access to real estate credit among retailers in Nairobi, microfinance institutions will always demand collateral in order to evaluate the borrower’s creditworthiness and minimize the risk of repayment and default. This study found that microfinance institutions are limited in terms of collateral offered to their clients. The study also found that the most accepted collaterals included shares held by the borrower and guarantors. The study concluded that this policy leaves out a large number of borrowers who may not be able to offer these collaterals and this affected the ability of clients to access credit. Microfinance institutions on the other hand use collateral substitutes, third party guarantees and threat of loss of future access to credit. The efficient use of collateral substitutes depends on the ability of the lender to obtain information about the credit worthiness of the borrowers at low cost.

2.3.2 Repayment Policies and Access to Real Estate Financing

According to Addae-Koranye (2014), the sustainability of microfinance institutions depends largely on their ability to collect their loans as efficiently and effectively as possible. In other words to be financially viable or sustainable, microfinance institutions must ensure high portfolio quality based on 100% repayment. A study conducted by Owusu-Manu, Edwards, Badu, Donkor-Hyiaman and Love (2015) conducted a study to determine the effects of lending policies on the access of microfinance loans to real estate developers in Malaysia developed a multiple regression analysis which included determining if repayment policies affected the access to real estate loans. The study found out that access to real estate loans has strong correlation with lending policies which include regular loan repayments policies (0.758). Repayment policies explain 75.8% of variance in access to finance. The study recommended that repayment policies be reviewed regularly to fit them to the dynamic lending in real estate financing.

Molino (2014) conducted a study to determine how favourable repayment schedules favoured the access of microfinance loans for real estate development in India. The study determined that regular repayment schedule links the topic of repayment rate, frequency instalment and group lending therefore it is one of the mechanisms for allowing the microcredit programmes to generate high repayment rates from low income borrowers without requiring collateral and without using group lending contracts that feature joint liability when issuing out large amounts of money that is associated with real estate development or investment.
In South Africa, Murray (2011) conducted a study to determine if there exists a relationship between access to real estate finance and the type of repayment schedule by commercial banks. The study indicated that through loan appraisal; management can gauge its ability to generate earnings from the bank’s total pool real estate loan portfolios, that if not well done could lead to decline on asset returns thus financial performance of commercial banks in South Africa. Thorough loan appraisal of the loan applicant before loan advancing with an aim of assessing the study recommended that there was need for commercial banks to enhance their client repayment loan appraisal policy so as to influence positively on access to real estate loans which impact positively on financial performance. This study shows that adherence to provisions of the credit appraisal in many commercial banks remains a challenge which affects the overall financial performance of the concerned commercial banks.

A study by Namutenda and Muturi (2017) included repayment policies as one of their objectives in determining the effects of lending policies on financial performance of microfinance institutions in Kisii County. Based on a multiple regression model similar to that of Nsobila (2015), the study findings indicated that regular and fixed repayment schedules make borrowers to be committed and prioritize repayments. This agrees with Jain and Mansuri (2003) who observed that frequent repayment can increase the maximum incentive compatible loan size and perhaps account for the low default rates realized by microfinance institutions. The study recommended that regular repayment schedules can function as screening device against undisciplined borrowers and as an early warning to the program about potential repayment problems. They also pressure borrowers to prioritize repayment before cash is consumed or diverted.

2.3.3 Group Lending and Access to Real Estate Financing
Various studies have been conducted with varying results on whether individual lending and group lending improve that access to real estate financing from microfinance institutions. A study by Gine and Karlan (2009) assessed the group versus individual liability for real estate microfinance borrowers in the Philippines. The study randomly selected existing group-lending centres to convert to an individual liability model. They found no difference in repayment rates between individual’s assigned individual liability and those assigned group liability, no change in overall profitability, and a reduction in voluntary savings for those removed from the group lending centre.
According to Brau and Woller (2004), real estate finance loans among financial institutions including microfinance banks and mortgage companies is most often extended without traditional collateral. A study by Wenner (2016) on the factors affecting lending policies adopted by microfinance institutions in Egypt showed that because borrowers do not have physical capital, real estate financing is done using social collateral, via group lending. Group lending encompasses a variety of methodologies, but all are based on the principal of joint liability. In essence, the group takes over the underwriting, monitoring, and enforcement of loan contracts from the lending institution. Under joint liability each group member is made responsible for the loans of other group members. If one member defaults, the other group members are required to cover the loan from their own resources, and if they do not, they lose access to future loans.

Social collateral also works through reputational effects on group members in which repayment of loans is seen by group members as necessary to maintain their social standing in the community. Goldmark (2001) suggests methods that may help build social collateral, thereby making real estate loans even more secure. Van Tassel (1999) constructed a model and one-period game to determine the optimal group lending contract under asymmetric information. He concludes that agents will always form groups with agents of the same type and that agents' types can be distinguished according to the rate at which they are willing to trade increased joint liability commitments for lower interest rates. Group lending not only increases repayment rates and welfare via social collateral, but also due to peer selection by members of the lending group.

A study conducted by Namutenda and Muturi (2017) while determining the effects of lending policies on financial performance of microfinance institutions in Kisii County concluded that group lending policies also affect the amount and access of loans to individuals who want to invest either in real estate or business expansion. These findings agree with the findings of previous studies such as the theoretical models of (Stiglitz, 1990). They demonstrated that peer group schemes induce higher levels of repayment effort due to intra-group monitoring and greater peer pressure. Group-based lending programs delegate costly monitoring activities to group members, reducing the costs of lending, which can be translated into lower interest rates for the borrowers and/or larger loan contracts.
2.4 Interest Rate and Access to Real Estate Financing

2.4.1 Drivers of Lending Interest Rate and Access to Real Estate Financing

According to Kar and Swain (2014), recent controversies regarding the high interest rates being charged by microfinance institutions have been justified with the aim of financial sustainability. Hence, attaining financial sustainability, increasing outreach and reaching poor clients delicately hinges on the interest rates charged. Financial sustainability requires that MFIs be able to cover the cost of lending out of the income generated from the outstanding loan portfolio and reducing the operational costs. This argument is supported by Mersland and Strom (2010), who conducted a study to determine the effects of high interest rate on the access of small scale microfinance real estate loans in Mexico. The study concluded that financial services to clientele involves a higher cost with a large number of transactions on small loan principals, higher administrative costs, different operational practices and efficiencies, costs of funds, competition from other providers, number of deposits.

According to the Consultative Group to Assist the Poor (2004), the high interest rates charged by many microfinance institutions (MFIs) have attracted the attention of policy makers throughout the world. Peltoniemi (2014) in her study analysed the drivers of high interest rate among micro finance banks in Malaysia. The study findings indicated that real estate loans form micro finance entities costs are high, but not because lending to poor clientele carries inherently higher risk. In fact, good microcredit programs often enjoy lower default rates than regular commercial banks. Real estate loans from microfinance institutions are high because of the greater delivery costs of tiny transactions that require face-to-face interaction and because MFIs in Malaysia use personal contact as a substitute for formal collateral or computerized credit scoring.

Battagalia, Porzio and Sampaganaro (2015) studied the dynamic access to real estate financing, interest rates and micro financing for 13 industrial countries. The results showed that access to real estate financing in 13 industrial countries was related with high interest rates within the MFIs, but the response of housing price on U.S. monetary shocks is different between the U.S. and the rest of the world. Tsatsaronis and Zhu (2014) studied the impact of high interest rate on the access to real estate financing. The results showed were highly responsive to short-term real interest rates as a result affecting access to real estate loans.
With higher interest rates, only a few individuals have the capabilities of borrowing, an occurrence that in turn lowers the available amount for making purchases, which results in slowed real estate development. Kariuki and Ngahu (2016) conducted a study to determine the effects of interest rate drivers on access real estate loan performance of five microfinance institutions in Naivasha Sub-County Kenya. The study adopted a census design which targeted 36 employees of the five microfinance institutions. The study established that default risk premium and liquidity risk premium were some of the drivers for high interest rates. High interest rates were found to substantially influence access of real estate loans. The study recommended that MFI should charge reasonable premiums which borrowers can afford and at the same time mitigate default risk.

**2.4.2 Interest Rate Ceilings and Access to Real Estate Financing**

A study by Alshebami and Khandare (2017) to determine the impact of interest rate ceilings on the access of real estate loans from microfinance institutions in Brazil describes that imposing ceilings on the interest rate has recently become one of the new hottest topics in microfinance industry; various debates have been discussing this issue to know the effect of interest rate ceilings on the supply of credit in particular and on microfinance industry in general. Based on the study findings, the study concluded that legislative requirements that force the micro financial institutions to lower their interest rate make them reduce the scale of operations and finally quit the market where the need credit access for real estate financing is affected, moreover, the transparency about the cost and other loan fees will be reduced by the MFI.

According to Mbengue (2015), charging high interest rate by MFI creates worries among various countries and governments in the world. The question which arises is how the financial institutions can, established mainly for serving the disadvantaged poor people, charge them more than the regular commercial banks and other regular lenders in the market. More than 40 countries in the world to impose ceilings on the interest rate demanded by MFI as a way to protect individual from this practice. Forcing such ceilings make it very difficult for the MFI to meet their needs and remain in market for long time. They ultimately have either to quit operation from the market or reduce their scale in remote rural areas along with reducing the transparency regarding the total cost of the loan thus affecting access to real estate financing. This, eventually, results in losing the chances for the poorest of the poor to access credit and other social intermediation.
Woller and Schreiner (2002) studied on the relationship between depth of outreach and financial self-sustainability in USA. In their study they found that depth of outreach has a positive relationship with financial self-sustainability. The study finding put evidence against a wide spread belief that small loans are highly risky and associated with lower financial sustainability. Ganka (2010) conducted a study to find out the impact of determinants of financial legislation on sustainability of MFIs at their start up and take off stage in Tanzania. The study reports that microfinance institutions have negative and significant relationship between breadth of outreach and financial sustainability. The study concluded that increase in number of borrowers itself does not improve financial sustainability of microfinance institutions.

A study conducted by Kathomi, Maina and Kariuki (2017) to determine interest rate regulations and sustainability of microfinance institutions in Nairobi County adopted the use of descriptive survey research design. A census was done on all the microfinance institutions in Nairobi County. The Pearson correlation and ANOVA results showed that the relationship of lending rate and sustainability of MFIs is negative and statistically significant. This means that increasing the interest rate reduces the return thus rendering the MFIs unsustainable. The government and other policymakers should come up with better interest rates policies that will make MFIs more sustainable thus making access to real estate financing and business more affordable.

2.4.3 Default Risk and Access to Real Estate Financing

Balta and Ayad (2014) in their study analysed the impact of default risks on demand for credit and loan repayment from micro financing institutions for real estate financing in Singapore. The study adopted a survey research design. They interviewed 50 clients of microfinance institutions who had taken loans for real estate development and 25 loan officers. The study showed how the interplay of high default risks, annual profits and owner’s equity affect the demand of finance for real estate investments by the individuals. The results indicated that there is a negative relationship between interest rates risks and access. The analysis demonstrated that owner's contribution savings accounts, to a large extent determines the weight which the microfinance institution in Singapore attaches to financing real estate development.

Aidoo and Mensah (2018) conducted a study to analyse the causes of default loans risk as a component of interest rate on the access to loans from microfinance institutions in
Ghana based on a case of selected microfinance institutions in Kumasi and Accra. The study adopted a descriptive research design with a target sample of 140 respondents. The study findings indicated that there was a connection between delinquent of recovery and unpaid loans and access of microfinance loans from microfinance institutions in Ghana. The study also concluded that the sustainability of microfinance institutions depends mainly on the willingness to collect the loans well and competently as possible. That is financial viability depend on microfinance institution ensuring that their customers pay back their loans (low default of loan) and ensuring due diligent are done when loans are issued.

According to Arko (2012), who conducted a study to determine the factors that affect the high rates of interest rate of real estate financing by microfinance banks in Namibia, identified high rates of default risks as one of the factors. The study adopted the use of purposive sampling in the study. Based on the study findings the study concluded that there have been complaints from customers that most the MFIs do not pay back their interest accrued from the money and actual money. These MFIs attributed to the high default rate of clients which means that majority of microfinance institutions are not attaining the internationally accepted standard risk of 3% of the bank’s portfolio which raise concern on impact of businesses, individuals and the economy at large. Currently, these defaults of loans have started approaching deep into the operations of microfinance institutions in Namibia.

A study conducted by Muthoni, Mutuku and Kamau (2017), to determine the influence of loan characteristics on microcredit default in Kenya with a comparative analysis of microfinance institutions and financial intermediaries target 48 MFIs and 70 finance institutions. The study findings indicated that loan characteristics did not significantly influence the default risk. The study also indicated that the key causes of loan default are high interest rate, delay in loan delivery, poor supervision on the part of the staff, non-profitable venture of the clients of the MFIs and inadequate government interventions such as credit programme and regulations of the microfinance industry. High interest rate, Loan payment gap can influencing rise in borrowing coming from transaction cost which in turn influence negatively the access of future micro finance loans.
2.5 Chapter Summary

This chapter has reviewed literature based on the specific research objectives highlighted in chapter one of the research proposal. The chapter identifies previous literature and recent studies to make inferences on the existing study. The next chapter introduces and discuss the research methodology that will be adopted by the study. It will highlight the research design, the target population and sample, the methods of data collection, the research procedure and methods of data analysis.
CHAPTER THREE

3.0 RESEARCH METHODOLOGY

3.1 Introduction
This chapter describes the research methodology that was adopted in the study. It discusses the research design, the population and sampling design which was the study population, the sample size, and the sampling technique and sampling frame, the methods of data collection methods, the research procedure and data analysis methods adopted in the study.

3.2 Research Design
Research design is the researcher’s plan for achieving research objectives. It is a blueprint for conducting the research. This study adopted the use of both descriptive research design and survey research design. A descriptive research is designed to describe the characteristics of a phenomenon e.g. discovering variation within variables (Mugenda & Mugenda, 2003). Descriptive research design was used to obtain information that describes what exists with respect to the variables being tested. The method of analysis that most captures the objectives of this study was descriptive analysis and the study design was therefore appropriate.

In this manner, the study was able to describe the relationship between the variables in the study. A survey design describes people responses to questions about a phenomenon or situation with aim of understanding respondent’s perceptions from which truisms are constructed (McBurney & White, 2010). This is based on the constructivist epistemology which holds that reality is what respondents generally perceive to be. A survey design was particularly useful as the study sought to establish the perception of respondents in reference to the effects of micro financing on the access to real estate financing in Kenya.

3.3 Population and Sampling Design
3.3.1 Target Population
Target population refers to the entire group of individuals or objects to which researchers are interested in generalizing the conclusions. The study of population refers to the total collection of elements which one would like to study or make inferences (Cooper & Schindler, 2011). According to Claytown Valuers Limited (2018), a real estate firm based in Nairobi and works as a consultant for the MFI's (by providing a true value of the real
estate asset- land & buildings) data obtained from their database indicate that there are 218 clients who have taken real estate micro-finance loans since January 2017. Kenya has a total of twelve licensed microfinance institutions with some having branches all over the country. The target population was 218 clients who have taken real estate microfinance loans from various microfinance institutions since January 2017 within Nairobi County.

**Table 3.1: Target Population Distribution**

<table>
<thead>
<tr>
<th>Client Loan Distribution</th>
<th>Population</th>
<th>% Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rafiki Microfinance Bank</td>
<td>67</td>
<td>31%</td>
</tr>
<tr>
<td>Kenya Women Finance Trust</td>
<td>52</td>
<td>24%</td>
</tr>
<tr>
<td>Sumac Microfinance Bank</td>
<td>63</td>
<td>29%</td>
</tr>
<tr>
<td>Uwezo Microfinance Bank</td>
<td>36</td>
<td>17%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>218</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: Claytown Valuers Ltd (2018)

**3.3.2 Sampling Design**

For some studies, the population may be small enough to warrant the inclusion of all of them in the study. But a study may entail a large population which cannot all be studied as the case of this study. That portion of the population that was studied is called a sample of the population. The major steps in sampling design include defining the population, determining the sample frame, determining the sampling design and the appropriate sample size then executing the sampling process.

**3.3.2.1 Sampling Frame**

According to Bougie and Sekaran (2013), the sampling frame is a physical representation of all the elements in the population from which the sample is drawn. Although sampling frame is useful in providing a listing of each element in the population, it may not always be current. In this study, the sample frame was the clients and individuals who have taken real estate financing loans from micro finance institutions.
3.3.2.2 Sampling Technique

Stratified random sampling technique was used for selecting the participants in this study. This technique was employed to ensure a fairly equal representation of the variables for the study. According to Kothari (2009), stratified random sampling entails grouping the study samples into homogenous strata from which a sampling fraction is selected. A random sample was selected from each stratum based upon the percentage that each subgroup represents in the population. A stratified random sample was generally more accurate in representing the population than are simple random samples. The strata in the study consisted of clients from each of the microfinance banks who have issued real estate loans.

3.3.2.3 Sample Size

A sample is a subset of the population. It comprises some members selected from it. Generally, elements of the population form the sample (McBurney & White, 2010). By studying the sample, the researcher was able to draw conclusions that generalize the population of interest in the study. With the target population limited to clients who have taken microfinance loans to finance real estate development or investments, the choice of the sample size was governed by the dependability the researcher has in the data, the level of certainty and the accuracy one requires in the estimation of the sample size, the analysis of the population and the total population in which the analysis was drawn. The sample size was calculated using Yamane’s (1967) with a margin of error at 5% confidence level. The sample size for the study was 141 clients who have taken loans to finance real estate development from various MFIs. The sample was derived from the formula as shown:

\[ n = \frac{N}{1 + N \cdot (e^2)} \]

\[ n = \frac{218}{1 + 218 \cdot (0.05^2)} \]

This gives \( n = 141.1003 \Rightarrow \) Therefore the sample size is 141
Table 3.2: Sample Size Distribution

<table>
<thead>
<tr>
<th>Client Loan Distribution</th>
<th>Sample Size</th>
<th>% Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rafiki Microfinance Loans</td>
<td>49</td>
<td>35%</td>
</tr>
<tr>
<td>Kenya Women Finance Trust</td>
<td>30</td>
<td>21%</td>
</tr>
<tr>
<td>Sumac Microfinance Bank</td>
<td>44</td>
<td>31%</td>
</tr>
<tr>
<td>Uwezo Microfinance Bank</td>
<td>18</td>
<td>13%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>141</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

3.4 Data Collection Methods

The researcher used primary data collection methods. For the purpose of the study, the researcher used the questionnaires to collect data from the target population. According to Bougie and Sekaran (2013), a questionnaire is a preformulated written set of questions to which respondents record their answers, usually within rather closely defined alternatives. According to Hussey and Collins (2009), questionnaires are largely designed to collect large numbers of quantitative data. The researcher came up with a detailed questionnaire that was divided into different sections that also include background section where the respondents described their personal profile while other sections of the questionnaire was guided by the objectives of the study.

3.5 Research Procedures

Reliability was undertaken through a pilot test. According to Perry (2001), pilot studies are small scale version or trial run done in preparation for the major study. He further adds that it can be used for pre-testing of a research instrument. The researcher issued questionnaire to five respondents identified in the study to conduct the pilot test. The results of the pilot test and issues emanating from the questionnaire were then used to correct the main questionnaire before actual data collection was undertaken. The researcher incorporated the opinions of experts in the questionnaire that was used in the field for data collection.

The researcher basically administered the questionnaire personally to the respondents. Personally administering the questionnaires to the respondents is advantageous as it will enable the researcher to collect all the responses within a short period of time. It is also important as any doubt that the respondents may have will be clarified on the spot. The researcher got the opportunity to introduce the research topic and motivate the
respondents to dive their frank answers. In general, the researcher administered the questionnaire to the identified clients clearly defining the goal and objectives of the research and some of the expected outcomes once the research is completed.

3.6 Data Analysis Methods
After the data has been collected, it is important to analyse the data that has been collected in order to facilitate interpretation. The data analysis also helps to see if the study objectives have been met. After collection of data, the researcher examined the raw data collected in order to avoid any possible errors that may arise. Questionnaires were subjected to careful scrutiny for completeness and accuracy (Hussey and Collins, 2009). Quantitative and qualitative techniques were used to undertake data analysis. Qualitative data analysis involved explanation of information obtained from the empirical literature open ended questions from the questionnaire. Quantitative analysis involved use of numeric measures in establishing the scores of responses provided. This entailed generation of descriptive statistics after data collection, estimation of population parameters from the statistics, and making of inferences based on the statistical findings, with help of Statistical Package for Social Sciences (SPSS).

A multiple regression was undertaken to establish the relationship between, borrower characteristics, lending policies, and interest rate and access to real estate finance loans in Kenya. This was performed using multiple regression model indicated below.

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e \]

Where:
Y = Dependent variable (Access to real estate finance loans)
\( \alpha \) is a constant,
\( \beta_1 X_1 \) = Borrower Characteristics
\( \beta_2 X_2 \) = Lending Policies
\( \beta_3 X_3 \) = Interest Rate
e = is the margin of error

Strength of the relationship was determined by the value of \( r^2 \). The value of \( r^2 \) ranges from 0 to 1. Values of 0 show no relationship, while 0.5 show moderate relationship and values above 0.7 showed strong relationship. The statistical test of significance was performed at 95% confidence level. The researcher computed an aggregate mean score of
each variable using all the items in the questionnaire measuring that variable. The mean score was used to perform the regression analysis. The results of the numerical data were interpreted based on the research objectives and thereafter conclusion and recommendations made and presented in tables and charts.

3.7 Chapter Summary
In this chapter, the research methodology was clearly described which include the target population, the sampling design. Moreover, the chapter also outlined the method that was used in data collection which was the use of questionnaires that was personally administered to the respondents identified in the study. Lastly, the researcher described how data analysis was conducted using the existing statistical software in order to summarize the findings using both descriptive and inferential statistics.
CHAPTER FOUR

4.0 RESULTS AND FINDINGS

4.1 Introduction
The chapter presents the study results which were obtained from the analysis of the collected data. The analysis of data included the use of both primary and secondary data. The main objective of the study was to establish the determinants of real estate financing by micro financing in Kenya. Both descriptive and inferential statistics were used in the study and the results are presented in Tables and Figures where appropriate providing ease of interpretation.

4.1.1 Response Rate
The response rates help to ensure that survey results are representative of the target population. A survey must have a good response rate in order to produce accurate, and useful results. Figure 4.1 below represents response rates of the targeted population. According to the findings the study realized a response rate of 63%. This is as out of the targeted 141 respondents, 89 participated and gave valid responses whereas 52 did not fill the questionnaires. The study obtained a good response as recommended by Mugenda and Mugenda (2003) that a response rate of 50% is good as a representative of the sample and that above 70% is excellent.

Table 4.1: Response Rate

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
<td>89</td>
<td>63%</td>
</tr>
<tr>
<td>Non-Response</td>
<td>52</td>
<td>37%</td>
</tr>
<tr>
<td>Total</td>
<td>141</td>
<td>100%</td>
</tr>
</tbody>
</table>

4.2 Background Information

4.2.1 Gender of Respondents
The study sought to determine the gender of the respondent. Figure 4.1 shows the findings. Most respondents were male with a representation of 55% and 45% were female. These findings show that both genders were involved in this study and thus the findings of the study did not suffer from gender biasness.
**Figure 4.1: Gender of Respondents**

4.2.3 Age Group of Respondents

The respondents were asked to indicate their age group. The Figure 4.2 shows the findings. The results show that majority 24% of the respondents were aged 18-25 years, 17% were aged 26-35 years, 18% were aged between 36-45 years, 21% were aged 46-55 years, 19% were aged above 56 years. This implies that majority of respondents were of considerable age and could understand the need for the study and therefore give rich information for the study.

**Figure 4.2: Age Group of Respondents**
4.2.4 Employment Status of Respondents

The researcher sought to understand the employment status of the respondents as indicated in the Figure 4.3. Majority of the respondents indicated that they are in business with 43%, followed by 23% who indicated that they are employed, 17% indicated that they are unemployed and lastly 16% they indicated that they are retired.

![Employment Status](image)

**Figure 4.3: Employment Status**

4.2.4 Highest Level of Education

The study sought to understand the level of Education for the respondents as indicated in the Figure 4.4. According to the findings, majority of the respondents 39% were graduates, followed by 19% who were holders of university undergraduate degrees, 18% of the respondents indicated they are certificate holders, 11% were diploma holders, it was followed by 8% who were High school graduates, and lastly 4% are those who have acquired the Post-Graduate studies.
4.2.5 Highest Loan Amount from the Micro-Finance

The study sought to understand the highest loan amount received by respondents from the microfinance institution for real estate financing. The findings indicated that majority received a loan of below KES 1,000,000 with a representation of 58%, followed by 23% in which they indicated they received a loan of between KES 1,000,000, and 3,000,000 it was followed by a loan of between KES 4,000,000 and 6,000,000 with a representation of 10%, between a loan of KES 7,000,000 and 10,000,000 it was represented by 8%. The Figure 4.5 indicates the summary of the loan amount received by the respondents from microfinance institution.

Figure 4.4: Highest Level of Education

Figure 4.5: Highest Loan Amount from the Micro-Finance
4.3 Borrowers Characteristics and Access to Real Estate Financing
The study sought to find out the effect of borrower’s characteristics on access to real estate financing. A likert scale of on a scale of 1-5. Where 1- strongly disagree, 2-disagree, 3- neutral, 4- agree, 5- strongly agree. The borrower’s characteristics were in there categories namely age, gender and source of income.

4.3.1 Effect of Age on Access to Real Estate Financing
The study findings indicated that the age of a client is not the main contributing factor to the access of real estate micro financing where the respondents strongly disagreed with the lowest mean of 1.449 and standard deviation of 0.691. Age-biased processes when issuing real estate microfinance affects the access to real estate micro financing where the respondents indicated a strong disagreement on it with a mean of 1.854 and standard deviation of 0.806. The age ceiling policies on real estate lending determine the access to real estate financing where they indicated strongly disagree with a mean of 1.584 and standard deviation of 0.736. The Table 4.2 below indicate the effect of age on access to real estate financing.

Table 4.2: Effect of Age on Access to Real Estate Financing

<table>
<thead>
<tr>
<th>Age</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The age of a client is a main contributing factor to the access</td>
<td>64%</td>
<td>29%</td>
<td>5%</td>
<td>2%</td>
<td>0%</td>
<td>1.449</td>
<td>0.691</td>
</tr>
<tr>
<td>of real estate micro financing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age-biased processes when</td>
<td>30%</td>
<td>61%</td>
<td>6%</td>
<td>3%</td>
<td>0%</td>
<td>1.854</td>
<td>0.806</td>
</tr>
<tr>
<td>issuing real estate microfinance affects the access to real estate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>micro financing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age ceiling policies on real</td>
<td>54%</td>
<td>36%</td>
<td>8%</td>
<td>2%</td>
<td>0%</td>
<td>1.584</td>
<td>0.736</td>
</tr>
<tr>
<td>estate lending determine the access to real estate financing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

KEY: SD- Strongly Disagree, D= Disagree, N=Neutral, A=Agree, SA=Strongly Agree

4.3.2 Effect of Gender on Access to Real Estate Financing
The study sought to determine the effect of gender on access to real estate financing where the first question was if the dissimilarities in gender borrowing decisions affect the access to real estate micro financing the respondents strongly indicated a disagreement with a mean of 1.584 and standard deviation of 0.781. On the accessibility of real estate financing through microfinance institutions is determined by gender most of the
respondents strongly disagreed with a mean of 1.685, and standard deviation of 0.667 was reported. Gender bias arises when issuing real estate microfinance loans affects access to real estate micro financing where majority of the respondents strongly disagreed with a mean of 1.663, and a standard deviation of 0.706. Credit constraints among clients of different gender affects access to real estate micro financing where most of the respondents indicated a strongly disagreement with a mean of 1.652, a standard deviation of 0.659 was reported. On commitment to repay loan among clients of different gender determines the access to real estate micro financing the respondents indicated a strong disagreement with a mean of 1.809, and a standard deviation of 0.752. Table 4.3 below indicates the summary of the effect of gender on access to real estate financing.

**Table 4.3: Effect of Gender on Access to Real Estate Financing**

<table>
<thead>
<tr>
<th>Gender</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dissimilarities in gender borrowing decisions affect the access to real estate micro financing.</td>
<td>53%</td>
<td>40%</td>
<td>5%</td>
<td>2%</td>
<td>0%</td>
<td>1.584</td>
<td>0.781</td>
</tr>
<tr>
<td>Access to real estate financing through microfinance institutions is determined by gender.</td>
<td>40%</td>
<td>53%</td>
<td>5%</td>
<td>2%</td>
<td>0%</td>
<td>1.685</td>
<td>0.667</td>
</tr>
<tr>
<td>Gender bias when issuing real estate microfinance loans affects access to real estate micro financing.</td>
<td>47%</td>
<td>39%</td>
<td>14%</td>
<td>0%</td>
<td>0%</td>
<td>1.663</td>
<td>0.706</td>
</tr>
<tr>
<td>Credit constraints among clients of different gender affects access to real estate micro financing.</td>
<td>45%</td>
<td>45%</td>
<td>10%</td>
<td>0%</td>
<td>0%</td>
<td>1.652</td>
<td>0.659</td>
</tr>
<tr>
<td>Commitment to repay among clients of different gender determines the access to real estate micro financing.</td>
<td>37%</td>
<td>47%</td>
<td>14%</td>
<td>2%</td>
<td>0%</td>
<td>1.809</td>
<td>0.752</td>
</tr>
</tbody>
</table>

**KEY:** SD- Strongly Disagree, D= Disagree, N=Neutral, A=Agree, SA=Strongly Agree

**4.3.3 Effect of Source of Income on Access to Real Estate Financing**

The study sought to understand the effect of source of income on access to real estate financing. The respondents were asked if the differences in the source of income affect the access to real estate micro financing, they strongly disagreed with a mean of 2.034, and standard deviation of 1.133 was also reported. Salary-based lending among MFI's
clients affect access to real estate financing, most of the respondents strongly disagreed with a mean of 2.326, and a standard deviation of 1.185. Real estate loans have been designed according to client income-scale which affects access to real estate financing, most of the respondents disagreed with a mean of 2.236, and standard deviation of 1.178 was reported. The Table 4.4 below represents the findings on the effect of source of income on access to real estate financing.

Table 4.4: Effect of Source of Income on Access to Real Estate Financing

<table>
<thead>
<tr>
<th>Source of Income</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Differences in the source of income affect the access to real estate micro financing.</td>
<td>40%</td>
<td>34%</td>
<td>11%</td>
<td>11%</td>
<td>3%</td>
<td>2.034</td>
<td>1.133</td>
</tr>
<tr>
<td>Salary-based lending among MFIs clients affect access to real estate financing.</td>
<td>19%</td>
<td>56%</td>
<td>10%</td>
<td>2%</td>
<td>12%</td>
<td>2.326</td>
<td>1.185</td>
</tr>
<tr>
<td>Real estate loans have been designed according to client income-scale which affects access to real estate financing.</td>
<td>29%</td>
<td>42%</td>
<td>12%</td>
<td>10%</td>
<td>7%</td>
<td>2.236</td>
<td>1.178</td>
</tr>
</tbody>
</table>

KEY: SD- Strongly Disagree, D= Disagree, N=Neutral, A=Agree, SA=Strongly Agree

4.4 Lending Policies and Access to Real Estate Financing

The study sought to find out the effect of lending policies on access to real estate financing. A Likert scale of on a scale of 1-5. Where 1- strongly disagree, 2- disagree, 3-neutral, 4- agree, 5- strongly agree. Lending policies were in there categories namely collateral requirements, repayment policies and grouping lending.

4.4.1 Effect of Collateral Requirements on Access to Real Estate Financing

The study sought to understand the effect of collateral requirements on access to real estate financing where on the questions strict collateral requirements affect access to real estate micro financing, respondents rated it as strongly agree with a mean of 3.449, and standard deviation of 0.826 was reported. Collateral substitutes and third-party guarantees affect the access to real estate micro financing the respondents rated it as agreed with a mean of 4.124, and standard deviation of 0.864. Collateral requirement limitation terms affect the access to real estate micro financing where majority of the respondents rated it as strongly agreed with a mean of 4.258, and a standard deviation of 1.028 was reported.
The Table 4.5 below indicate the summary of the effect of collateral requirements on access to real estate financing.

**Table 4.5: Effect of Collateral Requirements on Access to Real Estate Financing**

<table>
<thead>
<tr>
<th>Collateral Requirements</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strict collateral requirements affect access to real estate micro financing.</td>
<td>5%</td>
<td>5%</td>
<td>36%</td>
<td>52%</td>
<td>3%</td>
<td>3.449</td>
<td>0.826</td>
</tr>
<tr>
<td>Collateral substitutes and third-party guarantees affect the access to real estate micro financing.</td>
<td>0%</td>
<td>8%</td>
<td>8%</td>
<td>48%</td>
<td>36%</td>
<td>4.124</td>
<td>0.864</td>
</tr>
<tr>
<td>Collateral requirement limitation terms affect the access to real estate micro financing.</td>
<td>5%</td>
<td>3%</td>
<td>6%</td>
<td>35%</td>
<td>52%</td>
<td>4.258</td>
<td>1.028</td>
</tr>
</tbody>
</table>

**KEY**: SD- Strongly Disagree, D= Disagree, N=Neutral, A=Agree, SA=Strongly Agree

**4.4.2 Effect of Repayment Policies on Access to Real Estate Financing**

The findings indicated on the effect of repayment policies on access to real estate financing where on favorable repayment policies affect the access to real estate micro financing, majority of the respondents agreed with a mean of 4.191, and standard deviation of 0.824 was reported. The MFIs repayment loan appraisal policies determine the access to real estate micro finance loans where the clients of the MFIs rated it as strongly agree with a mean of 6.090 which was highest and a standard deviation of 9.233.

On the MFIs fixed repayment loan schedules affect the access to real estate micro financing which was rated as strongly agreed with a mean of 4.405, a standard deviation of 0.950 was reported. The Table 4.6 indicate the summary of the effect of repayment policies on access to real estate financing.
Table 4.6 Effect of Repayment Policies on Access to Real Estate Financing

<table>
<thead>
<tr>
<th>Repayment Policies</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Favourable repayment policies affect the access to real estate micro financing.</td>
<td>0%</td>
<td>7%</td>
<td>6%</td>
<td>49%</td>
<td>38%</td>
<td>4.191</td>
<td>0.824</td>
</tr>
<tr>
<td>MFIs repayment loan appraisal policies determine the access to real estate micro finance loans.</td>
<td>2%</td>
<td>5%</td>
<td>3%</td>
<td>30%</td>
<td>56%</td>
<td>6.09</td>
<td>9.233</td>
</tr>
<tr>
<td>MFIs fixed repayment loan schedules affect the access to real estate micro financing.</td>
<td>1%</td>
<td>8%</td>
<td>2%</td>
<td>27%</td>
<td>62%</td>
<td>4.405</td>
<td>0.95</td>
</tr>
</tbody>
</table>

**KEY**: SD- Strongly Disagree, D= Disagree, N=Neutral, A=Agree, SA=Strongly Agree

4.4.3 Effect of Group Lending on Access to Real Estate Financing

The study sought to understand the effect of group lending on access to real estate financing. Group lending makes real estate financing accessible and secure to new clients, majority of respondents agreed with a mean of 3.697, and a standard deviation of 0.697. The group repayment effort determines the access to future real estate micro financing where the respondents strongly agreed with a mean of 4.427 which was also the highest, and standard deviation of 0.782 was realized. On the last question was if maintaining a good group credit rating affects the access to future real estate micro financing which was rated as agreed with a mean of 4.169, and a standard deviation of 0.644. The Table 4.7 below indicates the summary of the effect of group lending on access to real estate financing.

Table 4.7: Effect of Group Lending on Access to Real Estate Financing

<table>
<thead>
<tr>
<th>Group Lending</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group lending makes real estate financing accessible and secure to new clients.</td>
<td>1%</td>
<td>2%</td>
<td>30%</td>
<td>58%</td>
<td>8%</td>
<td>3.697</td>
<td>0.697</td>
</tr>
<tr>
<td>Group repayment effort determines the access to future real estate micro financing.</td>
<td>0%</td>
<td>1%</td>
<td>11%</td>
<td>30%</td>
<td>57%</td>
<td>4.427</td>
<td>0.782</td>
</tr>
<tr>
<td>Maintaining a good group credit rating affects the access to future real estate micro financing.</td>
<td>0%</td>
<td>2%</td>
<td>7%</td>
<td>63%</td>
<td>28%</td>
<td>4.169</td>
<td>0.644</td>
</tr>
</tbody>
</table>

**KEY**: SD- Strongly Disagree, D= Disagree, N=Neutral, A=Agree, SA=Strongly Agree
4.5 Interest Rate and Access to Real Estate Financing

The study sought to find out the effect of interest rate on access to real estate financing. A Likert scale of on a scale of 1-5. Where 1- strongly disagree, 2- disagree, 3- neutral, 4- agree, 5- strongly agree. Interest rate were in there categories namely drivers of lending interest rate, interest rate ceilings, and default risk.

4.5.1 Effects of Drivers of Lending Interest rate on Access to Real Estate Financing

The study sought to understand the effects of drivers of lending interest rate on access to real estate financing. Majority of the respondents agreed that high transaction costs of real estate microfinance loans affect the access to real estate loans with a mean of 3.876, and a standard deviation of 0.671. The high short-term real interest rates affect access to real estate micro financing where most of them strongly agreed with a mean of 4.449, and a standard deviation of 0.784. High interest rates yield on loans affect the access to real estate financing in which most of the respondents agreed with a mean of 4.405, and a standard deviation of 0.669 was reported. The reasonable premiums charged by MFIs affect the access of real estate microfinance loans in which the findings indicated that they strongly agree with a mean of 4.663 and in which was the highest, a standard deviation of 0.563 was also was reported. The Table 4.8 below indicate the summary of the findings on the effects of drivers of lending interest rate on access to real estate financing.

Table 4.8: Effects of Drivers of Lending Interest rate on Access to Real Estate Financing

<table>
<thead>
<tr>
<th>Drivers of Lending Interest Rate</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>High transaction costs of real estate microfinance loans affect the access to real estate loans.</td>
<td>1%</td>
<td>2%</td>
<td>16%</td>
<td>70%</td>
<td>11%</td>
<td>3.876</td>
<td>0.671</td>
</tr>
<tr>
<td>High short-term real interest rates affect access to real estate micro financing.</td>
<td>1%</td>
<td>2%</td>
<td>5%</td>
<td>35%</td>
<td>57%</td>
<td>4.449</td>
<td>0.784</td>
</tr>
<tr>
<td>High interest rates yield on loans affect the access to real estate financing.</td>
<td>0%</td>
<td>2%</td>
<td>3%</td>
<td>46%</td>
<td>48%</td>
<td>4.405</td>
<td>0.669</td>
</tr>
<tr>
<td>Reasonable premiums charged by MFIs affect the access of real estate microfinance loans.</td>
<td>0%</td>
<td>1%</td>
<td>1%</td>
<td>28%</td>
<td>70%</td>
<td>4.663</td>
<td>0.563</td>
</tr>
</tbody>
</table>

KEY: SD- Strongly Disagree, D= Disagree, N=Neutral, A=Agree, SA=Strongly Agree
4.5.2 Effects of Interest Rate Ceilings on Access to Real Estate Financing

The study sought to understand the effects of interest rate ceilings on access to real estate financing. Majority of the respondents agreed that interest rate capping affects the access to real estate micro financing with a mean of 4.090, and a standard deviation of 0.514. The interest rates ceilings make MFIs more sustainable thus affecting access to real estate financing where most of them strongly agreed with a mean of 4.674, and a standard deviation of 0.579. The if unpredictable interest rate ceilings legislations affect access to real estate micro financing in which most of the respondents agreed with a mean of 4.315, and a standard deviation of 0.632 was reported. The Table 4.9 below indicate the summary of the findings on the effects of interest rate ceilings on access to real estate financing.

Table 4.9: Effects of Interest Rate Ceilings on Access to Real Estate Financing

<table>
<thead>
<tr>
<th>Interest Rate Ceilings</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest rate capping affects the access to real estate micro financing.</td>
<td>0%</td>
<td>0%</td>
<td>9%</td>
<td>73%</td>
<td>18%</td>
<td>4.09</td>
<td>0.514</td>
</tr>
<tr>
<td>Interest rates ceilings make MFIs more sustainable thus affecting access to real estate financing.</td>
<td>0%</td>
<td>0%</td>
<td>6%</td>
<td>21%</td>
<td>73%</td>
<td>4.67</td>
<td>0.579</td>
</tr>
<tr>
<td>Unpredictable interest rate ceilings legislations affect access to real estate micro financing.</td>
<td>0%</td>
<td>0%</td>
<td>9%</td>
<td>51%</td>
<td>40%</td>
<td>4.31</td>
<td>0.632</td>
</tr>
</tbody>
</table>

**KEY:** SD- Strongly Disagree, D= Disagree, N=Neutral, A=Agree, SA=Strongly Agree

4.5.3 Effects of Default risk on Access to Real Estate Financing

The findings indicated on the effect of default risk on access to real estate financing where on the question was if high default risk among clients affects the access to real estate micro financing, majority of the respondents strongly agreed with a mean of 4.472, and standard deviation of 0.605 was reported. The previous loan defaults by clients affect the access to future real estate micro financing where they rated it as strongly agree with a mean of 4.461 and a standard deviation of 0623. On the last question was the ability to collect unpaid loans affects the access to real estate micro financing which was rated as strongly agreed with a mean of 4.685, a standard deviation of 0.576 was reported. The
Table 4.10 indicates the summary of the effect of default risk on access to real estate financing

**Table 4.10: Effects of Default risk on Access to Real Estate Financing**

<table>
<thead>
<tr>
<th>Default Risk</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>Std. Dev</th>
</tr>
</thead>
<tbody>
<tr>
<td>High default risk among clients affects the access to real estate micro financing.</td>
<td>0%</td>
<td>0%</td>
<td>6%</td>
<td>42%</td>
<td>53%</td>
<td>4.472</td>
<td>0.605</td>
</tr>
<tr>
<td>Previous loan defaults by clients affect the access to future real estate micro financing.</td>
<td>0%</td>
<td>1%</td>
<td>3%</td>
<td>44%</td>
<td>52%</td>
<td>4.461</td>
<td>0.623</td>
</tr>
<tr>
<td>The ability to collect unpaid loans affects the access to real estate micro financing.</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
<td>24%</td>
<td>73%</td>
<td>4.685</td>
<td>0.576</td>
</tr>
</tbody>
</table>

**KEY:** SD- Strongly Disagree, D= Disagree, N=Neutral, A=Agree, SA=Strongly Agree

4.7 Inferential Statistics

4.7.1 Correlational analysis on Determinants of Real Estate Financing

A correlational analysis was tested to determine the determinants of real estate and access to financing from the micro-financing institutions. The Table 4.6 below indicates the findings of the correlation analysis. There was a weak positive correlation between borrowers’ characteristics and access to financing where the \( r=0.619, \ p\text{-value}>0.05 \) indicating there was an insignificant correlation analysis. On the relationship between lending policies and access to financing which indicated a strong positive correlation between lending policies and access to financing where the \( r=0.796, \ p\text{-value}>0.05 \) which indicated that there was a significant relationship between the variables. on the last objective showed a strong positive correlation interest rate and access to financing where the \( r=0.623, \ p\text{-value}>0.05 \), this indicated that there was a significant relationship between interest rate and access to financing from the micro-financing institutions. The Table 4.11 below indicates the correlational analysis for determinants of real estate financing.
Table 4.11: Correlational for Determinants of Real Estate Financing

<table>
<thead>
<tr>
<th></th>
<th>Access to Financing</th>
<th>Borrowers Characteristics</th>
<th>Lending Policies</th>
<th>Interest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Access to Financing</strong></td>
<td>Pearson Correlation</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>89</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Borrowers Characteristics</strong></td>
<td>Pearson Correlation</td>
<td>.053</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.619</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>89</td>
<td>89</td>
<td></td>
</tr>
<tr>
<td><strong>Lending Policies</strong></td>
<td>Pearson Correlation</td>
<td>.796**</td>
<td>.195</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.066</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>89</td>
<td>89</td>
<td>89</td>
</tr>
<tr>
<td><strong>Interest Rate</strong></td>
<td>Pearson Correlation</td>
<td>.623**</td>
<td>.054</td>
<td>.350**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.614</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>89</td>
<td>89</td>
<td>89</td>
</tr>
</tbody>
</table>

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

4.6.2 Regression Analysis for Determinants of Real Estate Financing

The regression analysis in Table 4.12 shows that the coefficient of determination, the percentage variation in the dependent variable being explained by the changes in the independent variable. The analysis shows that the R-square value for the model summary was 88.3% of variations in the dependent variable. Therefore 88.3% of variations of determinants of real estate could be explained by interest rate, borrowers’ characteristics, and lending policies. R of 0.883 shows that there is positive correlation between interest rate, borrowers characteristics, and lending policies and determinants of real estate in microfinance in Kenya.
Table 4.12: Model Summary for Determinants of Real Estate Financing

<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>.883a</td>
<td>.779</td>
<td>.771</td>
<td>1.91283</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Interest Rate, Borrowers Characteristics, Lending Policies

4.6.3 ANOVA for Determinants of Real Estate Financing

The analysis of variance for the determinants of real estate financing was conducted which is indicated in the Table 4.13 below. The ANOVA for determinants of real estate financing and access to financing where it was determined as follows; (F-Value was 99.887), and the P-value=0.000). In this study the p-value is 0.000 which is less than 0.05 implying that the regression model was statistically significant in predicting the relationship between determinants of real estate financing and access to financing. The independent variables of the study, lending policies, and interest rate has significant relationship with dependent variable of the study which is determinants of real estate financing only one independent variable which is borrower’s characteristics had an insignificant relationship.

Table 4.13: ANOVA for Determinants of Real Estate Financing

<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>1096.432</td>
<td>3</td>
<td>365.477</td>
<td>99.887</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>311.007</td>
<td>85</td>
<td>3.659</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1407.438</td>
<td>88</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Access to Financing
b. Predictors: (Constant), Interest Rate, Borrowers Characteristics, Lending Policies

4.6.4 Regressions Coefficients for Determinants of Real Estate Financing

Multi-regression analysis was conducted to find out the relationship between the determinants of real estate and access to financing from the micro-institutions by the respondents who have taken loan. The regression model generated from the study results is presented below.
The study sought to determine whether there was a significant influence of interest rate, borrowers’ characteristics, and lending policies on access of financing by microfinance in Kenya. The various coefficients are shown on the first column with an intercept of 0.853 which shows that if all the three predictors interest rate, borrowers’ characteristics, and lending policies were to be equated to zero, then access to financing will be 0.853. The data findings analyzed depicts that a unit increase in borrowers characteristics e.g age, gender, source of income will result to a 0.074 decrease in access of financing from the micro-finance institutions. A unit increase in lending policies will result to a 0.935 increase in access in financing from the micro-finance institutions. A unit increase in interest rate will result to a 0.587 increase in access of financing from the micro-financing institutions. The Table 4.14 below shows the regressions coefficients for the determinants of real estate financing. The resulting multivariate linear regression model is as follows:

\[
\text{Access to Financing} = -0.853 + 0.074 \times \text{Borrowers Characteristics} + 0.935 \times \text{Lending Policies} + 0.587 \times \text{Interest Rate}
\]

**Table 4.14: Coefficients for Determinants of Real Estate Financing**

<table>
<thead>
<tr>
<th>Model</th>
<th>Coefficients(^a)</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>-.853</td>
<td>2.783</td>
<td>-.307</td>
<td>.760</td>
</tr>
<tr>
<td></td>
<td>Borrowers Characteristics</td>
<td>-.074</td>
<td>.038</td>
<td>-.100</td>
<td>-1.932</td>
</tr>
<tr>
<td></td>
<td>Lending Policies</td>
<td>.935</td>
<td>.076</td>
<td>.679</td>
<td>12.253</td>
</tr>
<tr>
<td></td>
<td>Interest Rate</td>
<td>.587</td>
<td>.082</td>
<td>.391</td>
<td>7.189</td>
</tr>
</tbody>
</table>

\(a\). Dependent Variable: Access to Financing

### 4.8 Chapter Summary

The chapter has presented the background information for the study and analyzed the three specific objectives. At 5% significance level and 95% confidence level, two variables significantly influence the determination of real estate financing from the micro-finance institutions. The findings reveal that the borrower’s characteristics which include the age, gender, and sources of income have no influence in the determinations of real estate financing. Both lending policies and interest have an influence in determining the amount of financing in the real estate in Kenya. The next chapter will present the summary, discussions, conclusion, and recommendations for the study.
CHAPTER FIVE

5.0 DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction
This chapter summarizes, concludes and recommends basing on the findings as stated in the analysis in the chapter four on the determinants of real estate financing by micro-financing in Kenya. The chapter will compare the results and findings with the existing literature to come up with a concrete discussion, conclusions, and recommendations for the study.

5.2 Summary of the Study
The main objective of the study was to examine the determinants of real estate financing by micro financing in Kenya. The study was guided by the following research objectives; the effect of borrower’s characteristics on access to real estate financing by microfinance institutions in Kenya, effect of lending policies on access to real estate financing by microfinance institutions in Kenya, and to determine the effect of the effects of interest rate on access to real estate financing by microfinance institutions in Kenya.

The study used the descriptive research design. A descriptive research is designed to describe the characteristics of a phenomenon e.g. discovering variation within variables. Descriptive research design was used to obtain information that describes what exists with respect to the variables being tested. The method of analysis that most captures the objectives of the study and the design was appropriately adopted. In this manner, the study was able to describe the relationship between the variables in the study. The researcher relied on primary data and use of questionnaires to collect data from the target population was adopted. The sample size for the study was 141 clients who have taken loans to finance real estate development from various micro-finance institutions. Quantitative was used to undertake data analysis with help of Statistical Package for Social Sciences (SPSS ver.24). Descriptive statistics and multiple regression were undertaken to establish the relationship between, borrower characteristics, lending policies and interest rate and access to real estate finance loans in Kenya. The data was presented in form of graphs, pie charts, and tables.
The study findings indicated that age of a client is not the main contributing factor to the access of real estate micro financing it does not affect when issuing real estate microfinance affects the access to real estate clients. The dissimilarities in gender borrowing decisions affect access to financing and access to real estate financing through microfinance institutions is not determined by gender. The differences in the source of income do not affect the access to financing among the clients from the microfinance institutions, and salary-based lending among MFIs clients also does not affect access to real estate financing. The findings indicated that collateral requirements on access to real estate financing which showed that strict collateral requirements affect access to real estate micro financing, and third-party guarantees affect the access to real estate micro financing. Collateral requirement limitation terms affect the access to real estate micro financing where majority of the respondents rated it as strongly agreed.

The findings indicated that repayment policies on access to real estate financing which showed that favorable repayment policies affect the access to real estate micro financing, and the MFIs repayment loan appraisal policies determine the access to real estate micro finance loans among clients. The MFIs fixed repayment loan schedules also affect the access to real estate micro financing. The results revealed that group lending on access to real estate financing, indicated that lending makes real estate financing accessible and secure to new clients, and group repayment effort determines the access to future real estate micro financing where the respondents strongly agreed. Maintaining a good group credit rating affects the access to future real estate micro financing.

The results on the drivers of lending interest rate on access to real estate financing indicated that high transaction costs of real estate microfinance loans affect the access to real estate loans and short-term real interest rates also affect access to real estate micro financing. The high interest rates yield on loans affect the access to real estate financing in which most of the respondents agreed and reasonable premiums charged by MFIs affect the access of real estate microfinance loans in which the findings indicated that they strongly agree. Most of the respondents agreed that interest rate capping affects the access to real estate micro financing, ceilings make MFIs more sustainable which also contributes inaccessibility of access to real estate financing.
The findings on the relationship were tested to determine the determinants of real estate and access to financing from the micro-financing institutions. There was a weak positive correlation between borrowers’ characteristics and access to financing where the \((r=0.619, p\text{-value}>0.05)\) indicating there was an insignificant correlation analysis. On the relationship between lending policies and access to financing which indicated a strong positive correlation between lending policies and access to financing where the \((r=0.796, p\text{-value}>0.05)\) which indicated that there was a significant relationship between the variables. There was a strong positive correlation between interest rate and access to financing where the \((r=0.623, p\text{-value}>0.05)\), this indicated that there was a significant relationship between interest rate and access to financing from the micro-financing institutions.

5.3 Discussion
5.3.1 Borrower Characteristics and the Access to Real Estate Financing

The study findings indicate that the age of a client is not the main contributing factor to the access of real estate micro financing where the respondents strongly disagreed, and it had the lowest mean. The age-biased processes when issuing real estate microfinance affects the access to real estate micro financing where the respondents indicated a strong disagreement on it. The age ceiling policies on real estate lending determine the access to real estate financing where most indicated a strongly disagreement on it. This is in line with the study conducted by Opoku and Abdul-Muhimin (2013), in determining the various micro finance options of real estate financing for young individuals in Saudi Arabia, based on a sample of 800 young employed individuals, concluded that individuals who are younger than 30 years were more likely to be denied microfinance loans for real estate development compared individuals who were older than 30 years.

The study revealed on the effect of gender on access to real estate financing where on the dissimilarities in gender borrowing decisions affect the access to real estate micro financing most of the respondents strongly disagreed. Similarly, a study by Daley-Hariss (2014), which aimed at determining the role of gender and access to micro finance loans, dataset covering 350 MFIs from 70 countries indicate women represent 73% of microfinance customers on average thus making them major sources and borrowers of real estate finance. Most of the women are risk averse in nature, majority prefer not to borrow from micro finance institutions. They result on the access to real estate financing
through microfinance institutions is determined by gender most of the respondents strongly disagreed that access to real estate is not determined by the gender of an individual. The gender bias arises when issuing real estate microfinance loans affects access to real estate micro financing where majority of the respondents strongly disagreed. The findings revealed that credit constraints among clients of different gender affects access to real estate micro financing where most of the respondents indicated a strongly disagreement. The commitment to repay loan among clients of different gender determines the access to real estate micro financing the respondents indicated a strong disagreement. This is supported by the study of Godquin (2014), which showed that relationship between gender and micro-finance real estate loans is positive but not significant.

The outcome on the effect of source of income on access to real estate financing the results reveals that differences in the source of income affect the access to real estate micro financing, where respondents strongly disagreed. Salary-based lending among MFIs clients affect access to real estate financing, where most of the respondents strongly disagreed. A similar study by Tembo (2014), conducted a study to determine effects of salary-based microfinance lending on public service workers in selected government ministries of Lusaka City. The major finding of the study was that public service workers had experienced serious problems of indebtedness due to their continuous interactions with MFIs. The study concluded that, while salary-based microfinance lending is ideal for solving urgent problems, it is not an effective tool for development as it forces beneficiaries into severe indebtedness thus worsening their financial strength.

The results on the real estate loans have been designed according to client income-scale which affects access to real estate financing, most of the respondents disagreed. This is contrary to a study by Wanambisi and Bwisa (2013), in their study to determine the impact of salary scale on the access to microfinance loans in Kenya based on a case study of K-Rep Bank. The study concluded that salary-based lending is normally provided to those with a relatively stable employment history.

5.3.2 Lending Policies and Access to Real Estate Financing

The study outcome revealed that effect of collateral requirements on access to real estate financing where strict collateral requirements affect access to real estate micro financing,
this is supported by the Bond and Rai (2012), who asserts that collateral is closely tied to access to finance particularly in formal credit markets. One of the primary constraints in access to formal real estate loans or finance amongst the low-income groups is their inability to meet the collateral requirements of commercial banks. A study by Aslam and Azamat (2012), to determine the level of collateral requirements by microfinance institutions indicated that asset leasing, group guarantee, personal guarantor, promissory notes and gold were the major types of collateral used by Pakistan microfinance institutions for real estate financing as opposed to joint ownership.

The findings on the revealed that collateral substitutes and third-party guarantees affect the access to real estate micro financing. According to Lore (2011), asserts that microfinance institutions use collateral substitutes, third party guarantees and threat of loss of future access to credit. The efficient use of collateral substitutes depends on the ability of the lender to obtain information about the credit worthiness of the borrowers at low cost. The outcome where respondents indicated that collateral requirement limitation terms affect the access to real estate micro financing.

The findings revealed on repayment policies on access to real estate financing where on the question favorable repayment policies affect the access to real estate micro financing, majority of the respondents agreed. A similar study by Owusu-Manu et. al., (2015), conducted a study to determine the effects of lending policies on the access of microfinance loans to real estate developers in Malaysia, the findings indicated that that access to real estate loans has strong correlation with lending policies which include regular loan repayments policies. The MFIs repayment loan appraisal policies determine the access to real estate micro finance loans where respondents rated it as strongly agree. The MFIs fixed repayment loan schedules affect the access to real estate micro financing which was rated as strongly agreed. A similar study by Nsobila (2015), his findings indicated that regular and fixed repayment schedules makes borrowers to be committed and prioritize repayments. This is contrary to the study by Jain and Mansuri (2003) who observed that frequent repayment can increase the maximum incentive compatible loan size and perhaps account for the low default rates realized by microfinance institutions.

The results on indicated that group lending on access to real estate financing where group lending makes real estate financing accessible and secure to new clients. Group repayment effort determines the access to future real estate micro financing where the
respondents strongly agreed. The findings indicated that maintaining a good group credit rating affects access to future real estate micro financing. A similar study conducted by Namutenda and Muturi (2017), in determining the effects of lending policies on financial performance of microfinance institutions in Kisii County concluded that group lending policies also affect the amount and access of loans to individuals who want to invest either in real estate or business expansion.

5.3.3 Interest Rate and Access to Real Estate Financing

The study outcome on the effects of drivers of lending interest rate on access to real estate financing, the findings indicated that high transaction costs of real estate microfinance loans affect the access to real estate loans. This is supported by Mersland and Strom (2010), who conducted a study to determine the effects of high interest rate on the access of small scale microfinance real estate loans in Mexico. They concluded that financial services to clientele involves a higher cost with a large number of transactions on small loan principals, higher administrative costs, different operational practices and efficiencies, costs of funds, competition from other providers, number of deposits.

The results revealed that high short-term real interest rates affect access to real estate micro financing. Findings indicate that high interest rates yield on loans affect the access to real estate financing for the micro-financing institutions. A similar study by Battagalia, Porzio and Sampaganaro (2015), they studied the dynamic access to real estate financing, interest rates and micro financing for 13 industrial countries. The findings showed that access to real estate financing in 13 industrial countries was related with high interest rates within the MFIs, and the rest of the world. And according to Tsatsaronis and Zhu (2014), studied the impact of high interest rate on the access to real estate financing. The results showed were interest was highly responsive to short-term real interest rates as a result affecting access to real estate loans. There are reasonable premiums charged by MFIs and it affect the access of real estate microfinance loans. According to Kariuki and Ngahu (2016), asserts that default risk premium and liquidity risk premium are some of the drivers for high interest rates. High interest rates were found to substantially influence access of real estate loans. The study recommended that MFIs should charge reasonable premiums which borrowers can afford and at the same time mitigate default risk.
The findings on the effects of interest rate ceilings on access to real estate financing and most of the respondents agreed that interest rate capping affects the access to real estate micro financing. Interest rates ceilings make MFIs more sustainable thus affecting access to real estate financing where most of respondents strongly agreed. The unpredictable interest rate ceilings legislations affect access to real estate micro financing in which majority of the respondents almost agreed.

The findings indicated on the effect of default risk on access to real estate financing where on high default risk among clients affects the access to real estate micro financing, majority of the respondents strongly agreed. This is supported by Mbengue (2015), who argues that charging high interest rate by MFIs creates worries among various countries and governments in the world. More than 40 countries in the world impose ceilings on the interest rate demanded by MFIs as a way to protect individual from this practice. Forcing such ceilings make it very difficult for the MFIs to meet their needs and remain in market for long time. In a similarly study by Kathomi, Maina and Kariuki (2017), determining interest rate regulations and sustainability of microfinance institutions in Nairobi County. The findings revealed that increasing the interest rate reduces the return thus rendering the MFIs unsustainable. The government and other policymakers should come up with better interest rates policies that will make MFIs more sustainable thus making access to real estate financing and business more affordable.

The findings on the previous loan defaults by clients affect the access to future real estate micro financing where they respondents rated it as strongly agree. The results revealed that the ability to collect unpaid loans affects the access to real estate micro financing among the clients from the micro-finance institutions. A similar study by Aidoo and Mensah (2018) who analysed the causes of default loans risk as a component of interest rate on the access to loans from microfinance institutions in Ghana based on a case of selected microfinance institutions in Kumasi and Accra. The study findings indicated that there was a connection between delinquent of recovery and unpaid loans and access of microfinance loans from microfinance institutions in Ghana. The study also concluded that the sustainability of microfinance institutions depends mainly on the willingness to collect the loans well and competently as possible. That is financial viability depend on microfinance institution ensuring that their customers pay back their loans and ensuring due diligent are done when loans are issued.
5.4 Conclusions

5.4.1 Borrower Characteristics and Access to Real Estate Financing

There was a weak positive relationship between borrowers’ characteristics and access to financing indicating that there was an insignificant relationship. The age, gender and sources of income of a client do not influence the access of real estate micro financing. Micro-finance institutions finance individual not based on the gender and age. Gender and age were not an influence when micro-finance gave out real estate loans among individuals to finance their real estate. On the sources of the income clients was not given loan based on their salary-based lending. Therefore, this study concludes that the borrower’s characteristics do have an influence on the access to real estate financing among clients by the micro-financing institutions.

5.4.2 Lending Policies and Access to Real Estate Financing

In conclusion lending policies and access to financing indicated a strong positive relationship between lending policies and access to financing which indicated that there was a significant relationship between lending policies and access to financing. This indicated that collateral requirements have an influence on the access to real estate financing. The findings revealed that collateral substitutes and third-party guarantees affect the access to real estate micro financing. On the repayment policies on access to real estate financing had an influence on the how clients access financing and the regular loan repayments policies positively makes borrowers to be committed and prioritize repayments which contributes to low default rates realized by micro-finance institutions.

5.4.3 Interest Rate and Access to Real Estate Financing

To conclude on the last objective there was a strong positive association between interest rate and access to financing this indicated that there was a significant relationship between interest rate and access to financing from the micro-financing institutions. High transaction costs of real estate microfinance loans affect the access to real estate loan on the clients which makes the cost of the loan to be high, higher administrative costs, costs of funds, competition from other providers, number of deposits are key items that influence the inaccessibility of the loan. The results showed that interest was highly correlated to access to real estate loans on accessibility by the clients from the micro-finance institutions. The interest rate capping and Interest rates ceilings make MFIs more sustainable, which affects the access to real estate financing by the clients.
5.5 Recommendations

5.5.1 Recommendations for the Improvement

5.5.1.1 Borrower Characteristics and Access to Real Estate Financing

The study recommends that the microfinance institutions should create enabling environment to facilitate real estate financial accessibility to enhance growth in the sector. Therefore, by having more mortgage institutions. The stakeholders of micro-finance institutions should finance clients not based on the income level, gender and age based level for those seeking financing of the real estate.

5.5.1.2 Lending Policies and Access to Real Estate Financing

The microfinance institutions should use a regular payment schedules as a screening to the undisciplined borrowers so that they can be able to access real estate financing. The management of micro-finance institutions should remove strict compliance of the lending policies so that to create investment for the real estate developers in Kenya. For this it will create an enabling environment for those who want to increase the level of investment in the real estate sector.

5.5.1.3 Interest Rate and Access to Real Estate Financing

The study recommended that MFIs should charge reasonable premiums which borrowers can afford and at the same time mitigate default risk. The government through the Central bank of Kenya should enforce guidelines on how the microfinance should charge premiums on borrowers, so that access to real estate financing is easily accessible among clients.

5.5.2 Recommendations for further Research

The aim of the study was to establish the determinants of real estate financing by microfinance institutions in Kenya. Further studies can be conducted on determinants of real estate financing by commercial banks so that to ascertain if the interest rates, borrowers’ characteristics, and lending polices has an influence on accessibility of the real estate financing. The study can look into other determinants of real estate financing such as the inflation rate, Gross Domestic product, exchange rate on the access of real estate financing.
REFERENCES


Consultative Group to Assist the Poor. (2004). *Interest rate ceilings and microfinance*. Consultative Group to Assist the Poor.


APPENDICES

APPENDIX I: INTRODUCTION LETTER

Tresy Maryann Muriuki

United States International University- Africa

P.O. Box 14634-00800

NAIROBI, KENYA

Dear Sir/ Madam,

RE: REQUEST FOR DATA COLLECTION

I am a graduate student at United States International University (USIU- Africa) pursuing Master of Business Administration in Finance (MBA). I am currently conducting a research on the “Determinants of Real Estate Financing by Micro Finance Institutions in Kenya”. This is a requirement in partial fulfilment of the MBA degree program at USIU-Africa.

The study will be based on clients who have taken real estate loans with micro finance institutions in Kenya which is a casing point of microfinance banks that offers real estate financing and you have been selected as one of respondents to participate in the survey. The results of the survey will be instrumental for microfinance institutions to determine the role that they have played and continue to play in the access or real estate finance to promote the development of real estate sector in Kenya.

This is an academic research and confidentiality will strictly be adhered to. Your name will not appear anywhere in the report. Kindly spare some of your time to complete the questionnaire attached by using (√), (X) or writing the answers in the spaces provided.

Thank you for your cooperation and time.

Tresy Maryann Muriuki

Contact: 0735-005957
APPENDIX II: RESEARCH QUESTIONNAIRE

Please note that any information you give will be treated with utmost confidentiality and will never be used for any other purpose other than for this project. Your cooperation and participation will be highly appreciated. I look forward to your swift response.

Please tick where appropriate:

SECTION A: BACKGROUND INFORMATION

1. Gender:

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
</table>

2. What is your age group?

<table>
<thead>
<tr>
<th>18-25 Years</th>
<th>26-35 Years</th>
<th>36 - 45 Years</th>
<th>46-55 Years</th>
<th>Above 56 Years</th>
</tr>
</thead>
</table>

3. What is your employment status?

<table>
<thead>
<tr>
<th>Employed</th>
<th>Unemployed</th>
<th>Business</th>
<th>Retired</th>
</tr>
</thead>
</table>

4. What is your highest level of education?

<table>
<thead>
<tr>
<th>High School</th>
<th>Certificate</th>
<th>Diploma</th>
<th>Undergraduate</th>
<th>Graduate</th>
<th>Post Graduate</th>
</tr>
</thead>
</table>

5. Indicate the highest loan amount you have received from any microfinance institution for real estate financing

<table>
<thead>
<tr>
<th>Below Kshs 1,000,000</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kshs 1,000,000-3,000,000</td>
<td></td>
</tr>
<tr>
<td>Kshs 4,000,000-6,000,000</td>
<td></td>
</tr>
<tr>
<td>Kshs 7,000,000-10,000,000</td>
<td></td>
</tr>
</tbody>
</table>
SECTION B: BORROWER CHARACTERISTICS AND ACCESS OF REAL ESTATE FINANCING IN KENYA

Kindly indicate the extent to which the following attributes of borrower characteristics affects the access to real estate financing in Kenya. Please (y) tick appropriately on a scale of 1-5. 1- Strongly Disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree.

<table>
<thead>
<tr>
<th>No.</th>
<th>STATEMENT</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>The age of a client is a main contributing factor to the access of real estate micro financing.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>7.</td>
<td>Age-biased processes when issuing real estate microfinance affects the access to real estate micro financing.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>8.</td>
<td>Age ceiling policies on real estate lending determine the access to real estate financing.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Dissimilarities in gender borrowing decisions affect the access to real estate micro financing.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>10.</td>
<td>Access to real estate financing through microfinance institutions is determined by gender.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>11.</td>
<td>Gender bias when issuing real estate microfinance loans affects access to real estate micro financing.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>12.</td>
<td>Credit constraints among clients of different gender affects access to real estate micro financing.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>13.</td>
<td>Commitment to repay among clients of different gender determines the access to real estate micro financing.</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

Source of Income
14. Differences in the source of income affect the access to real estate micro financing. 1 2 3 4 5

15. Salary-based lending among MFIs clients affect access to real estate financing. 1 2 3 4 5

16. Real estate loans have been designed according to client income-scale which affects access to real estate financing. 1 2 3 4 5

SECTION C: LENDING POLICIES AND ACCESS TO REAL ESTATE FINANCING IN KENYA

Kindly indicate the extent to which the following attributes of lending policies affects the access to real estate financing in Kenya. Please (y) tick appropriately on a scale of 1-5. 1- Strongly Disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree.

<table>
<thead>
<tr>
<th>No.</th>
<th>STATEMENT</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Collateral Requirements</strong></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Strict collateral requirements affect access to real estate micro financing.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>18</td>
<td>Collateral substitutes and third-party guarantees affect the access to real estate micro financing.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>19</td>
<td>Collateral requirement limitation terms affect the access to real estate micro financing.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td></td>
<td><strong>Repayment Policies</strong></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Favourable repayment policies affect the access to real estate micro financing.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>21</td>
<td>MFIs repayment loan appraisal policies determine the access to real estate micro finance loans.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>22</td>
<td>MFIs fixed repayment loan schedules affect the access to real estate micro financing.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>No.</td>
<td>STATEMENT</td>
<td>SCALE</td>
</tr>
<tr>
<td>-----</td>
<td>---------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td></td>
<td><strong>Group Lending</strong></td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>Group lending makes real estate financing accessible and secure to new clients.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>24.</td>
<td>Group repayment effort determines the access to future real estate micro financing.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>25.</td>
<td>Maintaining a good group credit rating affects the access to future real estate micro financing.</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

**SECTION D: INTEREST RATE AND ACCESS TO REAL ESTATE FINANCING IN KENYA**

Kindly indicate the extent to which the following attributes of interest rate affects the access to real estate financing in Kenya. Please (y) tick appropriately on a scale of 1-5. 1-Strongly Disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree.

<table>
<thead>
<tr>
<th>No.</th>
<th>STATEMENT</th>
<th>SCALE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Drivers of Lending Interest Rate</strong></td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>High transaction costs of real estate microfinance loans affect the access to real estate loans.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>27.</td>
<td>High short-term real interest rates affect access to real estate micro financing.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>28.</td>
<td>High interest rates yield on loans affect the access to real estate financing.</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>29.</td>
<td>Reasonable premiums charged by MFIs affect the access of real estate microfinance loans.</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

<p>|     | <strong>Interest Rate Ceilings</strong>                                                 |       |
| 30. | Interest rate capping affects the access to real estate micro financing.   | 1 2 3 4 5 |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>31.</td>
<td>Interest rates ceilings make MFIs more sustainable thus affecting access to real estate financing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>32.</td>
<td>Unpredictable interest rate ceilings legislations affect access to real estate micro financing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>Default Risk</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33.</td>
<td>High default risk among clients affects the access to real estate micro financing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>34.</td>
<td>Previous loan defaults by clients affect the access to future real estate micro financing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>35.</td>
<td>The ability to collect unpaid loans affects the access to real estate micro financing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

**APPENDIX III: LIST OF MICROFINANCE INSTITUTIONS IN KENYA**
<table>
<thead>
<tr>
<th>NO.</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Faulu Kenya</td>
</tr>
<tr>
<td>2</td>
<td>Choice Microfinance Bank Limited</td>
</tr>
<tr>
<td>3</td>
<td>KWFT – Kenya Women Microfinance Bank Ltd</td>
</tr>
<tr>
<td>4</td>
<td>SMEP Microfinance Bank Ltd</td>
</tr>
<tr>
<td>5</td>
<td>Musoni Microfinance Institution</td>
</tr>
<tr>
<td>6</td>
<td>Century Microfinance Bank Ltd</td>
</tr>
<tr>
<td>7</td>
<td>Uwezo Microfinance Bank Ltd</td>
</tr>
<tr>
<td>8</td>
<td>Rafiki Microfinance Bank Ltd</td>
</tr>
<tr>
<td>9</td>
<td>Remu Microfinance Bank Ltd</td>
</tr>
<tr>
<td>10</td>
<td>Sumac Microfinance Bank Ltd</td>
</tr>
<tr>
<td>11</td>
<td>U&amp;I Microfinance Bank Ltd</td>
</tr>
<tr>
<td>12</td>
<td>Caritas Microfinance Bank Ltd</td>
</tr>
</tbody>
</table>

*Source: Central Bank of Kenya (2018)*