EFFECTS OF DEMAND SIDE FACTORS ON MORTGAGE UPTAKE IN THE REAL ESTATE MARKET IN NAIROBI COUNTY

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DECLARATION

This research project is my original work and has not been presented for examination to any other institution or university.

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DEDICATION

I would like to dedicate this project to my dear loving husband Simon Wanjau for his unending support and encouragement, my loving children Alvin and Ashley for their patience and understanding and to my parents Aaron Mwatha and Grace Mwatha for their prayers and moral support.

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ABSTRACT

The mortgage market in Kenya has developed rapidly over the last ten years in terms of the number and the value of loans. It has been ranked as the third most developed within sub Saharan Africa, after Namibia and South Africa. The study sought to answer the research question: What are the effects of demand side factors on the uptake of mortgage in the real estate market in Nairobi County? Descriptive research design was adopted in this study; the target population constituted all the 26,187 outstanding mortgage loans holders in Nairobi County as at December 2017. Out of these, 394 mortgage loan holders were surveyed. Primary data was collected using a semi structured questionnaire. Data analysis was done using Charts and Tables. Descriptive analysis entailed computation of the mean and standard deviation for the scores on various indicators. Regression analysis was done and significance of the beta factors interpreted at 5% level of significance. The operations were done using Statistical Package for Social Sciences, version 20. The study established that a unit change in customer knowledge would lead to increase in mortgage uptake by a factor of 0.237, representing 23.7%; unit change in customer profile and income would lead to increase in competitive advantage by a factor of 0.231, representing 23.1%. A unit change in cognitive limitations would lead to increase in mortgage uptake by a factor of 0.239, representing 23.9%. At 5% level of significance, demand side factors were each found to significantly influence mortgage uptake. Based on the findings, the study recommends that an in-depth study should be done on challenges facing the uptake or mortgage products, more so in the low income market segments. The study also recommends that the influence of moderating and mediating factors should be examined, since that was not within the scope of the current study.The study recommends that the academics in the field of Finance, should consider using the empirical evidence adduced to further their research interests. Theorists should also consider the findings of this study to find further empirical foundation in light of the effect of demand side factors on mortgage uptake in Nairobi County. By so doing, further studies in other contexts, including public, private, manufacturing, and service would develop. The study further recommends the findings for the development of policies that would be geared towards increasing the sustainability of the real estate industry. The Ministry of Housing in Kenya should apply the study results in decision making since it would assist in developing well-informed policies geared towards the achievement of the Vision 2030, the Big Four agenda (more so on the affordable housing pillar), and the sustainable development goals in Kenya. Finally, the study recommends that the top management team of the individual commercial banks that deal in mortgage finance should use the findings for guidance in making necessary changes in their various functional units to enable them enhance their competitiveness. Specifically, because the study findings have drawn important lessons for success and best practices for the banking industry sustainability against the backdrop of interest rate capping in Kenya.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

A mortgage refers to a debt instrument whose security is the real estate property whose obligation of payment is the borrowers'. Giddings (2007) posits that a mortgage is a source of long term finance for the development of new housing; urban infrastructure and a major driver for the deepening of capital markets. Mortgages enable individuals to acquire property without having to pay the entire cost of the property upfront. According to Milani (2010) Interest charged on mortgage loans can either be fixed or variable. Mortgages can be categorized in two categories, fixed rate and the Variable rate. In the former, interest rates are fixed throughout the life of the mortgage while in the latter, interest rates may change every month, after six months or every year. This depends on the mortgage terms. This rate of interest is a combination of an index in addition to a margin (Nielsen, 2010). The fluctuations in the rates of interest affect the decision of the borrower in terms of reinvestment and refinancing. According to Akenga, Olang &Galo (2015), financial institutions face present value or economic uncertainty when rates of interest change.

The mortgage market in Kenya has developed rapidly over the last ten years in terms of the number and the value of loans. It has been ranked as the third most developed within sub Saharan Africa, after Namibia and South Africa. The mortgage market in Kenya is equal to 2.5 percent of Kenya's Gross Domestic Product. Kenya's growing mortgage market combined with other initiatives will offer part of the housing investment which is needed in the years to come considering the population growth and the shift of the economic center to urban areas (World Bank, 2011).

The mortgage market is largely funded by banks. Large banks have dominated the Kenyan mortgage market. This comprises of 90% of the entire portfolio of outstanding loan to assets. This indicates entry barriers or risks are higher for small and medium banks (Central Bank, 2010).

1.1.1 Demand Side Factors of Mortgage Uptake

Mortgage customers are considered key in providing mortgage demand for products in the country. While there is a short supply of mortgage facilities in Kenya the situation has not been any better on the demand side of these products. This means housing customers lack the resources to act on the demand since funding is unavailable or most cannot afford (World Bank, 2011).

Mortgage providers set stringent conditions; some of these conditions are; sufficient absolute level of income, income needs to be verifiable and income needs to be regular. At the higher end of the income distribution, income is much higher but to a small minority and the majority of the population with total income at subsistence level poses a big challenge in meeting the “sufficient absolute level of income”(World Bank,2011).

The situation was made worse because of the sky rocketing interest rates earlier being charged by Kenyan banks. This made prospective mortgage borrowers shy away from these facilities. The average mortgage borrower has been profiled to be married and has a family size of at least three children. The same family has been estimated to have a gross income of around Kshs 150,000. The standard repayment period of the mortgage has been estimated to be between 10-15 years (HFCK, 2013). Risks related to Interest rate refer to the exposure of the earnings and capital of a financial institution whether future or current to changes in the interest rates. After the Interest Capping introduced in September 2016, banks have shied away due to the reduced revenues from Interest. Financial institutions are highly exposed to risks due to the high volatility of the rates of interest. Kenya is highly susceptible to these changes due to inflation generated both internally and externally (World Bank, 2011).

In the age of numerous mortgage products and diverse customer needs it is difficult to distinguish one mortgage product from the next and this is made even difficult as banks duplicate products with little additional features in order to entice customers. It is from this information bombardment that customers with superior market information will be seen to benefit as opposed to those who don't have that information.

The profile of the customer and the income level is also considered key in accessing mortgage facilities. The details of the customer as regards age, marital status, profession, religion, number of dependents among others are used by banks to carry out screening. This gives more confidence to customers who fit the profile. Customers have been known to aggressively seek mortgage products if they know they fit the profile that banks are looking for.

The mortgage cost is a key factor which determines mortgage uptake as it affects the repayment period and installment amounts. This cost acts as an incentive if it is perceived to be affordable and a deterrent if it is perceived to be exorbitant. Cost of Mortgage has also been too high in past years before the Interest capping law.

The interest rate capping law introduced in September 2016 has affected the mortgage industry. Mortgage demand has spiraled as the customers perceive that the mortgages are now affordable. As of December 2016 after the interest rate cap, demand increased by 8.1%. The mortgage rates of interest averaged 13.46% with ranges of between 10.5% – 18.0% as compared to 18.7% average with a range of 11.9%–23.0% in 2015(CBK,2016).

According to the CBK annual mortgage survey of 2016, the number of mortgage loans was 24,085 in the market as at December 2016 down from 24,458 in December 2015 a decrease of 373 loan accounts or 1.5 percent due to tighter credit standards by commercial banks. Commercial banks in Kenya have been introducing standards of credit which are tighter translating into lower disbursements of mortgage as compared to the higher demand level. The banks have also preferred short term to longer tenure loans. Some banks have however exploited the space in the existing approval limits to increase non-interest charges on loans to increase their incomes. The CBK report of 2017 puts the outstanding number of mortgages at 26,187 accounts, this being an increase of 8.8 percent from 2016. This was due to an increased appetite for home ownership as opposed to rentals.

Mortgage financiers are known to balance between their quest for profit and attraction of new mortgage seekers by making sure the cost of knowledge is affordable (World Bank, 2010). Customers will seek the least cost provider of mortgage in order to shield themselves from unaffordable costs by banks. The central bank of Kenya has continued to date to encourage banks to focus on lowering their cost of finance in order to pass the benefits to mortgage customers (CBK, 2011). The government has taken an active role in boosting home ownership in the country, through setting up the Kenya Mortgage Refinance Company. The government has also come up with other incentives such as allowing people to access mortgage facilities with their pension contribution being used as security in case of default. This is meant to solve the collateral dilemma that faces most mortgage borrowers.

Cognitive Limitations and Heuristic Biases is another determinant of mortgage uptake among consumers. The borrowing decisions of some consumers are not perfectly rational but very biased. Such biases include time inconsistent preferences. These may be caused by hyperbolic discounting. Consumers may prefer to consume in the present, rather than saving. If these consumers were to consider the time value of money, they would have delayed consumption and saved for the future.

Heuristic biases may include Self-serving and Optimism bias. These biases lead consumers to underrate their default risk. These include hyperbolic discounting, cognitive limitations, endowment effects and Optimism bias. Cognitive limitations present in the consumers' ability to think rationally as regards understanding the Terms of the loan. The consumers most of the time do not consider all the financial risks they are taking in relation to the interest rates, prepayment penalties, teaser rates, negative amortization among others. Negative amortization relates to increased loan principal balance due to failing to make payments that cover the interest due. The Interest amount due is added on the loan principal. Securitization, standardization, and transparency go a long way to simplify consumer mortgages.

The challenge of hyperbolic discounting and time inconsistent preferences presents itself where the consumers prefer to consume today rather than consume in the future. The consumers also have a tendency to underestimate future risks. The consumers behave this way as they find it difficult to assess risky future events which are not certain. These challenges present themselves as the consumers most of the time conclude that bad happenings are highly unlikely to happen to themselves but to others.

Optimism bias presents itself when the consumers overestimate that their incomes are very stable and that they will grow in an upward trajectory. The consumers also underestimate their consumption needs and future borrowing. This optimism bias may lead consumers to under estimate the risk associated with higher payments which are due when a teaser period ends, floating interest rates and the need to refinance. A lack of anticipation of an unforeseen health risks, growth of the family may influence the ability of the consumer to repay the debt and most institutions may take advantage of this optimism bias.

There is also an increased over-reliance on Experts which may lead consumers to over borrow. The Consumers trust the word of these experts whether or not their advice makes sense or not or whether their expertise is well established or not. This reliance on the advice from the experts may be of advantage or not. This depends on the bias and accuracy of the advice from the experts. It is better for borrowers to seek the advice of several experts who have varied opinions rather than one or many experts biased in the same direction.

1.1.2 Mortgage Uptake in the Real Estate Market in Nairobi County

According to Femi (2013), the mortgage market is the market for financing real estate assets. The success of the provision of housing depends on a well-developed mortgage market. Commercial banks, saving and loans firms, mortgage firms which are highly specialized, parastatals, insurance companies, pension funds and trusts are the main institutions which provide mortgages in Kenya (Lai, 2011).

According to Walley (2011), the mortgage market in Kenya ranks third after Namibia and South Africa. This market has completed the germination phase and it is progressing to development stage. Walley (2011) also established that the gap in housing is increasing due to a deficit in housing of 156,000 units yearly. This is based on migration from rural to urban areas and the tremendous population growth. The industry therefore needs to be financed through rental housing and mortgage financing since the gap in housing has led to slum creation and the quality of housing units being poor.

Kenya's commercial banks have been the institutions which have dominated mortgage lending. Central Bank of Kenya authorizes the ordinary banks and the mortgage companies for example Housing Finance Corporation of Kenya, putting forward similar regulations for both of the lenders. The number of mortgage accounts, total mortgage lending and the mortgage debt to GDP ratio are some of the indicators which the Central Bank of Kenya uses to measure the mortgage market growth in Kenya (Central Bank of Kenya, 2013)

1.1.3 Demand Side Factors and Mortgage Uptake

The average mortgage customers have been considered to prefer housing in urban areas given the proximity of the housing to their workplace although majority find it extremely expensive to own the houses in the said urban areas. The same customers would prefer a gated community as their preferred home given the high level of amenities and infrastructure developed in these areas (Hass Consult, 2015).

The rapid population growth necessitated by high birth rates and low death rates implies the increasing need for housing. This has further been worsened by the increased rural to urban migration therefore sparking an upsurge of demand for housing in urban areas (HFCK, 2015). Population growth and population migration are going to be the key catalysts for urban growth going forward. This is likely to present serious challenges to town planners in the near future.

The government has stepped in to introduce the Kenya Mortgage Refinance Company whose aim is to provide affordable housing to Kenyans. The yield curve, inflationary pressures, the banks' mortgage market and credit difference particularly affect the prices of housing (Tsatsaronis and Zhu, 2004). They found that the customers use external financing to acquire houses. The availability of financing and the mortgage loan cost play a critical role in determination of mortgage uptake.

1.1.4 Real Estate Market in Nairobi County

The housing problem led to the Government setting up the Kenya Mortgage Refinance Company '(KMRC)' which was constituted after the World Bank proposal of having a Mortgage Refinance Company that adapts from other successful models such as Malaysia and Morocco that guarantee up to 70 per cent of mortgage loans. This will see the number of mortgages in Kenya that average 25,000 a year rise to an average of 60,000.

The initial funding will be from sovereign loans under the World Bank Affordable Housing Finance Project, and the government. Kenya has an accumulated deficit in terms of housing of above two million units and almost 61 percent of the urban population resides in slums. 244,000 units are needed yearly due to the increased demand. Kenya currently produces less than 50,000 units therefore creating a gap in the housing market. As a result, the housing units have become unaffordable.

Limited supply and lack of affordability have forced many Kenyans to live in slum dwellings. The housing problem will become more acute as Kenya's population continues to grow and the rates of urbanization continue rising, if there is no serious emphasis on housing and housing finance for an average Kenyan (World Bank, 2017).

According to the Kenya Economic update by World Bank of 2017, the Kenya Mortgage Refinancing Company (KMRC) would be established in order to provide professional, high quality, credible medium to long term liquidity. KMRC would provide long term financing to consumers at rates which are attractive and it would also ensure that the Primary Mortgage Lenders (PMLs) habits in terms of lending are sound. As a result, there will be increased affordability and availability of mortgages on the fixed rate terms and the loan terms availability would be long term. Consequently, the numbers of borrowers who qualify for the mortgages would also increase thereby expanding ownership of homes in Kenya and the primary mortgage market.

Further, there have been increasing prices of property within the formal market. In Africa, Nairobi city ranks the highest in terms of price. This has widened the affordability gap and reduced opportunities for the middle and low income earners. Prices of housing units tripled from the year 2000 to 2013. The cost of the lowest priced house was Kshs 1,342,106 ($15,300) in December of 2012. The supply is however not available within the market for less than $43,956 or Kshs 4 million, particularly in Nairobi (World Bank, 2017)

Nairobi has served as a regional hub to many firms and continues to attract many other firms that have set their eyes in the greater Eastern African region. This pull factor has been attributed to the better infrastructure as compared to its peers in the region, the connection to the undersea fiber optic cable, the presence of an educated workforce and liberal market laws (KFPGRI, 2013). The above factors have served as a catalyst for spiraling housing market prices with absence of commensurate increase of workforce income thus locking out majority of its residents from ownership (KFPGRI, 2013).

1.2 Research Problem

According to World Bank (2011), Kenya's mortgage market is preparing to go into the development phase, after having completed the germination stage. The average size of Kenya's mortgage market is approximately Kshs 800 billion and most of it is predominantly within the urban area. Typical loans for amounts of Kshs 4 million would be accessible at adjustable rates of 14 percent over 15 years. This translates to 2.4 percent of the entire population and around 11 percent in urban areas. The low income levels in rural areas and high development costs in terms of establishing a distribution network make the rural areas a less viable market.

The demand factors in the market have had an impact on mortgage uptake. The Mortgage Market has expanded in the last decade. However, the loan size is quite low due to poor information at the disposal to potential customers (Kinyanjui, 2011). Nyandemo and Singh (2003) posit that uncertainty relates to a situation where the decision makers lack full knowledge about product demand, its future, the factor costs and other variables which are relevant. According to Vusumuzi (2009) housing challenges are due to lack of access to finances to buy homes and are not due to lack of demand. McCann, 2009 observed that prices of property are prohibitive to the young and low income workers.

The demand for housing in the country is growing rapidly due to the growing population, the record numbers of rural to urban migration, the burgeoning middle class and the setting up of regional headquarters of multinationals. These have served to accelerate the demand to a record high with no commensurate supply (World Bank, 2013). The lack of a proper policy framework on urban housing coupled with the absence of a clear housing plan by successive governments has exacerbated the housing problem and is bound to provide the perfect storm in the near future if not properly addressed (World Bank, 2013). Mortgage provision is seen as the only solution to this problem. This is because of the long term nature of finance that it provides coupled with the vast amounts being provided upfront.

The preferences of the consumers keep changing. They access the mortgage market with little information of the mortgage fit for them. The mortgage prices also keep changing and this presents challenges to the consumers because of no transparency as regards the prices of the mortgage and also lack of adequate information. This information may also come late thus affecting the process of making an informed decision. Consumers also prefer the products which give them current gain as compared to future risks. Therefore, consumers may keep looking for a mortgage product which meets their needs (Essene and Apgar 2007).

According to Okanga (2015), it is highly possible that a major part of growth of mortgage financing is determined by other factors other than the rates of interest. The pressures of Inflation also affect the rates of interest due to the fixed rates which are paid on majority of loans. Lenders are not willing to lend money if purchasing power of the funds will be eroded when the amount is paid back. The lender will have to demand rates which are higher. This is referred to as ‘inflationary premium’. Therefore, inflation increases the rates of interest while deflation reduces the rates.

Nguyen (2007) established that interest rates had a huge impact on capital intensive industries and this increased the risk of investing in those industries. This therefore has a huge impact on the real estate industry knowing that it is a capital intensive industry. Njiru and Moronge (2013) did a study on the determinants which affect the growth of industries dealing with mortgage in Kenya. Their main focus was on the National Housing Corporation. They concluded that the main factors were poor access to the facilities and the changes in the interest rate.

Otwoma (2013), states that the real estate market in Kenya is dominated by private developers with the Government through the National Housing Corporation accounting for a small percentage. The housing demand in Kenya outstrips supply, predominantly in the urban regions. The estimates range between 30,000 – 50,000 units in supply annually, against an estimated demand of above150, 000 units annually within the urban areas (Ministry of Housing, 2004). The above factors make mortgage provision the single most important factor in the housing market today (HFCK, 2015). Though the subject has been researched at depth in the past there has not being a clear cut solution put forward by researchers to address the same. This is despite the vast resources that have been allocated for previous research. The government and other private entities continue to fund such research activities.

Previous research had focused on banks and other financial institutions perspective mostly with regard to inflationary pressures and interest rates. Other studies have paid attention to the determinants which affect the prices of housing and the industry players dominating the real estate market in Kenya. The demand side of mortgage has only been mentioned in passing light therefore leaving a gap in the literature of mortgage financing since the customers make a key constituent which has not been well addressed. It is the aim of the researcher to explore deeper on the problem, its history and bring new insight to the problem while objectively exploring and putting forward solutions that will be practical and acceptable to all the industry players going forward.

1.3 General objective

The general objective of the study was to determine the effect of demand side factors on mortgage uptake in the real estate market in Nairobi County.

1.4 Value of the Study

The results of this study are important in the following ways:

The study addresses the knowledge gap that exists in the academic and policy makers circle on the demand side factors affecting uptake of mortgage in Nairobi County, it also provides a foundation for future research by academics in the field of mortgage financing.

This study assists regulators and policy makers in the implementation of new improved regulations and policies. It is also beneficial for Management to adopt the best practice and policies. It also enables the Regulatory bodies to implement new practices in order to improve on the framework for regulation. The Government can be able to come up with new incentives to improve the mortgage market and meet the demand of the consumers.

The study results also benefits the developers of property for them to be able to develop products that are customized for the consumer. Mortgage institutions are able to provide innovative products and knowledge on different mortgage products to the market and thus an improvement on the performance of mortgage loans and a reduction in the number of non-performing loans.

The results of the study would be beneficial to financial institutions that wish to understand and serve the Kenyan mortgage market better. They can use the information from this research to better market their products and understand their customers better.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

The literature reviewed in this chapter forms the framework of the study. The literature reviewed various studies and analyzed different theories related to financing and uptake of mortgage.

2.2 Theoretical Review

The lien theory suggests that the title on the property is transferred to the mortgagor or borrower upon the signing of the documents while the mortgagee faces difficulties in the repossession in case the borrower defaults in payment. The lender however holds lien on the property until full payment. The title theory does not transfer the title to the borrower until full payment of all the loan obligations. The lender retains legal repossession of the property and transfers it to the borrower after full payment of the loan. The Intermediate theory applies both the lien and title theories. The lender holds the title until full payment of the mortgage loan. The lender is protected since the borrower can't sell the property until the borrower has fully paid up the mortgage loan. The security is pledged to a mortgage institution.

In the mortgage credit Intermediation model, the mortgage markets depend on a network of intermediation which provides support for funding, market education and also support in case of default. According to the Classical theory of demand, the demand for money is a function of the price and the commodities and services which are exchanged for money. The volume and velocity of the circulation of money represents the supply and is equal to the money demand which is represented by the price and aggregate quantity of goods and services which are exchanged for money. Money demand is connected to the circulating business in a fiscal system. Thus consumers keep money to purchase goods or invest in assets.

2.2.1 Lien Theory

In this theory, the borrower obtains legal, equitable title on the mortgage property while the lender obtains lien on the property. The lender is protected in case of any default by the borrower as he has the right of legal repossession of the property. Under the lien theory, once the borrower signs the documents, he acquires the title. However, the Lender holds encumbrances in case the borrower defaults. However, the lender still faces difficulties with regard to repossession of the mortgage property as the borrower has possession and holds the title on the land and property (Medley, 2011).

Moreover, Denise and Wheaton (2002) documented that lien theory creates lien on land thus ownership is transferred to the mortgagor and mortgagee retains the security over the property. The mortgagor commits to adhere and make installment payments as per agreed terms thus during the mortgage period, the mortgagee holds the deed to the property while the mortgagor holds the title. Repossession of the property is more difficult by the mortgagee since there is creation of lien on property to the mortgagor.

2.2.2 Title Theory

In this theory, the legal repossession on the mortgage property is retained by the lender until after full payment of the mortgage. The borrower holds the equitable title and the lender holds the legal title on the property until the loan is repaid. The lender has possession and the rights to rents on the property. If the mortgagor defaults, the lender can take back possession of the property. Once the documents are signed, full ownership of the property is acquired by the lender. The mortgagor gets control until full payment of the loan. The lender holds the property as collateral or security. Once the mortgage loan is fully paid up and the loan obligations fully met, the lender transfers the deed to the borrower (Denise and Wheaton 2002).

Some mortgage firms apply the title theory in terms of mortgage loans and this protects the lender since he has the right to repossess the mortgage property. Medley (2011) noted that mortgage loans are considered as title conveyance to the mortgagee. Through this, borrower acquires full title of the property upon full payment of the mortgage loan. Since the title vests on the lender, he has full rights to repossess the mortgaged property anytime but this can only happen if the mortgagor defaults on the repayment terms. In case the borrower sells the property during the mortgage period, then the title transfers to the new buyer upon receipt of payment by the mortgage institution

2.2.3 The Intermediate Theory

The intermediate theory applies both the lien theory and title theory in case of default. The lender holds the title until full payment of the mortgage loan. The terms of Mortgage are important and there is need of distinction in case of default. The mortgage institutions act as third party in trust as they possess full ownership of the property on behalf of the mortgagor or the borrower. In case of default by the borrower, the lender has all rights to repossess the property (Medley 2011).

Medley (2011) documented that for lien under intermediate theory, there is creation of protection by the lender since the borrower can’t sell the property until the borrower has fully paid up the mortgage loan. Mortgage instrument is used to place lien on the mortgage property. The property is taken up as security by the mortgage institution therefore the borrower can't be able to put the property up for sale until after full payment of the mortgage loan. The borrower however has the right to ownership of the property even though the debt still exists. The right of security to the property remains with the mortgage institution until full payment.

2.2.4 Mortgage Credit Intermediation Model

In this model, the mortgage markets depend on an intermediation network (Stephens, 2005, Chiquier and Lea, 2009). This system of intermediation supports the origination and credit funding, market education, division of responsibilities and obligations and also providing support in case of default.

Mortgage intermediation was at the onset done by a privileged and regulated class of institution in most developed countries. In the United Kingdom, it was the building society which performed the intermediation while in the United States, the Savings and Loans Associations(S&Ls) did the intermediation. These organizations were driven by the need to address housing problem rather than profit maximization since they started off as mutual societies. They were given unique tax and regulatory concessions so long as their business was restricted to mortgage lending. They established a network of intermediating on mortgage but they faced the challenge of ensuring their business was efficient for it to survive in the long term. In a country like Kenya with its rapid population growth, mortgage intermediation is rapidly growing. This has made a significant input to the development of the economy and the financial systems.

2.2.5 Classical Theory of Demand

According to Fishers and other classical economists, the money demand is a function of price and the goods and services exchanged for money expressed as: MV=PT. M represents the volume of money, V stands for the velocity of money circulation, P represents the price while T stands for the aggregate quantity of goods and services which are exchanged for money. PT stands for the money demand which is based on the value of the transactions while MV is the money supply.

Money demand is therefore determine by the degree of full employment earnings. According to Fishers, the demand for money is connected to the circulating business in a fiscal system. This theory brings out the fact that individuals keep money to buy goods or invest in assets. In a market which is competitive, the price of a good varies till it settles where the quantity demanded will be equal to the quantity supplied therefore equilibrium in the economy for quantity and price (McConnel, 2008).

According to the law of demand, ceteris paribus, there is an inverse relationship between the quantity demand and price of a good and service. If the price of a good goes up, its demand will go down (Marshall, 1890).This means that increase in cost of mortgage including interest rates will ultimately lead to decreased demand and reduced cost would lead to increased demand. The increased demand due to low interest rates will lead to increased prices of the housing units which are available (Njiru&Moronge, 2013).

2.3 Determinants of Mortgage Uptake in the Real Estate Market

There are several factors which influence mortgage uptake from the demand side of the market. These factors include: customer knowledge, customer profile and income level, cost of mortgage and cognitive limitations and heuristic biases. These are further explained as below:

2.3.1 Customer Knowledge

Customer knowledge is considered paramount for seekers of mortgage finance. This knowledge may be acquired from mortgage providers, newspapers, home expos, radio, and newspaper advertisements, friends and even family (Hass consult, 2015). This information is supposed to be used by the customer to source and negotiate for a mortgage product that suits his/her needs.

It has been found that customers who possessed superior information were in a better position to source and negotiate their mortgage than those who didn't have such superior information.

2.3.2 Customer Profile and Income Level

Customer profile is considered key in accessing mortgage facilities. Information such as marital status, age, profession, religion among others is used by banks to carry out screening. Customers have been known to aggressively seek mortgage products if they know they fit the profile that banks are looking for (HFCK, 2011). This can be attributed to confidence in the knowledge that they will easily get the mortgage.

It has also been shown that the people who make the perfect fit such as the right age, income level and profession are more likely to seek mortgage facilities because of their class orientation and socialization. The income level of the customer is also a key component in accessing mortgage facilities. The sustainability of the borrowers income regarding employment income or other income has been regarded as one of the main risk factors considered before a mortgage loan to household is approved (CBK, 2017).

The level of income in Kenya is low and also not evenly distributed more so in the sub-Saharan Africa. This has posed a difficult challenge to prevail over in developing a mortgage market which is vibrant. The income of the household is also supposed to be absolute and sufficient. Households should earn an adequate amount of income in order to cover the mortgage cost and the other household expenses. The household income needs to be verifiable. Due to the high level of informal income, it poses a challenge of verifying. Lenders have to check the household expenditure and this long process of verification translates into increased loan costs.

Dean (2000) posits that the standards of underwriting loans have restricted the access to home loans. This is because of the strict process of scrutiny that the income of the borrowers is subjected to and also the worth of the collateral. Therefore, a reduction in the mortgage credit supply as compared to the high demand levels. The conditions set include among others absolute level of income, stable and verifiable incomes. Too stringent conditions present challenges in taking up mortgages. Mortgage loans are unaffordable for many households. Sensible standards of lending propose that the households ought not to allocate more than 33 percent of their net income monthly towards costs of housing.

The household Income needs to be regular considering the long loan period. Civil servant jobs have been considered more secure but there the level of affordability is limited (World Bank, 2011).

2.3.3 Cost of Mortgage

The cost of mortgage is known to be a key factor for seekers of mortgage (Hass consult, 2010). Some of the determinants of the cost include interest rate, Negotiation Fee of around 2.5% of loan amount, ledger Fees of about Kshs 350 per month, Legal Fees, Valuation fees among others. The higher the cost of mortgage, the lower the demand, thus reduced uptake of mortgage.

The cheapest property available requires an individual to have an income of Kshs 635,000 ($6,200) annually and significant cash savings of nearly Kshs 250,000 ($2,500) in order to cover the mortgage costs of registration, deposit on the property, and also registration of the title (World Bank, 2017).

A financial institution exposes itself to risks related to rates of interest which occur when there is a mismatch between the maturity of the liabilities and the assets (Kolbe, Gaylon and Rudner 2003). If the rates of interest on the assets and the liabilities are adjusted at different periods of time or the maturity periods differ, the lender is exposed to interest rate risk (Bangkok Bank, 2008). The rate of Interest is therefore a key determinant of the interest income on assets and also the expense from the interest on the liabilities for the lender. This affects the overall net interest income. The fluctuating interest rates also affect the reinvestment and refinancing decisions of the borrower.

After the Interest capping law of 2016, demand for housing increased. The higher demand has not been met with commensurate supply. The lower interest rates meant reduced incomes for the financial institutions which have led to most of them shying away from lending.

The interest rate charged on mortgages averaged at 13.6 percent in 2017, compared to 18.7 percent in 2016, excluding bank and other charges. This decrease was attributable to the interest rate capping effected in September 2016 (CBK, 2017).

The actual property costs take into account the cost of the land, whether it is for construction or purchase. The associated costs of financing comprise the down payment and also the costs of transaction including the legal fees, charges and taxes (World Bank, 2017).

2.3.4 Cognitive Limitations and Heuristic Biases

According to Janger (2009), cognitive limitations, time inconsistent preferences including hyperbolic discounting, heuristic biases for example optimism bias and over reliance on experts have a strong effect on mortgage uptake and repayment. Consumers may be too optimistic about their future income and not consider that there may be eventualities that may come up which may influence their ability to repay the loan. Default on mortgage repayment may lead the lender to repossess the property. Banks have tightened lending due to the increase in number of non-performing loans in the Real estate sector. Consequently, potential mortgage seekers may shy away from mortgage uptake.

2.4 Empirical Review

Diverse research has been done in mortgage financing and the performance of the real estate market. Development of the Real estate market is important and is useful in the assessment of the country’s economic development. The institutions offering mortgage and the banks provide funding to make sure that the objective of owning a home is met by potential home owners as this is considered a basic need. Residential real estate is considered a physiological fundamental need and it is needed by everyone. It also needs significant initial expenditure therefore individuals must either beg or resort to borrowing in order to meet this need.

2.4.1 Global Studies

According to a study done by Odame, Key and Stevenson (2006) in Ghana, on measures of real estate including systems of valuation and land registration in emerging economies between the years 1998 and 2005. The landscaping quality, plot size, property size and location are important factors which influence the prices of the real estate properties.

Swyngedouw, Moulaert and Rodriguez (2002) studied neoliberal urbanization in Europe. They paid attention to how the forces of liberalization and globalization respond as an outcome of governance.

Interest rates which are low by macro-economic policy are highly risky and would consequently lead to a huge bubble in the economy because of the large number of investments in the real estate market. Case in point is Japan where there were low interest rates thereby leading to increased investments in the real estate industry. This led to a huge real estate bubble (Inamot, Hasegawa, Sudo and Shimizu 1995).

2.4.2 Local Studies

Inganga (2014) examined the determinants of the demand of customers for the financial services which are accessible from the commercial banks within Nairobi. He established that the rates of Interest were cheaper for credit services offered in the short term, 51% of individuals who responded had savings accounts, 32 % had checking accounts while 14%

had salary accounts. The study focused on general financial services and not specifically the mortgage market. This study aims to fill this gap.

Waithaka (2013) found that Kenya ranks below her counterparts in the Sub – Saharan Africa in the market for mortgage because of the high rates of interest charged by banks. 71 percent of lending within Kenya is dominated by five major players that include Housing Finance Company of Kenya, Stan Chart Ltd, CFC Stanbic bank, Co-operative Bank of Kenya and KCB group under S&L division. KCB had 30 percent market share being the highest in 2012. Housing Finance Company of Kenya followed next at 19 percent. The constantly increasing prices have been a challenge for middle class earners of income in terms of accessing the facilities. This led to a bullish mortgage market hence a supply deficit and increased demand for the houses.

Another study done by Proam (2012), posits that majority of the expectations and assumptions which are put forward by Central Banks dictate that reducing the rates of interest technically would increase consumption and also the investments in a country.

Kigige and Messah (2011) studied the factors affecting the prices of property in Meru, Kenya. They established that the income level, housing demand, realtors and location affect the property prices.

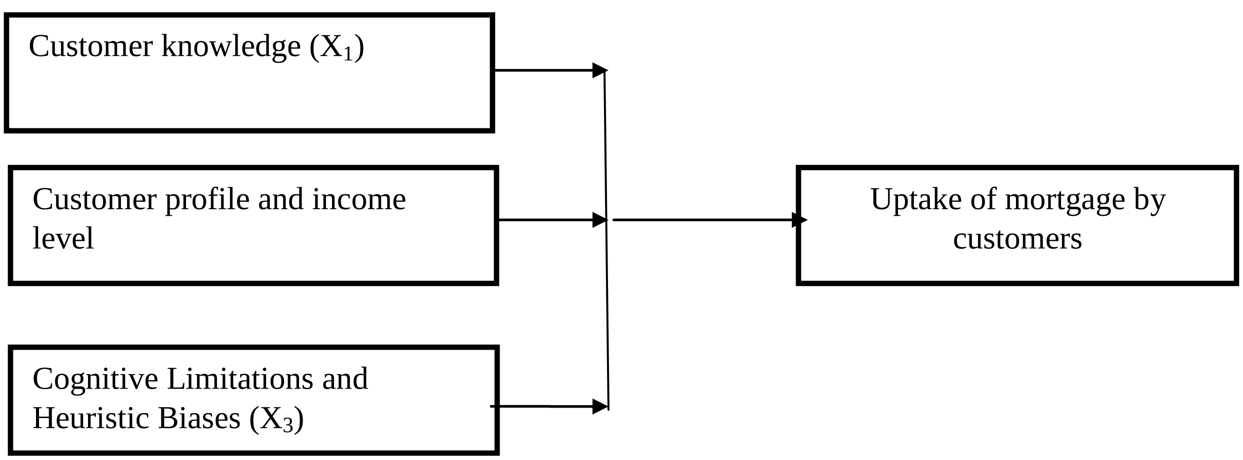
Ongweso (2006) studied the relationship between rates of interest and non-performing loans. He found that the relationship between the interest levels and the loans which are non-performing is a positive relationship. Increased rates of interest increased the number of non-performing loans.

2.5 Conceptual Model

A conceptual model is a result of a qualitative process of theorization. This process links concepts which provide an understanding of a phenomenon. These concepts support each other and also establish a philosophy which describes the relationships in a framework-specific manner. Mugenda and Mugenda (2003) describe a conceptual framework as a depiction of all the phenomena in the study together with a graphical illustration of all the variables.

The conceptual framework of this study relates to independent variables; Customer knowledge, Customer profile and income level and Cognitive Limitations and Heuristic Biases and the dependent variable; uptake of mortgage by customers. The independent and dependent variable and their relationship are presented in the figure below.

Conceptual Model



2.6 Summary of the Literature Review

Table 2.1 Literature Review Summary

Author of Study	Focus of Study	Methodology	Findings	Knowledge Gaps	Focus of current Study
Waithaka (2013)	"Kenya behind Peers in Mortgage Market"	Study among five major participants: Housing Finance Company of Kenya, Co-operative Bank of Kenya, CFC Stanbic bank, Stan Chart Ltd and KCB group under S&L division and	Kenya has lagged behind due to the high rates of Interest rates charged by financial institutions	The interest capping law was introduced in September 2016, Demand for mortgage and loans went up with no commensurate supply	To establish the effects of demand side factors on the uptake of mortgage in the Real Estate market in Nairobi County.
Ongweso (2006)	Relationship between interest rates and non-performing	Secondary data from the Commercial banks licensed by CBK	An increase in interest rates increased the number	Other factors influencing mortgage uptake within Nairobi county	Effect of demand side factors on mortgage

	loans		of non-performing loans.	have not been adequately addressed	uptake in the Real Estate market in Nairobi County
Inganga (2014)	Factors influencing the demand for financial products which are offered by the commercial banks in Nairobi County	Mixed research design technique targeting a population of customers from thirteen Commercial banks in Nairobi County.	He established that the rates of Interest were cheaper for credit services offered in the short term.	This study focused on the general financial services and not specifically the mortgage market	To determine the effect of the demand side factors on mortgage uptake.
Kigige and Messah (2011)	Factors affecting the Property prices in	Descriptive research design targeting a population of	Income level, housing demand,	This study was conducted in Meru municipality	This study will be done in Nairobi

	Meru, Kenya	the 15,844 registered owners of real estate in five regions within Meru.	realtors and location influenced the property prices.	and focused on factors affecting the prices of real estate. It did not focus on demand side of mortgage.	County to establish effect of demand side factors on mortgage uptake.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The research methodology used in the study is discussed in this chapter. This includes the research design used during collection of data, the targeted population of the study, data collection procedures and instruments. Finally it describes data analysis and methods used to generate the data. The methodological scope of the study consisted of a population of 26,187 outstanding mortgage loans. The sample size was 394 home owners. The study made use of questionnaires to get qualitative data for analysis.

3.2 Research Design

Descriptive research design was adopted in the study. This type of study is used to describe characteristics of goods or services. It also makes predictions and estimates proportions of groups of people who behave in a certain way. Kenya's Real estate market fits in the descriptive framework. A research design refers to the strategy for a study. It also refers to the plan through which the strategy is to be conducted. It also specifies methods and also the procedures for the collection of data, its measurement, and analysis. This research made use of Descriptive survey and considered the customers of the mortgage and financial institutions licensed by CBK, within Nairobi County. The Survey was useful in the collection and administering of questionnaires from the respondents to ascertain the current situation of the variables.

3.3 Target Population

The target population refers to the population which the researcher intends to generalize the study results (Mugenda & Mugenda 1999). This Study's target population was drawn from mortgage customers within the mortgage and financial institutions licensed by CBK, within Nairobi County. This research considered all the 31 licensed mortgage institutions as at December 2017, according to CBK report of 2017. The number of mortgage institutions went down from 35 in 2016 attributed to acquisition of two banks while two other banks following commercial decisions stopped offering mortgage loans. The target population constituted 26, 187 outstanding mortgage loans as at December 2017, according to the CBK report of December 2017.

3.4 Sampling Design

A sample design refers to a definite plan required for obtaining a sample from a population. Stratified random sampling technique was used in the research to select the sample. The population was grouped into strata. The computation of the sample size for this survey study adapted a formula advanced by Cooper and Schindler (1998) as shown below:

$$n = \frac{N}{N (e*e) + 1}$$

Where:

n = Sample Size

N = Population Size

e= Error of the sample

The assumed confidence interval is 95% making the allowable error 5%.

From the 26,187 outstanding mortgage loan beneficiaries, the study arrived at a sample of 394 from the formulae.

3.5 Data Collection Instruments and Procedures

The main source used was primary data. The questionnaire was used to obtain qualitative data, with standardized questions to ensure most respondents respond to the same questions in a defined manner. The questionnaire contained closed and open ended questions. The questionnaires also comprised of 5 point likert scale which were ticked by the respondents from 1 representing strongly disagree to 5 representing strongly agree. The questionnaires were self-administered. The data was collected from a sample of 394 individuals within Nairobi County.

3.6 Data Reliability and Validity

Reliability refers to the degree to which the methods of data collection provide results which are consistent. Validity refers to the level to which the instruments proposed measure the concepts they are meant to measure. This study sought information from existing mortgage customers who gave their views and opinions on mortgage by filling out questionnaires which were structured and which had standardized questions hence the validity and reliability of the data was ensured.

3.7 Data Analysis

The analysis of the study entailed the examination, categorization, tabulation and recombination of evidences to tackle the research questions. The data collected was summarized in tables and analyzed using quantitative and qualitative techniques. The closed ended questions in the questionnaire were coded and summarized. An allocation of points was awarded to describe the degree to which a determinant influences mortgage uptake in the Real Estate Market. This coding facilitated the calculation of percentages, frequencies, mean scores and standard deviation.

The data analysis was done using SPSS (Statistical Package for Social Sciences). To ascertain the relationship between various variables, multiple regression analysis was used.

3.7.1 Analytical Model

Linear regression was used in order to determine the effect of customer knowledge, customer profile and income level and cognitive limitations and heuristic biases on mortgage uptake.

Linear regression formula used is as follows:

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

Where:

Dependent variable is represented by Y, and independent variables are represented by X_1, X_2 and X_3:

Y = Mortgage uptake in the Real Estate, measured by the respondents' opinion on their principal mortgage loan

X_1= Customer knowledge, measured by the respondents' rating on various statements about their knowledge level

X_2 = Customer profile and income level, measured by the respondents' rating on various statements about their personal profiles and income level

X_3 = Cognitive limitations and heuristic biases, measured by the respondents' rating on various statements about their cognitive limitations and heuristic biases

βo:is a constant which represents the determinant that has no influence on Mortgage uptake.

β_{1-3}:represents the degree to which each of the particular independent variables influence mortgage uptake.

Ɛ= Error term

3.7.2 Inferential Statistics

A 95% confidence level was used as the test of significance. This was established by standard error test, Prob (F-statistic) and using the coefficient of determination R. The variables in the model were transformed using natural logarithm in order to ensure linearity.

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CHAPTER FOUR: DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter comprises the interpretation and presentation of the study findings. It presents the response rate, demographic information of the respondents, and the findings of the study based on the research objectives. Descriptive and inferential statistics form the basis for discussion of the study findings.

4.2 Response Rate

The study targeted a sample size of 394 respondents from which 280 filled in and returned the questionnaires making a response rate of 71 percent. This response rate sufficed for the researcher to draw reasonable conclusions from the study. According to Mugenda and Mugenda (1999), a response rate of 50 percent is adequate for analysis and reporting; a rate of 60 percent is good and a response rate of 70 percent and over is excellent. Based on the assertion, the response rate was considered to be excellent.

Table 4.1: Response Rate

Questionnaire	**Frequency**	**Percentage**
Filled and Returned	280	71
Unreturned	114	29
Total	**394**	**100.0**

Source: Research Findings

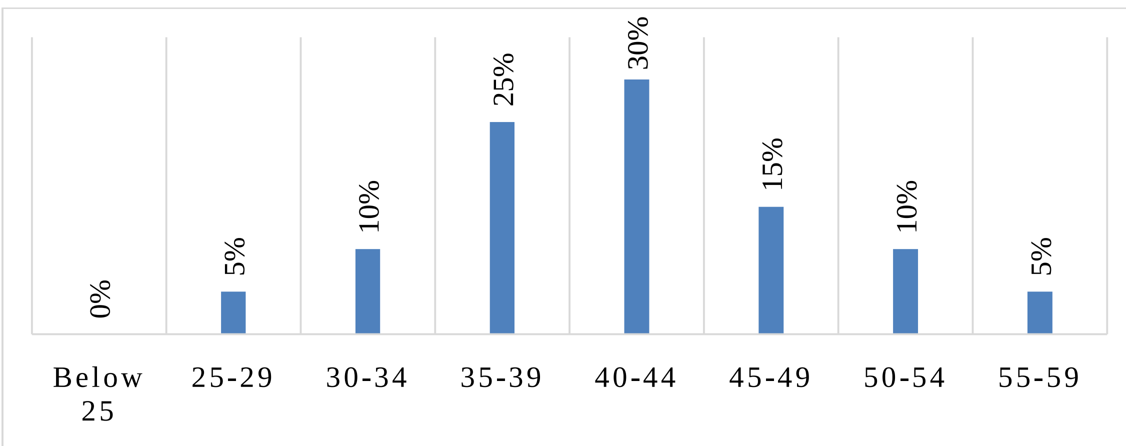
4.3 Demographic Information

The respondents were asked to indicate the following demographic data: age; monthly income; level of education; marital status; and the mortgage maturity period. The responses were as shown below.

4.3.1 Age

As shown in Figure 4.2 below, majority of the respondents were between 40 and 44 years old; followed by those who were between 35 and 39 years old. The lowest age category was between 55-59 years. There was no respondent below 25 years old. This could be because of the traditional conditions underlying the mortgage business.

Figure 4.2 Age Distribution

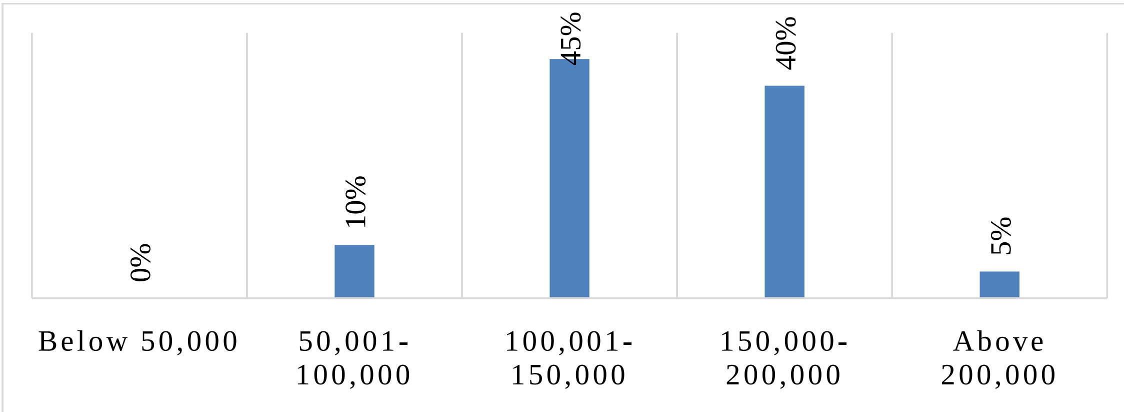


Source: Research Findings

4.3.2 Monthly Income

As shown in Figure 2.3 below, majority of the respondents had monthly income between Kenya Shillings 100,001 and 150,000; followed by those who were between 150,001 and 200,000. The lowest monthly income category was those who had above 200,000. There was no respondent with monthly income below 50,000. This could be because of the ability to service the mortgage loan.

Figure 4.3 Monthly Income Distribution

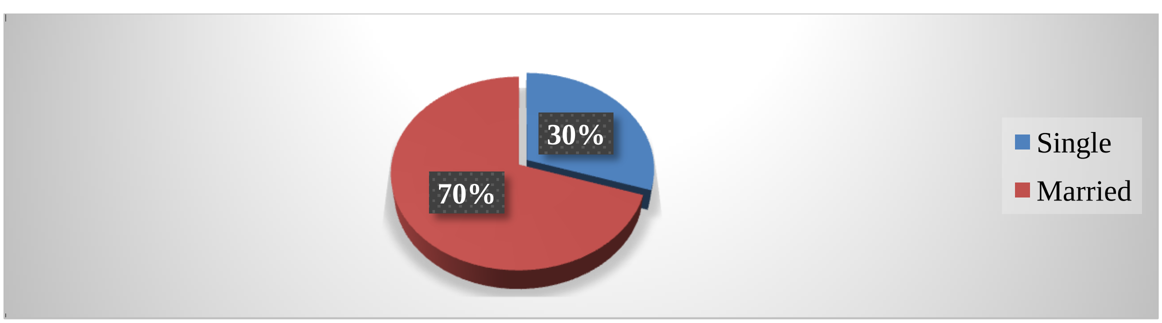


Source: Research Findings

4.3.3 Marital Status Distribution

As shown in Figure 4.4 below, 70% of the respondents were married, while 30% were single. Majority of the respondents were, therefore, of the married. This could be because majority of the respondents were over 35 years as shown in Figure 2.2 above.

Figure 4.4 Monthly Income Distribution

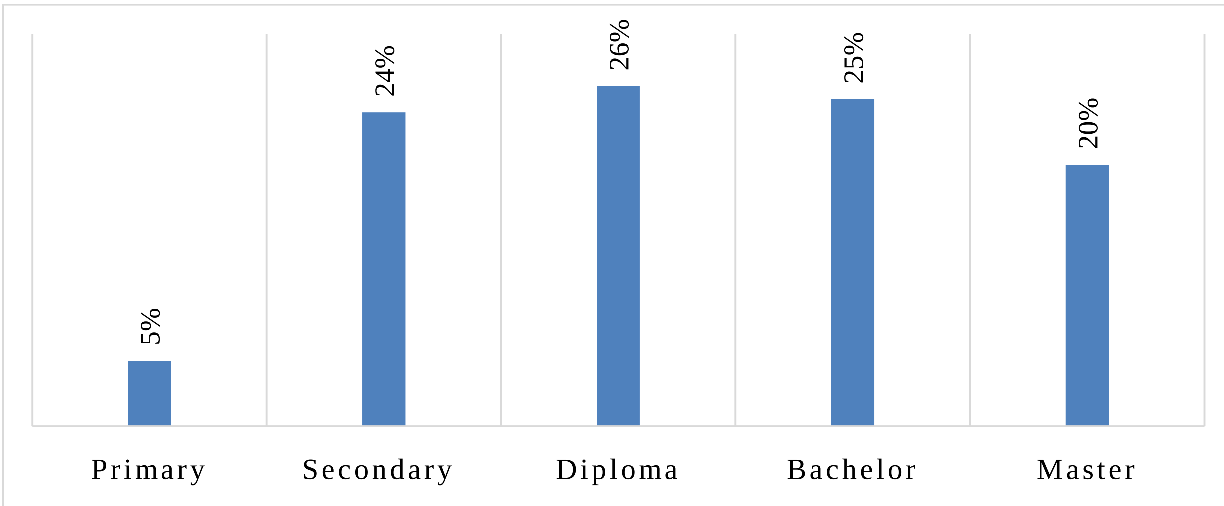


Source: Research Findings

4.3.4 Level of Education

As shown in Figure 4.5 below, majority of the respondents had a diploma, representing 26% of the respondents; followed by those who had bachelors, representing 25%. The lowest category of respondents was those who had primary education, representing 5% of the respondents.

Figure 4.5 Level of Education Distribution

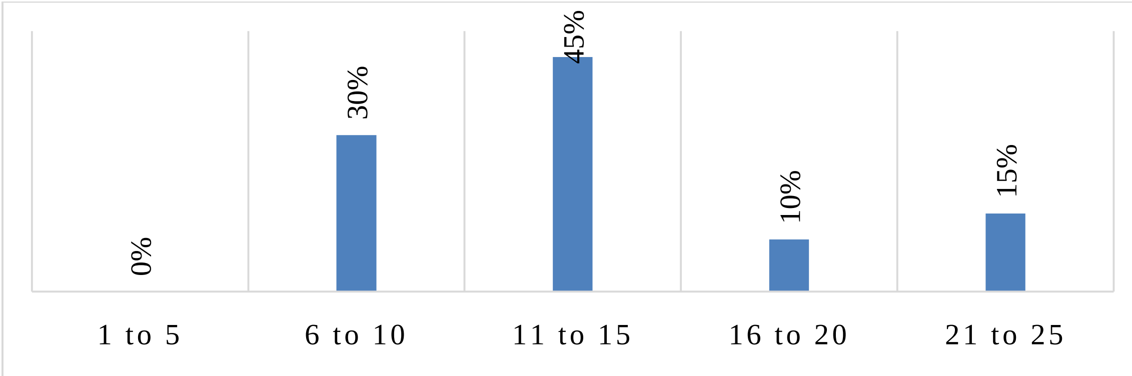


Source: Research Findings

4.3.5 Loan Maturity Period

As shown in Figure 4.6 below, majority of the respondents' loans had maturity periods between 11 and 15, representing 45% of the respondents; followed by those between 6 and 10 years, representing 30% of the respondents. No loan had maturity period below 6 years. This could be because shorter maturity period attracted higher monthly installments.

Figure 4.6 Level of Education Distribution



Source: Research Findings

4.4 Customer Knowledge

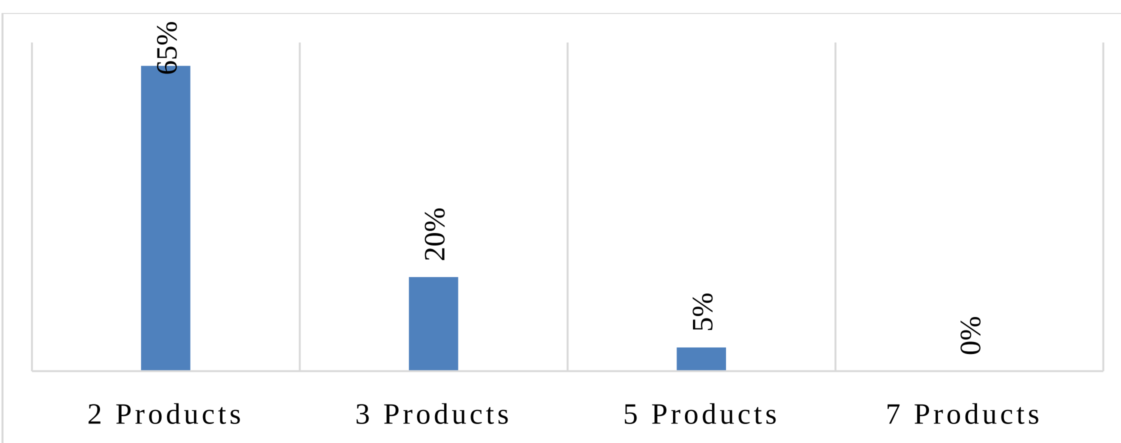
The respondents were asked to rate their knowledge of the products in the mortgage sector. The distribution of responses was as shown in Table 4.2 below. Table 4.2 demonstrates that the customer understanding of the mortgage had the most favorable score of 4.471, and standard deviation of 0.327. The knowledge about mortgage product variability had the least favorable score of 4.206. However, most responses about comparison of products before purchase had the most consistent scores as shown by the least standard deviation of 0.153. On average, the customers agreed that they knew the mortgage business, as shown by the aggregate mean score of 4.325, and standard deviation of 0.249.

Table 4.2 Customer Knowledge Distribution

Statements	SD	D	NS	A	SA	Mean	Standard Deviation
Score	**1**	**2**	**3**	**4**	**5**		
I understand the mortgage products well	10	19	41	140	70	**4.471**	**0.327**
Mortgage products vary in characteristics	10	14	46	135	75	**4.206**	**0.268**
I compared the various products before settling on the current one	13	15	42	132	78	**4.299**	**0.153**
Aggregate Score						**4.325**	**0.249**

Source: Research Findings

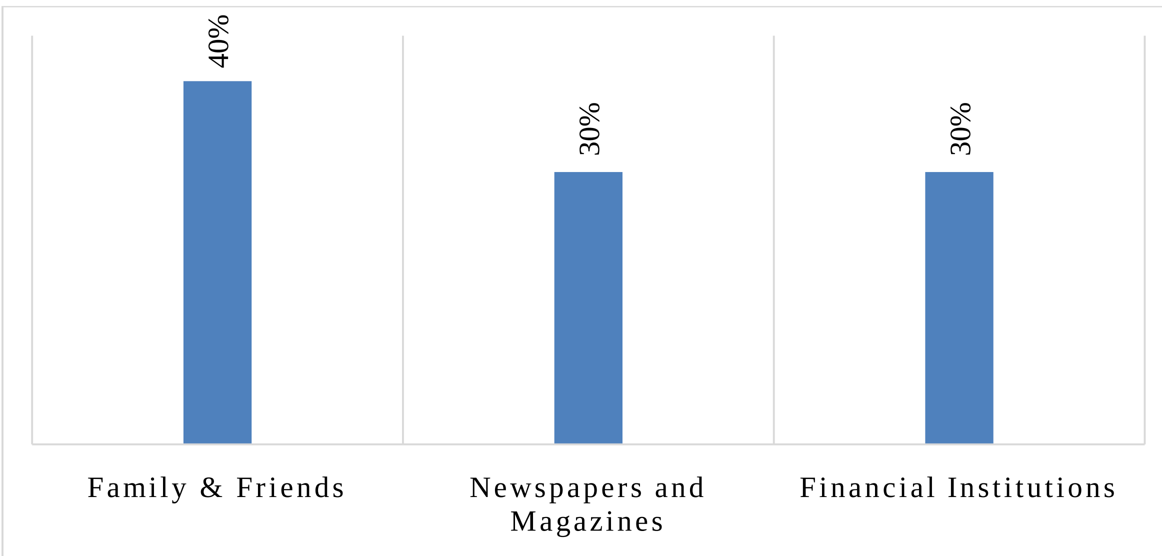
Figure 4.7 Product Knowledge Distribution



Source: Research Findings

As shown in Figure 4.7 above, majority of respondents knew two products in the industry, representing 65% of respondents. This was followed by those who knew three products. No respondent knew more than five mortgage products. This could be due to the conservative nature of the mortgage business in Kenya, characterized by minimal advertising. The respondents were asked for their source of information about the mortgage products. The responses were as shown in Figure 4.8 below.

Figure 4.8 Source of Information on Mortgage Products



Source: Research Findings

As shown in Figure 4.8 above, majority of the respondents obtained information about mortgage products from family and friends, representing 40% of the respondents. Those who obtained knowledge from newspapers and magazines, as well as those who obtained knowledge through the financial institutions had similar level, each at 30%.

4.5 Customer Profile and Income Level

The respondents were asked to score various statements about their personal profile and income level, with respect to mortgage loan acquisition. The distribution of responses was as shown in Table 4.3 below.

Table 4.3 Customer Profile and Income Level Distribution

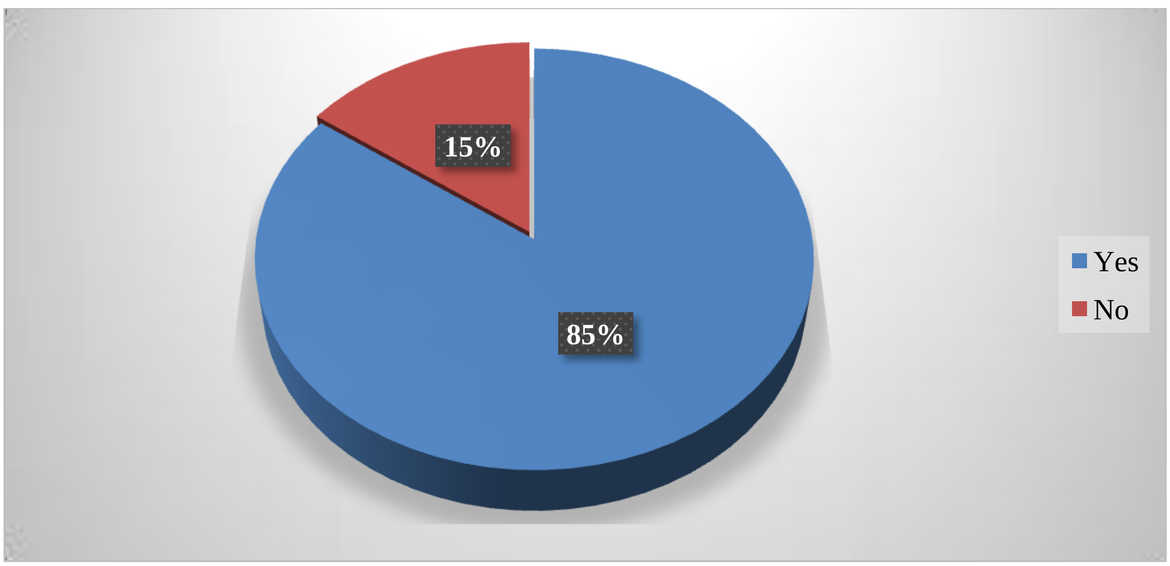
Statements	**SD**	**D**	**NS**	**A**	**SA**	**Mean**	**Standard Deviation**
Score	**1**	**2**	**3**	**4**	**5**		
I provided personal information before the loan was awarded	7	20	42	141	70	**4.071**	**0.379**
The award was highly dependent on the personal information provided	12	16	49	134	69	**3.896**	**0.205**
My income level was a key determinant of the loan award	10	16	43	133	78	**3.889**	**0.252**
Aggregate Score						**3.952**	**0.279**

Source: Research Findings

From Table 4.3, majority of the respondents agreed that they provided personal information before the loan was awarded. This represented a mean of 4.071 and standard deviation of 0.379. Even though the respondents agreed that their income level was a key determinant of the loan award, this indicator attracted the least favorable response, with a mean of 3.889, and standard deviation of 0.252. The most consistent responses were on the dependence of the loan award on personal information, with the least standard deviation of 0.205. On average, the respondents agreed that personal profile and income level determined loan award.

As shown in Figure 4.9 below, the 85% of the respondents believed that the banks considered their profile before advancing a mortgage loan. 15% believed otherwise.

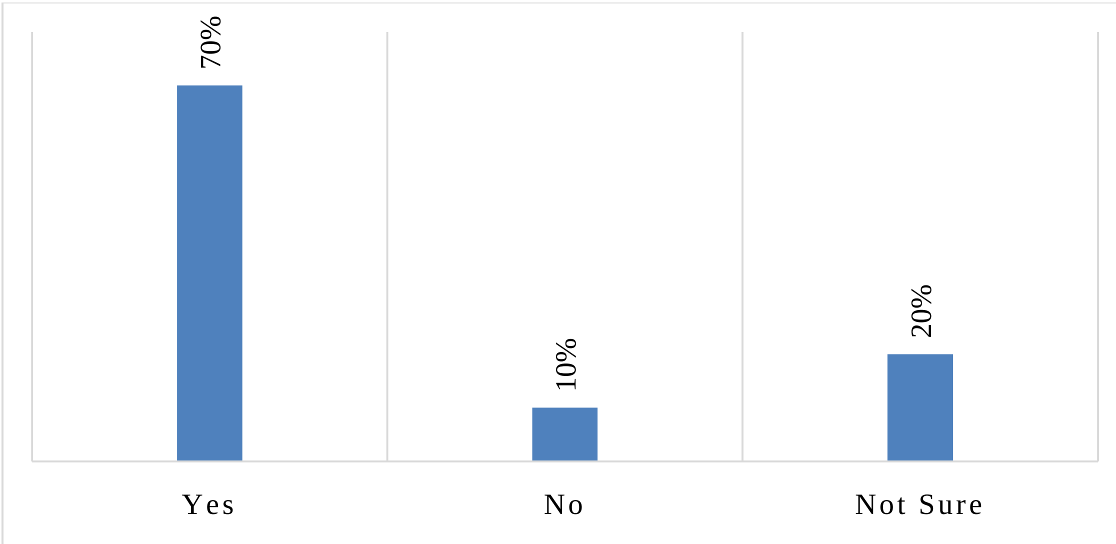
Figure 4.9 Personal Profile Determination of Loan Award



Source: Research Findings

As shown in Figure 4.10 below, the 70% of the respondents believed that their income level boosted their level of mortgage finance, compared to 10% who believed otherwise, and 20% who were not sure.

Figure 4.10 Personal Income Determination of Loan Award



Source: Research Findings

4.6 Cost of Mortgage

The respondents were asked to score various statements about cost of mortgage, with respect to mortgage loan acquisition. The distribution of responses was as shown in Table 4.4.

From Table 4.4, the respondents agreed to all of the statements about cost of mortgage. However, the most favorable score was on the cost of mortgage determination of the product choice, with a mean of 4.470 and standard deviation of 0.209. This was also the most consistent score. The least favorable score was on cost of mortgage inhibition of mortgage uptake, with a mean of 3.789 and standard deviation of 0.272.

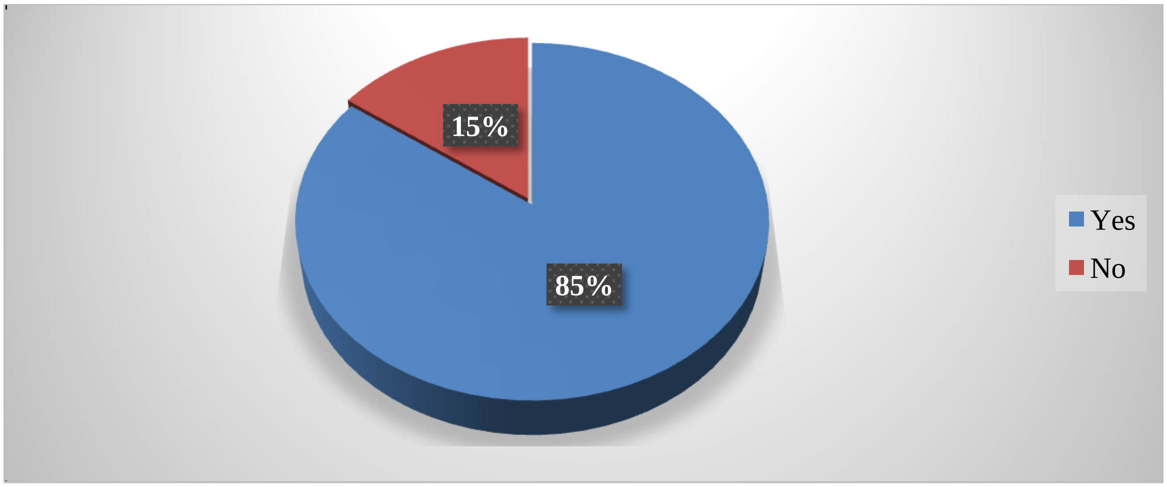
Table 4.4 Cost of Mortgage Responses

Statements	SD	D	NS	A	SA	Mean	Standard Deviation
Score	**1**	**2**	**3**	**4**	**5**		
The cost of mortgage determined my choice of the specific product	7	20	42	141	70	**4.470**	**0.209**
If the cost of mortgage were to be lower, I would take up a higher value	12	16	49	134	69	**4.263**	**0.333**
Cost of mortgage inhibits mortgage uptake	10	16	43	133	78	**3.789**	**0.272**
Aggregate Score						**4.174**	**0.271**

Source: Research Findings

From Figure 4.11, majority of the respondents agreed that cost of mortgage influenced their decision whether to take a mortgage. 15% of them argued otherwise.

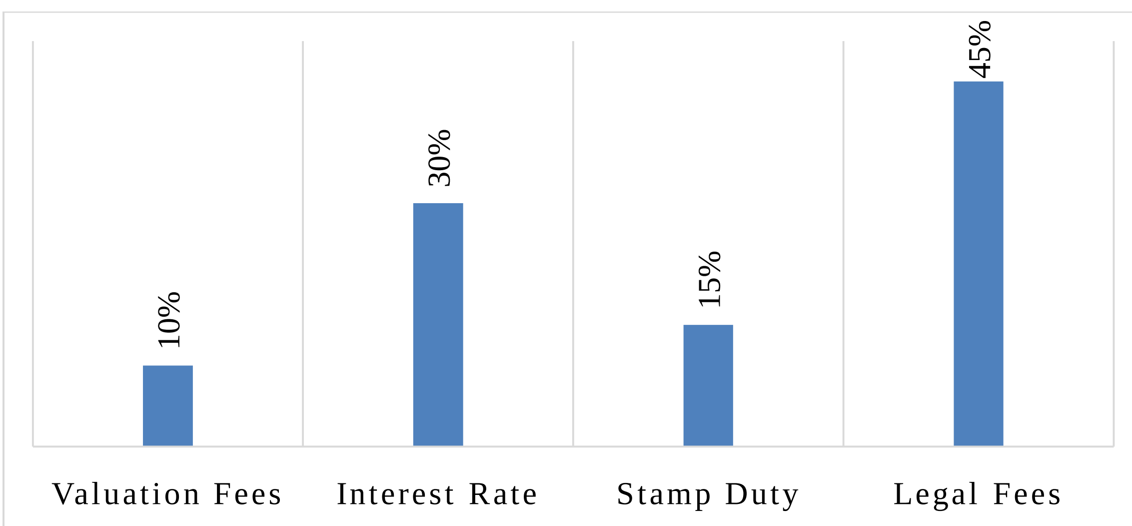
Figure 4.11 Cost of Mortgage Determination of Loan Award



Source: Research Findings

From Figure 4.12 below, majority of the respondents, representing 45% of the respondents argued that conveyance fees were the most of concern. This was followed by interest rate, at 30%. Legal fees were the least of concern.

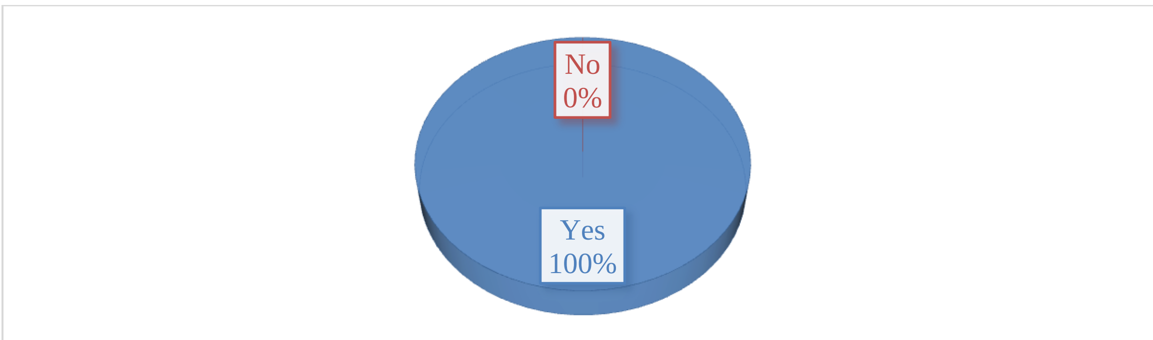
Figure 4.12 Type of Cost Consideration



Source: Research Findings

The respondents were asked to score various statements about cognitive limitations and heuristic biases, with respect to mortgage loan acquisition. The distribution of responses was as shown in Table 4.5 below. All the respondents agreed that they undertook am mortgage insurance, representing 100% of the respondents. All respondents also agreed that insurance undertaking was mandatory for the mortgage loan. Figure 4.13 below depicts the same.

Figure 4.13 Mortgage Insurance



Source: Research Findings

4.7 Cognitive Limitations and Heuristic Biases

Majority of the respondents agreed that they had cognitive limitations and heuristic biases as shown by the mean of 4.174, and standard deviation of 0.271. The greatest mean score in this regard was on the lack of expertise in the mortgage industry, with a mean of 4.470, with the same indicator attracting the most consistent scores due to low standard deviation of 0.209.

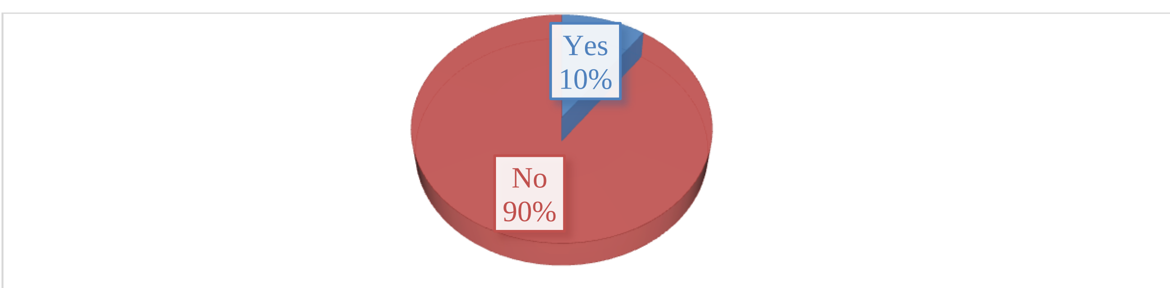
Table 4.5 Cognitive Limitations and Heuristic Biases Responses

Score	1	2	3	4	5		
I am not an expert in the mortgage industry	7	20	53	130	70	**4.470**	**0.209**
I consulted widely before making a decision on the current product	12	16	59	124	69	**4.263**	**0.303**
The consultations contributed to the quality of the decision	10	16	54	133	67	**3.789**	**0.292**
Aggregate Score						**4.174**	**0.271**

Source: Research Findings

From Figure 4.14 below, 90% of the respondents did not seek expert advice before investment, compared to 10% who did. This could contribute to the post-purchase dissonance among the mortgagees.

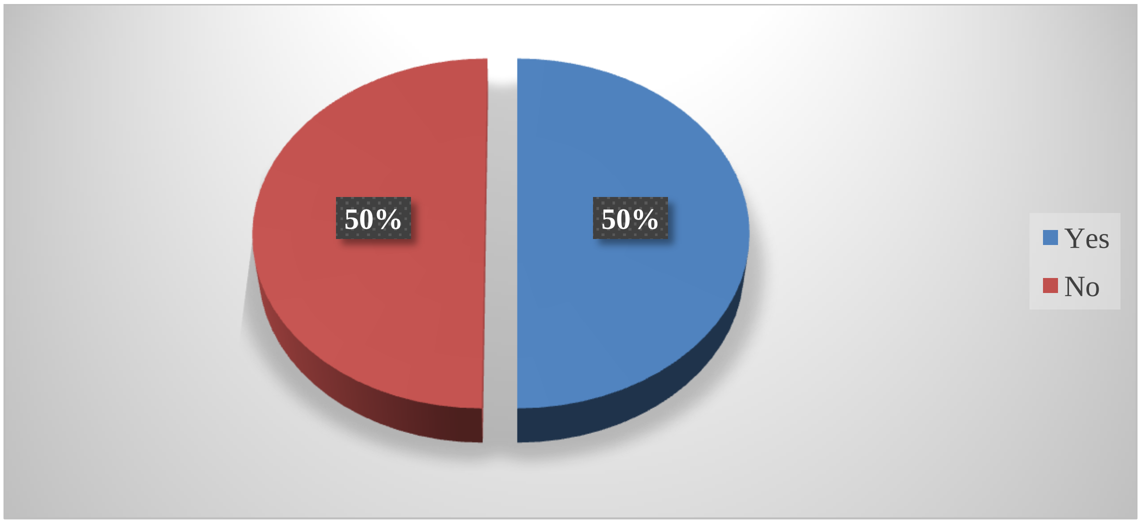
Figure 4.14 Expert Advice



Source: Research Findings

From Figure 4.15 below, equal number of respondents considered their income to be stable and continue growing into the future.

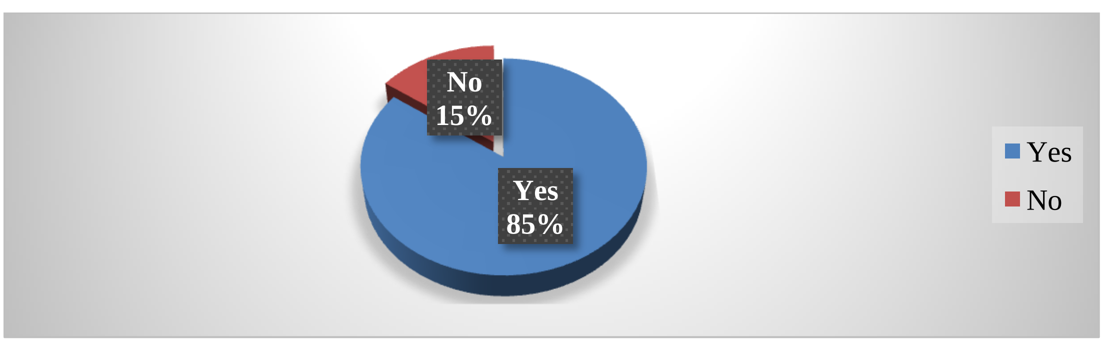
Figure 4.15 Income Stability and Growth Perception



Source: Research Findings

From Figure 4.16 below, 85% of the respondents agreed that they considered all financial risks before taking a mortgage loan. 15% of them reported otherwise.

Figure 4.16 Financial Risk Consideration Perception

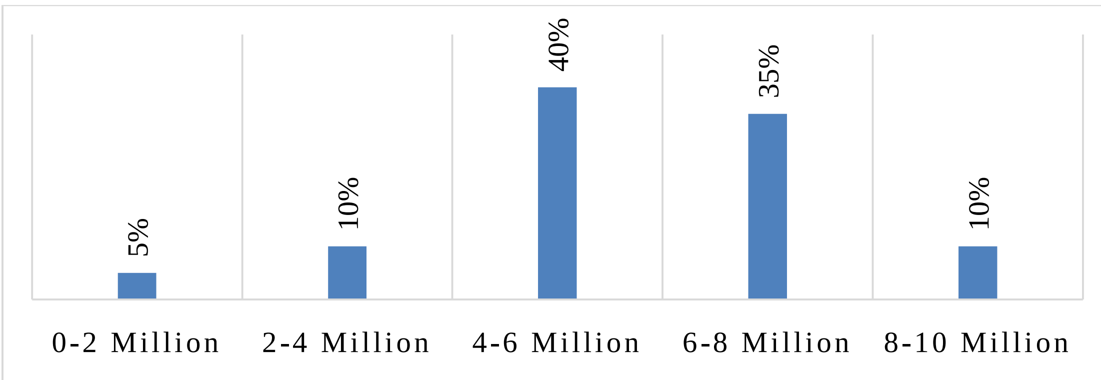


Source: Research Findings

4.8 Mortgage Uptake

The respondents gave the following information (Figure 4.17 and Table 4.6) about their level of mortgage uptake, measured by the principal amount.

Figure 4.17 Mortgage Uptake



Source: Research Findings

Table 4.6 Mortgage Uptake

Class	Midpoint	Frequency	Cumulative Frequency
0-2 Million	1 Million	14	14 Million
2-4 Million	3Million	28	84 Million
4-6 Million	5Million	112	560 Million
6-8 Million	7 Million	98	686 Million
8-10 Million	9 Million	14	126 Million
		Aggregate	**1470 Million**

Source: Research Findings

From Figure 4.17 and Table 4.6, the majority of respondents had the principal amount of between 4 and 6 Million (Kenya Shillings). This represented 40% of the respondents. The minority, representing 5% had the principal amount between 0 and 2 Million.

4.9 Correlation Analysis

Correlation is a statistical measure that indicates the extent to which two or more variables fluctuate together. A positive correlation indicates the extent to which those variables increase or decrease in parallel; a negative correlation indicates the extent to which one variable increases as the other decreases. Table 4.7 shows the nature and degree of correlation between pairs of variables.

Table 4.7 Correlation Matrix

		Mortgage Uptake	Customer knowledge	Customer profile and income level	Cognitive limitations and Heuristic biases
Mortgage Uptake	Pearson Correlation	1	-.498	-.022	.787**
Customer knowledge	Pearson Correlation	-.498	1	-.250	-.315*
Customer profile and income level	Pearson Correlation	-.022	-.250	1	.116
Cognitive limitations and Heuristic biases	Pearson Correlation	.787**	-.315*	.116	1

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

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

Source: Research Findings

The correlation between customer knowledge, customer profile and income level, and cognitive limitation and heuristic biases; each with mortgage, found to be -0.498, -0.022, and +0.787 respectively. From Table 4.7 above, the most significant correlation was noted between cognitive limitations and heuristic biases and mortgage, with an index of .0787. In this regard, this pair of correlation was flagged significant at 0.01 level of significance. There was no significant auto-correlation between the independent variables.

4.10 Regression Analysis

The objective of the study was to determine the effects of demand side factors on mortgage uptake in the real estate market in Nairobi County. Various inferential statistics were interpreted in light of the study objectives. R^2 was used to measure the proportion of mortgage uptake explained by each of the demand side factors. The beta factors were used to measure the correlation between each of the demand side factors, and mortgage uptake. The significance of the beta factors was interpreted at 5% level of significance.

Table 4.8 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.808(a)	.653	. 633	.69440

Source: Research Finding

Adjusted R squared is coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variable.

From the findings in the above table the value of adjusted R squared was 0.633.The figure was an indication that there was variation of 63.3% on mortgage uptake due to changes in the demand side factors at 95% confidence interval. This shows that 63.3% changes in mortgage uptake could be explained by changes in the demand side factors. R was the correlation coefficient which showed the relationship between the variables. From the findings shown in the table above there was a strong positive relationship between the study variables as shown by 0.808.

Table 4.9 Analysis of Variance

Model		**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**
1	Regression	0.813	3	0.271	3.045	.021[b]
	Residual	2.759	276	0.089		
	Total	3.572	279			

Source: Research Finding

From the ANOVA statistics in Table above, the processed data, which is the population parameters, had a significance level of 2.1% which shows that the data is ideal for making a conclusion on the population's parameter as the value of significance (p-value) was less than 5%. The F critical at 5% level of significance was 2.0196 since F calculated (3.045) was greater than the F critical; this showed that the overall model was significant. This was an indication that the demand side factors significantly influenced mortgage uptake.

Table 4.10 Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	Constant	1.298	.453		2.865	.006
	Customer Knowledge	.237	.160	.198	2.479	.012
	Customer Profile and Income	.231	.126	.245	3.834	.001
	Cognitive Limitations and Heuristic Biases	.239	.145	.008	2.065	.023

$p<0.05$, dependent variable; Mortgage uptake

Source: Research Finding

From the data in the above table the established regression equation was

$$\mathbf{Y = 1.298 + 0.237\ X_1 + 0.231\ X_2 + 0.239\ X_3}$$

From the above regression equation it was revealed that a unit change in customer knowledge would lead to increase in mortgage uptake by a factor of 0.237, representing 23.7%; unit change in customer profile and income would lead to increase in competitive advantage by a factor of 0.231, representing 23.1%. A unit change in cognitive limitations would lead to increase in mortgage uptake by a factor of 0.239, representing 23.9%. At 5% level of significance, demand side factors were each found to significantly influence mortgage uptake. The p values for customer knowledge, customer profile and income level and cognitive limitations at 0.012, 0.001 and 0.23 respectively were found to be below 0.05 showing that each of the demand side factors were significant.

4.11 Interpretation of Findings

The study had a relationship with both theoretical and prior empirical studies. The postulations of lien, and title theories, intermediate theory, mortgage credit intermediation model, and classical theory of demand have predictions on the relationship between the demand side factors and mortgage uptake. Previous empirical studies have also been examined, based on their objectives, and major findings. The current study adduced evidence in support of and against the selected theoretical and empirical literature.

Lien theory postulates that the borrower obtains legal, equitable title on the mortgage property while the lender obtains lien on the property. The lender is protected in case of any default by the borrower as he has the right of legal repossession of the property. Under the lien theory, once the borrower signs the documents, he acquires the title. However, the Lender holds encumbrances in case the borrower defaults. However, the lender still faces difficulties with regard to repossession of the mortgage property as the borrower has possession and holds the title on the land and property (Medley, 2011). The current study adduced empirical evidence in support of the lien theory since each of the selected demand side factors were found to significantly, and positively affect mortgage uptake in Nairobi County, Kenya.

Title theory postulates that the legal repossession on the mortgage property is retained by the lender until after full payment of the mortgage. The borrower holds the equitable title and the lender holds the legal title on the property until the loan is repaid. The lender has possession and the rights to rents on the property. If the mortgagor defaults, the lender can take back possession of the property. Once the documents are signed, full ownership of the property is acquired by the lender. The mortgagor gets control until full payment of the loan. The lender holds the property as collateral or security. Once the mortgage loan is fully paid up and the loan obligations fully met, the lender transfers the deed to the borrower (Denise and Wheaton 2002). The current study adduced empirical evidence in support of the title theory since each of the selected demand side factors were found to significantly, and positively affect mortgage uptake in Nairobi County, Kenya.

The intermediate theory applies both the lien theory and title theory in case of default. The lender holds the title until full payment of the mortgage loan. The terms of Mortgage are important and there is need of distinction in case of default. The mortgage institutions act as third party in trust as they possess full ownership of the property on behalf of the mortgagor or the borrower. In case of default by the borrower, the lender has all rights to repossess the property (Medley 2011). The current study adduced empirical evidence in support of the intermediate theory since each of the selected demand side factors were found to significantly, and positively affect mortgage uptake in Nairobi County, Kenya.

Mortgage credit intermediation model argues that the mortgage markets depend on an intermediation network (Stephens, 2005, Chiquier and Lea, 2009). This system of intermediation supports the origination and credit funding, market education, division of responsibilities and obligations and also providing support in case of default. Mortgage intermediation was at the onset done by a privileged and regulated class of institution in most developed countries. In the United Kingdom, it was the building society which performed the intermediation while in the United States, the Savings and Loans Associations(S&Ls) did the intermediation. The current study adduced empirical evidence in support of the mortgage credit intermediation model since each of the selected demand side factors were found to significantly, and positively affect mortgage uptake in Nairobi County, Kenya.

According to the classical theory of demand, ceteris paribus, there is an inverse relationship between the quantity demand and price of a good and service. If the price of a good goes up, its demand would go down (Marshall, 1890).This means that increase in cost of mortgage including interest rates would ultimately lead to decreased demand and reduced cost would lead to increased demand. The increased demand due to low interest rates would lead to increased prices of the housing units which are available (Njiru & Moronge, 2013).

The current study adduced empirical evidence against the postulations of the classical theory of demand since each of the selected demand side factors were found to significantly, and positively affect mortgage uptake in Nairobi County, Kenya. Inganga (2014) examined the determinants of the demand of customers for the financial services which are accessible from the commercial banks within Nairobi. He established that the rates of Interest were cheaper for credit services offered in the short term, 51% of individuals who responded had savings accounts, 32 % had checking accounts while 14% had salary accounts.

According to a study done by Odame, Key and Stevenson (2006) in Ghana, on measures of real estate including systems of valuation and land registration in emerging economies between the years 1998 and 2005, various demand side factors were found to significantly affect mortgage uptake in Ghana. The current study adduced empirical evidence in support of both Inganga (2014), and Odame et al. (2006)empirical findings since each of the selected demand side factors were found to significantly, and positively affect mortgage uptake in Nairobi County, Kenya.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter comprises a presentation on summary of the study findings, conclusions and recommendations based on the findings. The summary, conclusion and recommendations have been made in accordance with the objectives, methodological approach, findings, and limitations of the current study.

5.2 Summary of Findings

The study used linear regression to determine the effect of demand side factors on mortgage uptake in Nairobi County. The study determined that a unit change in customer knowledge would lead to increase in mortgage uptake by a factor of 0.237, representing 23.7%; unit change in customer profile and income would lead to increase in competitive advantage by a factor of 0.231, representing 23.1%. A unit change in cognitive limitations would lead to increase in mortgage uptake by a factor of 0.239, representing 23.9%. At 5% level of significance, demand side factors were each found to significantly influence mortgage uptake. The study also established that most customers agreed that they knew the mortgage business. All the customers also had undertaken mortgage insurance as a mandatory requirement. The study established that most customers were quite optimistic about their incomes growing in an upward trajectory in the future. Most respondents did not seek expert advice before investment as per study results, thereby leading to an increased number of non-performing loans.

Majority of the respondents were also of the opinion that their personal profile and income levels were strongly considered by banks during the mortgage application process. The study revealed that income levels were a strong determinant to mortgage uptake and the higher the incomes, the higher the mortgage uptake.

Study results revealed that customer knowledge of products was not too widespread with majority of them seeking information from family and friends, thereby indicating that banks have not done advertising of their products.

5.3 Recommendations

The study recommends that the academics in the field of Finance, should consider using the empirical evidence adduced to further their research interests. Theorists should also consider the findings of this study to find further empirical foundation in light of the effect of demand side factors on mortgage uptake in Nairobi County.

By so doing, further studies in other contexts, including public, private, manufacturing, and service would develop. The study further recommends the findings for the development of policies that would be geared towards increasing the sustainability of the real estate industry. The Ministry of Housing in Kenya should apply the study results in decision making since it would assist in developing well-informed policies geared towards the achievement of the Vision 2030, the Big Four agenda (more so on the affordable housing pillar), and the sustainable development goals in Kenya.

Finally, the study recommends that the top management team of the individual commercial banks that deal in mortgage finance should use the findings for guidance in making necessary changes in their various functional units.

This will enable them enhance their competitiveness. Specifically, because the study findings have drawn important lessons for success and best practices for the banking industry sustainability against the backdrop of interest rate capping in Kenya.

5.4 Limitations

Several limitations were encountered in the course of this study. Some respondents were uncooperative in filling the questionnaires; this limitation was mitigated by invoking a conversation with the respondents first to make them at ease. This strategy was used also to reduce the risk of the respondents giving socially-correct responses.

Some respondents also took longer than expected time to fully complete the questionnaire; the researcher however ensured questionnaire submission was done early enough to allow significant time for completion. Early preparation of questionnaires and pre-testing of the same also helped the researcher time for analysis and presentation.

The study was also limited to information volunteered by the respondents. The possibility of them giving incomplete and incorrect information was not ignored. This limitation was mitigated by reiterating to the respondents that the information would be handled in a confidential manner, while adhering to ethical code of conduct.

5.5 Suggestions for Further Research

The study sought to determine the effect of demand side factors on mortgage uptake in Nairobi County. The study recommends that an in-depth study should be done on challenges facing the uptake of mortgage products, more so in the low income market segments.

The study also recommends that the influence of moderating and mediating factors such as the macroeconomic factors including interest rates, inflation rates, and foreign exchange rates should be examined, since they were not within the scope of the current study. The study recommends that factors which inhibit the supply of mortgage in rural set up should be examined and solutions brought forward to develop a product that would benefit the customers in the rural areas.

Lastly, the study also recommends that other solutions to the challenge of affordability should be examined in a holistic manner. The current affordable housing plan addresses the availability and affordability of housing for income earners below 12,000 United States Dollar annually. A study focussing on affordability of mortgages to the other population not currently addressed in the affordable housing plan should be examined in order to bridge the housing gap of 156,000 housing units annually which has accumulated to an aggregate of two million units.

REFERENCES

CBK (2009). *FSD Kenya, Fin Access National Survey*. Nairobi: CBK.

CBK and World Bank. (2010). *Mortgage Finance in Kenya: Survey Analysis.* Nairobi: CBK & WB.

Chiquier, L & Lea, M., (2009). *Housing Finance Policy in Emerging Markets.* The World Bank

Denise, D. & Wheaton, C. (2002).The Markets for Real Estate and Space: A Conceptual Framework. *Journal of the American Real Estate and Urban Economics Association*, 20(1), 181 – 197.

Essene, R. & Apgar, W (2007). Understanding Mortgage Market Behavior: Creating Good Mortgage Options for All Americans. *Journal of Public Policy and Marketing*, 25, 1-61.

Froland, C. (2007). What Determines Capitalization Rates on Real Estate? *Journal of Portfolio Management*, 13, 77 – 83.

Mugenda, O. M. and Mugenda, A. G.(2003). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: Acts Press.

Femi, P.J., (2013). *Developing the Mortgage Sector in Nigeria through the provision of Long-term Finance: An efficiency perspective*. Cranfield University, DBA Thesis

Karimi, P. (2010). *Introduction of Mortgage Backed Securities in Kenya Capital Market.* Nairobi: University of Nairobi.

Janger,E. & Block-Lieb,S. (2009). *Demand side gatekeepers in the market for Home loans*: Brooklyn Law School.

Giddings, S.(2007).*Housing Challenges & Opportunities in Sub- Saharan Africa.* Washington. D.C: International Housing Coalition

Lai, Y., Xu, H. &Jia, J.(2009). Study on Measuring Methods of Real Estate Speculative Bubble. *Journal of Service Science and Management*, 2, 43 – 46.

Hass Consult Survey (2015). *Kenyan Property Market.* Nairobi: Hass Consult

World Bank (2017). *Kenya economic update:* housing - unavailable and unaffordable (English). Kenya economic update; no15. Washington, D.C.: World Bank Group.

Inganga, B.W., Njeru, A., Ombui, K. &Tirimba, O. (2014), Factors affecting customer demand for financial products offered by commercial banks in Nairobi County, *International Journal of Scientific and ResearchPublications,*4(11): 1-25

Medley, M. (2011) *Mortgage Theories and How They Affect Foreclosures, Consumer Attorney Services*, December 5th.

Njiru, M. M. &Moronge, M. (2013). Factors affecting growth of mortgage industries in Kenya: A case study of National Housing Corporation. *International Journal of Social Sciences and Entrepreneurship,* 1 (7), 26-35.

Odame, M, Key, Y. & Stevenson, S. (2006). *Measures of Real Estate Values from Land Registration and Valuation Systems in Emerging Economics:* The Case of Ghana.

Swyngedouw, E., Moulaert, F. & Rodriguez, A. (2002). *Neoliberal Urbanization in Europe: Large Scale Urban Development Projects and the New Urban Policy*, Blackwell Publishing Ltd, UK.

Tsatsaronis, K. & Zhu, H. (2009). What Drives Price Dynamics: Cross Country Evidence. *BIS Quarterly Review*, 120, 65 – 78.

Waithaka, J. (2013) Kenya behind Peers in Mortgage Market, *Daily Nation, October 2.*

Milani,C. (2010), *The Determinants of Mortgage Rates: an Empirical Analysis of the Euro Area Countries*, AbiServizi, Economic Research Department

Akenga,G. Olang M. & Galo, N.(2015). Effect of Mortgage Market Risk on Mortgage Uptake: A Case Study of Mortgage Lenders in Kenya. *Journal of Investment and Management.*

Proam, (2012).*Nairobi has the fastest-growing luxury real estate prices on the Planet* .Kenya: Proam Group Ltd.

Kolbe, P. T.; Gaylon, G. E. & Rudner, H. G. (2003).*Real Estate Finance* (1st ed.). Chicago: Dearborn Financial Publishing

Walley, S. (2011). *Developing Kenya's Mortgage Market,* World Bank Report No. 63391

Zhu, H. (2013). The Importance of Property Markets for Monetary Policy and Financial Stability. *Conference on Real Estate Indicators and Financial Stability* (pp. 1 – 20). Washington DC: IMF/ IBS.

Marshall, Alfred (1890). *Principles of Economics. 1* (First ed.). London: Macmillan. Retrieved 2012-12-07.

Njiru, M. M. &Moronge, M. (2013). Factors affecting growth of mortgage industries in Kenya: A case study of National Housing Corporation. *International Journal of Social Sciences and Entrepreneurship*, 1 (7), 26-35.

Cooper, Donald R. and P.S. Schindler. (1998). *Business Research Methods*. Irwin-McGraw-Hill Boston USA

Ongweso, A.B. (2006). *The Relationship between Interest Rates and Nonperforming Loans in Commercial Banks in Kenya* Unpublished MBA Project, University of Nairobi.

McCann, E. J. (2009). *City Marketing. In International Encyclopedia of Human Geography* ed. R. Kitchin and N. Thrift. Elsevier

McConnel c, B. S. (2007). *Micro-Economics* (1st Ed, Vol. 1). Toronto: Mcgraw-Hill Irwin Press

Kigige, A. & Messah, B. (2011). *Factors Influencing Real Estate Property Prices:* A Survey of Real Estates in Meru Municipality, Kenya, Journal of Economics and Sustainable Development, 2, 34 – 54.

APPENDIX I: QUESTIONAIRE

PART A: DEMOGRAPHIC INFORMATION

1. Gender; Male ☐ Female ☐

2. Age;

Below 25yrs ☐ 25 – 29yrs ☐

30 – 34yrs ☐ 35 – 39yrs ☐

40 – 44yrs ☐ 45 – 49yrs ☐

50 – 54yrs ☐ 55 – 59yrs ☐

Other:………………….............. (Specify)

3. Level of monthly income;

Below 50,000 ☐ 50,000 – 100,000 ☐

100,001 – 150,000 ☐ 150,001 – 200,000 ☐

Above 200,000 ☐

4. Marital status;

Single ☐ Married ☐ Other:……………….......

(Specify)

5. What is your highest education level?

Primary ☐ Secondary ☐

Diploma ☐ Bachelor ☐ Master ☐

Other:……………………………. (Specify)

6. Mortgage loan repayment period;

1 – 5 yrs ☐ 6 – 10 yrs ☐

11 – 15 yrs ☐ Other:……………………………. (Specify)

PART B: CUSTOMER KNOWLEDGE

Using a scale of 1-5, tick the answer which is most appropriate from the options given.

1-Strongly Disagree, 2-Disagree, 3-Not-Sure, 4-Agree, 5-Strongly Agree

Statements	**Strongly disagree**	**Disagree**	**Not sure**	**Agree**	**Strongly Agree**
I understand the mortgage products well					
Mortgage products vary in characteristics					
I compared the various products before settling on the current one					

How many mortgage products do you know that exist in the market currently?

3 ☐ 5 ☐ 7 ☐

Other:……………………………. (Specify)

Where did you get the information about the mortgage products?

Family & friends ☐ Newspapers & magazines ☐

Financial institutions ☐ Other:……………………………. (Specify)

PART C: CUSTOMER PROFILE AND INCOME LEVEL

Using a scale of 1-5, tick the answer which is most appropriate from the options given.

1-Strongly Disagree, 2-Disagree, 3-Not-Sure, 4-Agree, 5-Strongly Agree

Statements	**Strongly disagree**	**disagree**	**Not sure**	**Agree**	**Strongly Agree**
I provided personal information before the loan was awarded					
The award was highly dependent on the personal information provided					
My income level was a key determinant of the loan award					

Do you believe banks consider your profile when advancing mortgages?

Yes ☐ No ☐

Does your income level boost the level of mortgage finance advanced by financial institutions?

Yes ☐ No ☐ Not sure ☐

PART D: COST OF MORTGAGE

Using a scale of 1-5, tick the answer which is most appropriate from the options given.

1-Strongly Disagree, 2-Disagree, 3-Not-Sure, 4-Agree, 5-Strongly Agree

Statements	**Strongly disagree**	**Disagree**	**Not sure**	**Agree**	**Strongly Agree**
The cost of mortgage determined my choice of the specific product					
If the cost of mortgage were to be lower, I would take up a higher value					
Cost of mortgage inhibits mortgage uptake					

Does the cost of mortgage influence your decision on whether to take a mortgage?

Yes ☐ No ☐

What aspect of cost mostly concerns you?

Legal fees ☐ Interest rates ☐

Stamp duty ☐ Valuation fee ☐

Have you undertaken mortgage insurance?

Yes ☐ No ☐

Was it a mandatory requirement by your mortgage provider?

Yes ☐ No ☐

PART E: COGNITIVE LIMITATIONS AND HEURISTIC BIASES

Using a scale of 1-5, tick the answer which is most appropriate from the options given.

1-Strongly Disagree, 2-Disagree, 3-Not-Sure, 4-Agree, 5-Strongly Agree

Statements	**Strongly disagree**	**Disagree**	**Not sure**	**Agree**	**Strongly Agree**
I am not an expert in the mortgage industry					
I consulted widely before making a decision on the current product					
The consultations contributed to the quality of the decision					
Had I not consulted I would have selected an unfavorable mortgage plan					
I am not satisfied with the conditions of my loan					
Had I consulted further, my loan would be better performing					

1. Do you seek the advice of experts before Investment?

   Yes ☐ No ☐

   If Yes, State how many experts advise you seek before making a major investment……………………………………………………………………

2. Do you consider that your income is stable and will continue growing in an upward trajectory?

   Yes ☐ No ☐

3. Do you consider all financial risks associated with taking up a mortgage before embarking on investment?

   Yes ☐ No ☐

PART F: MORTGAGE UPTAKE

What was the principal amount of your mortgage in *Kenya Shillings*? ………………

Thanks for Your Participation