

**RELATIONSHIP BETWEEN COST OF FINANCE AND DEMAND FOR  
HOUSING UNITS IN NAIROBI COUNTY**

**BY**

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## DECLARATION

### Declaration

I declare that this is my original work and has not been presented to any institution or university other than The University of Nairobi for academic credit. I further declare that I followed all the applicable ethical guidelines in the conduct of the research proposal.

Signature.....Date.....

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### Declaration by Supervisors;

This research project has been submitted for examination with my approval as university supervisor.

Signature.....Date.....

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## **DEDICATION**

I would like to dedicate this project to my family, friends and supervisor for both their moral and financial support during the entire duration when I was doing the project. I would like to particularly thank my Family Andrew Ngochoch, Phyllis Chumba, Loncah Ngochoi and Patrick Chumba for pushing me hard during difficult moments and my very close friend Asman Abdallah for the moral support during the entire period. This is the least that I can do to acknowledge and recognise your generous support.

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## ABSTRACT

Majority of people cannot afford to purchase houses outright and have to rely on a mortgage financing to buy them. However there are several issues to consider and among them is the cost of financing. These costs include requirements for deposits, other charges such as appraisal fees, legal fees, stamp duty, ledger fees and interest rates: once the mortgage is taken out, interest has to be paid. The main purpose of the study was to examine the relationship between access to housing finance and demand for purchase of housing units in Nairobi County. The study sought to answer the following research question: how does, Interest rates, and collateral influence demand for purchase of housing units in Nairobi County? The study used a descriptive design in collecting data from the respondents because it ensures complete description of the situation, making sure that there is minimum bias in the collection and interpretation of data. The target population is drawn from twenty three commercial banks and Housing Corporation of Kenya. The primary data for the study was collected using the questionnaires and complemented by desk research. Quantitative data was analyzed using descriptive and regression statistics with the aid of Statistical Package for Social Sciences (SPSS 21.0), while qualitative data was analyzed through content analysis.

The study established that demand for purchase of housing units is negatively affected by cost of finance arising from high interest rates; legal, appraisal and ledger fees on stamp duty, title search, notary, insurance policy, credit check fees loans making it expensive; besides banks load closing cost on loan products making their financial products unaffordable to most customers. Interest rate, legal, appraisal and ledger fees and closing cost on loan influence demand for purchase of housing units. Most prospective house owners are negatively affected by the requirement for deposit or collateral as some banks offering mortgages require high threshold of deposit or collateral which some potential owners do not have.

There is need for banks to develop financial products that are appropriate and relevant to customers of all economic stratas on the basis of service and structure costs that do not lead the customer to encounter access and/or use difficulties. They also need to continuously review the cost structure on their products so as to enhance the uptake of finance for purchasing housing units. There is need for banks to regularly review the cost of their financial services such as interest rates; legal, appraisal and ledger fees on stamp duty, title search, notary, insurance policy, credit check fees loans so that they can unlock the bottlenecks that negatively influence demand for their products and the subsequent relation with the purchase of housing units making them accessible to relatively most of the clients

## **DEFINITIONS OF OPERATIONAL TERMS**

### **Demand**

A desire to possess a good, supported by willingness and ability to pay in order to obtain it

### **Housing Demand**

The willingness and ability of households to pay for housing

### **Cost of Finance**

Finance costs refer to interest expense on borrowings. The term “finance cost” is broader and also includes costs other than just interest expense

### **Collateral**

The property or other assets that a borrower offers a lender to secure a loan. If the borrower stops making the promised loan payments, the lender can seize the collateral to recoup its losses.

### **Interest Rates**

Refers to the amount charged, expressed as a percentage of principal, by a lender to a borrower for the use of assets.

## **LIST OF ACRONYMS**

<b>HFCK</b>	Housing Finance Corporation
<b>HFI</b>	Housing Finance Institutions

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## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background**

This chapter examines the background information to the study, the statement of the research problem and the research objectives of the study, research questions and importance of the study is also discussed.

##### **1.1.1 Cost of Finance**

Finance costs refer to interest expense on borrowings. The term “finance cost” is broader and also includes costs other than just interest expense. Finance costs also include: Amortization of discounts or premiums that are related to the borrowings Amortization of ancillary costs incurred in connection with the borrowings or arrangements and closing costs, loan discount points and prepaid items (Wurgler, 2000).

Closing costs are the actual expenses that the lender incurs in the origination of a new home loan. Some of the costs are related to the loan application, such as the expense of newly updated credit reports on all applicants. Other fees are related to the house itself, such as the appraisal of the property (Okonkwo, 1998). Others are payment to the lender for processing your application, such as the loan origination fee. All these costs are lumped into a broad category called "closing costs." Unless the seller offers to pay them for you, this area of expenses is charged to the buyer, and often runs between 2 and 3 percent of the amount being borrowed. Because different banks have different fees and taxes that are a part of these costs, it's impossible to generalize for all banks (Luffman, 2006).

Loan discount points are, in essence, a form of prepaid interest. One discount point is exactly equal to one percent of the amount being borrowed. It is paid in cash at closing to the lender as a form of interest. Discount points have the effect of lowering the stated interest rate you will pay on the loan you obtain. For example, a lender might offer you a 30 year fixed rate loan at 8% with zero points or the same loan at

7.5% with 2 discount points. Because the points are considered interest, the yield to the lender is approximately the same (Hannan, 1991).

Other costs include prepaid items as most banks require borrowers to set up what is called and "escrow" account. This is nothing more than a savings account that the lender holds. Every month the borrower will, in addition to the regular loan payment, deposit a sum for property taxes and insurance into this account. And when the next bill comes due for taxes or insurance, the bank makes the payment. In addition, the borrower is required to pay for the first year's insurance policy in full (Karen, Alberto & Juan-Pablo, 2010).

### **1.1.2 Housing Demand**

Housing not only provides physical shelter but also has significant impact on the lives of the dwellers in terms of skills enhancement, income generation, increased security, health, self confidence and human dignity. Housing finance development, therefore, plays a role in boosting equitable economic growth and reducing poverty through helping households build assets, improving living conditions, empowering the middle- and lower-income population, and strengthening communities (Hulchanski, 2006).

Demand can be described as a desire to possess a good, supported by willingness and ability to pay in order to obtain it (Gachuru, 2005). Housing demand, commonly referred to as effective demand, seeks to measure the willingness and ability of households to pay for housing. It is a function of many factors: household income, the price (or rent) of a dwelling, financing arrangements (including interest rate and the loan term), and household preferences for different attributes of a dwelling, such as location (Schmuecker, 2011). Households are willing to spend more on housing if they are buying their own house than if they are renting. Housing demand is often contrasted with housing need, a socially derived concept that measures the number of dwellings required to house a population above an arbitrarily determined standard or norm, with no regard for the ability to pay (Mostafa, Francis & Chi Mun, 2006).

There are three main characteristics of demand: willingness and ability to pay; demand is always at a price hence it will be meaningless without reference to price.

The consumer must know the price and the commodity then he will be able to tell the quantity demanded by him. Demand is always per unit of time in the sense that when the prices of the commodities fall, they are tempted to purchase more commodities and when the prices rise, the quantity demanded decreases. Indeed the law of demand states that people will buy more at lower prices and buy less at higher prices, other things remaining the same (Schmuecker, 2011).

Housing demand is a function of many factors: household income, the price (or rent) of a dwelling, financing arrangements (including interest rate and the loan term), and household preferences for different attributes of a dwelling, such as location (Luffman, 2006). According to Schmuecker (2011) households are willing to spend more on housing if they are buying their own house than if they are renting. Housing demand is often contrasted with housing need, a socially derived concept that measures the number of dwellings required to house a population above an arbitrarily determined standard or norm, with no regard for the ability to pay or access to financial services. Demand for housing is usually characterised by the ability to pay and indeed access to financial services (Mostafa, Francis & Chi Mun, 2006).

Other important determinants that influence the demand of housing in general include: Affordability that is the ratio of house prices to incomes (Hulchanski, 2006). Most people are dependent on getting a large mortgage upto 95% of house value. If mortgages become less available then demand will fall. Since credit crunch availability of cheap 95% mortgages has declined. Banks are demanding bigger deposits that many first time buyers don't have therefore demand for housing has fallen. Interest rates determine the cost of paying a variable mortgage. Lower rates make interest payments more affordable (Okonkwo, 1998). The main alternative to buying a house is renting. If the cost of renting rises, there will be a fall in demand (Bramley, 1994). Higher economic growth and falling unemployment will lead to rising demand for houses (André, 2010).

### **1.1.3 Cost of Finance and Demand for Housing**

Majority of people cannot afford to purchase houses outright and have to rely on a mortgage financing to buy them. However there are several issues to consider and among them is the cost of financing. These costs include requirements for deposits, other charges such as appraisal fees, legal fees, stamp duty, ledger fees and interest rates: once the mortgage is taken out, interest has to be paid. If interest rates rise, mortgage repayments go up and an opportunity cost is experienced. There will be less money to spend in other parts of the household meaning that it deters individuals from taking out mortgages in the first place. Conversely, as interest rates fall in the economy, householders will be able to afford the mortgage repayments and will be attracted to taking out mortgages enabling them to buy houses

Since house purchases typically involve household borrowing, house prices are likely to be strongly driven by credit conditions and household leverage. An influential set of studies (Stein, 1995; Kiyotaki and Moore, 1997) posit that households can borrow only a fixed multiple of their down payment. This assumption of a fixed “leverage ratio” implies an “accelerator” mechanism, where a positive or negative shock to income (or net worth) is amplified by an expansion, or contraction, in borrowing capacity, in turn influencing house prices. Relaxing lending standards in good times drives up both credit and house price growth while a tightening of standards puts downward pressure on house prices.

Housing demand more than any other category of household expenditure, depend critically on the availability, cost and flexibility of debt financing. These factors are likely to drive shifts in housing demand in the short term together with returns in other asset classes, which determine the opportunity cost of real estate investments. Given the sluggish response of housing supply, these drivers of demand play a key role in shaping the short term dynamics of house prices. A declining interest rate environment, which keeps servicing costs of ever larger mortgages within the household budget limits imposed by current income, typically boosts the demand for residential real estate. In importance among the drivers of house price dynamics are the three variables related to mortgage finance: bank credit, short-term interest rates and spreads. The lack of affordability is a combination of factors which includes the

low levels of income (especially in rural areas), and the high and volatile level of inflation and relatively high interest margins charged by banks.

#### **1.1.4 Overview of Housing Sector in Nairobi County**

Nairobi has the highest growth rates per annum compared to the other growth rates in Africa. Kenya continues to experience serious housing shortage. The prolonged housing shortage has led to the proliferation of unplanned and informal urban settlements (Kenya National Bureau of Statistics, 2009). 75% of the urban population growth is absorbed by informal settlements. The number of urban population living in slums will double in the next 15 years. Informal settlements cover only 5% of the total residential land area of the city, but they are inhabited by at least half of the city's population (UN-Habitat, 2008). Overall policies and practices to address slum dwellers' needs have been poorly developed and implemented. As the informal sector keeps expanding, appropriate strategies are in order to enhance its economic growth as well as to harness the efforts of various partners and communities, with a view to providing for slum dwellers' basic needs through coordinated service delivery. Indeed Nairobi is home of some of the largest low income and informal urban settlements in Africa. The government has put in place measures to improve housing in the metropolitan region. In Nairobi, for example, slum upgrading projects have been initiated in Kibera – Plate 4-1. Other housing projects are proposed in Mavoko, Kajjado, Ruiru and Thika.

Between the 1980s and 1990s there were over 20 housing finance providers in Kenya. Only five of these institutions remain, namely: Housing Finance, Savings and Loans (a subsidiary of Kenya Commercial Bank), Equity Bank (formerly Equity Building Society), East Africa Building Society, and Family Finance Building Society. However over the past two years several commercial banks have developed mortgage products and are competing directly with the five housing finance institutions (GoK, 2007)

The Kenyan housing finance system has grown rapidly over recent years in both value of loans and number of loans. The mortgage market is the third most developed in

Sub-Saharan Africa with mortgage assets equivalent to 2.5 percent of Kenya's GDP. Only Namibia and South Africa rank higher, with Botswana just slightly smaller. Mortgage products are widespread and are offered by virtually all banks. A typical loan would be done at variable rates for around 14 percent for an amount of Ksh 4 million over a period of 15 years. Based on this, 2.4 percent of the total population could afford a mortgage for a basic house. This rises to 11 percent of the urban population. There is no viable market in rural areas given the low levels of income together with the high costs of developing a distribution network. The potential size of the mortgage market is currently around Ksh 800 billion or \$9.9 billion around 13 times the current level (Institute of Policy Analysis and Research, 2005).

The housing sector is characterised by a three-tier market. First are those households with the highest disposable income (less than 3% of the housing market), who are able to afford high-quality housing in fully serviced neighbourhoods, and able to utilise bank financing or specialised housing finance institutions. The second tier is the relatively narrow stratum of middle-income households (representing 12 to 15 % of the housing market), who are the main users of specialised housing financial institutions such as Housing Finance Corporation (HFCK). The third and largest of the tiers is low-income households, for which housing is provided largely by the private sector, often under illegal and unsatisfactory site conditions (Central Bureau of Statistics, 2002).

## **1.2 Research Problem**

As in most developing countries, only a small proportion of urban households probably not more than 10% - have traditionally qualified for mortgage loans from Housing Finance Institutions (HFIs), with the majority ruled out by their low incomes. Banks typically do not offer mortgage loans smaller than Ksh 500,000 (USD 7,500) and borrowers generally consist of high net worth individuals. Even with the fall in interest rates since the 1990s, and the recent extension of lending terms to 25 years by some HFIs, access to mortgage loans is still very limited, although it has improved (GoK, 2007).

Adedeji and Abiodun (2012) observe that in Nigeria housing provision is fraught with a plethora of problems especially for low-income earners who incidentally constitute



the majority of the population. Fundamental to this is the lack of access to housing finance by this segment of the society. Karen, Alberto and Juan-Pablo (2010) observe that access to financial services enables households to invest in activities that are likely to contribute to higher future income purchase of necessities like housing Davenport (2003) indicated that income levels are significant in purchase of houses and that there is need for increased effectiveness of housing policy to make housing more affordable to low-income households. Alder and Mutero (2007) note that previously the housing finance companies invested in the development of housing for high and middle-income buyers but, under pressure from falling interest rates, have now moved down market and develop new lending products with greater reach to the groups

A number of researchers have undertaken research on housing; for instance Alder and Mutero, (2007) in their study focused on Housing Micro-finance in Kenya, Mwangi, (1997) researched on the nature of Rental Housing in Kenya; Okonkwo, (1998) on housing Finance and Housing Delivery Systems in Kenya, while Gachuru, (2005) studied Mortgage Default in the Kenyan mortgage market. However there is limited information on the relationship between cost of finance and purchase of housing units by groups. This study therefore seeks to answer the question: how does, Interest rates, and collateral influence demand for purchase of housing units in Nairobi County?

### **1.3 Research Objectives**

The general objective of this study is to examine the relationship between cost of housing finance and demand for purchase of housing units in Nairobi County

### **1.4 Value of the Study**

In practice the study will be significant to banks, because they will be able to understand the relationship between cost of finance and demand for purchase of housing units and be able to facilitate bank management and other financial institutions to seek ways to leveraged on the demand to finance the purchase of the housing units to boost their financial performance

The study will also be significant to the general housing institutions and real estate experts who will be able to understand the relationship between cost of finance and housing demand and be able to leverage on the period when they the cost of finance is low to purchase houses so as to improve their living conditions of the earners.

The findings of the study will assist central bank of Kenya in formulating guidelines and policies to facilitate m commercial banks to offer relevant financial products to its customers at lower cost.

In theory the study will add and enrich the existing body of knowledge on the relationship between access to finance and demand for purchase of housing units by the groups not only in Kenya but other regions of the world. The study will further provide the background information to research organizations and scholars and identify gaps in the current research for further research.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

In this chapter, literature, which is related to and consistent with the objectives of the study, is reviewed. Important theoretical and practical problems are brought out; relevant literature on the aspects pertaining to the relationship between cost of finance and demand for purchase of housing units in Nairobi County is discussed.

#### 2.2 Theoretical Framework

##### 2.2.1 Theory of Cost of Capital

According to Modigliani and Miller (1952) in much of his formal analysis, the economic theorist at least has tended to side-step the essence of this cost-of-capital problem by proceeding as though physical assets-like bonds-could be regarded as yielding known, sure streams. Given this assumption, the theorist has concluded that the cost of capital to the owners of a firm is simply the rate of interest on bonds; and has derived the familiar proposition that the firm, acting rationally, will tend to push investment to the point where the marginal yield on physical assets is equal to the market rate of interest (Dean. 1951)

This proposition can be shown from either of two criteria of rational decision-making which are equivalent under certainty, namely the maximization of profits and the maximization of market value. According to the first criterion, a physical asset is worth acquiring if it will increase the net profit of the owners of the firm. But net profit will increase only if the expected rate of return, or yield, of the asset exceeds the rate of interest. According to the second criterion, an asset is worth acquiring if it increases the value of the owners' equity, i.e., if it adds more to the market value of the firm than the costs of acquisition. But what the asset adds is given by capitalizing the stream it generates at the market rate of interest, and this capitalized value will exceed its cost if and only if the yield of the asset exceeds the rate of interest.

Under either formulation, the cost of capital is equal to the rate of interest on bonds, regardless of whether the funds are acquired through debt instruments or through new issues of common stock. It must be acknowledged that some attempt is usually made

in this type of analysis to allow for the existence of uncertainty. This attempt typically takes the form of superimposing on the results of the certainty analysis the notion of a "risk discount" to be subtracted from the expected yield (or a "risk premium" to be added to the market rate of interest). Investment decisions are then supposed to be based on a comparison of this "risk adjusted" or "certainty equivalent" yield with the market rate of interest (Durand, 1952)

### **2.2.2 Modern Development Theory**

Modern development theory studies the evolution of growth, relative income inequalities, and their persistence in unified models. In many of these models, financial market imperfections play a central role, influencing key decisions regarding human and physical capital accumulation and occupational choices. For example, in theories stressing capital accumulation, financial market imperfections determine the extent to which the poor can borrow to invest in schooling or physical capital. In theories stressing entrepreneurship, financial market imperfections determine the extent to which talented but poor individuals can raise external funds to initiate projects. Thus, the evolution of financial development, growth, and intergenerational income dynamics are closely intertwined. Finance influences not only the efficiency of resource allocation throughout the economy but also the comparative economic opportunities of individuals from relatively rich or poor households.

Financial market imperfections are often at the core of this line of thought because inequalities persist because of these imperfections. For example, in the model of Galor and Zeira (1993), it is because of financial market frictions that poor people cannot invest in their education despite their high marginal productivity of investment. In Banerjee and Newman's model (1993), individuals' occupational choices are limited by their initial endowments. The structure of occupational choices—whether people can become entrepreneurs or have to remain wage earners—in turn determines how much they can save and what risks they can bear, with long-run implications for growth and income distribution. Hence, these models show that lack of access to finance can be the critical mechanism for generating persistent income inequality or poverty traps, as well as lower growth.

### **2.2.3 Theory of Capital Structure**

The theory posits that when the Weighted Average Cost of Capital (WACC) is minimized, and the market value of assets is maximized, an optimal structure of capital exists. The Traditional Theory of Capital Structure says that a firm's value increases to a certain level of debt capital, after which it tends to remain constant and eventually begins to decrease. The Traditional Theory of Capital structure tells us that wealth is not just created through investments in assets that yield positive return on investment; purchasing those assets with an optimal blend of equity and debt is just as important.

Modigliani–Miller theorem is a theorem on capital structure, arguably forming the basis for modern thinking on capital structure. The basic theorem states that, under a certain market price process (the classical random walk), in the absence of taxes, bankruptcy costs, agency costs, and asymmetric information, and in an efficient market, the value of a firm is unaffected by how that firm is financed. It does not matter if the firm's capital is raised by issuing stock or selling debt. It does not matter what the firm's dividend policy is. Therefore, the Modigliani–Miller theorem is also often called the capital structure irrelevance principle ( Modiglian, 1985)

### **2.2.4 Standard Economic Theory**

Standard economic theory suggests that any deviation from perfect competition results in less access by borrowers to loans at a higher cost. Using an endogenous growth model, Pagano (1993) interprets the absorption of resources, resulting in a savings–investment ratio of less than one, and thus the spread between lending and deposit rates as reflecting “the X-inefficiency of the intermediaries and their market power.

Informational asymmetries between lender and borrower, resulting in adverse selection, moral hazard, and hold-up problems, however, may change the relation between market structure and access to loans from a negative to a positive or nonlinear one, as shown in several theoretical contributions. Petersen and Rajan (1995) show that banks with market power have more incentives to establish long

term relationships with young borrowers, since they can share in future surpluses. Similarly, Marquez (2002) shows that borrower-specific information becomes more dispersed in more competitive banking markets, resulting in less efficient borrower screening and most likely in higher interest rates. Dinc, (2000), on the other hand, shows that there is an inverted U-shaped relation between the amount of relationship lending and the number of banks, with an intermediate number of banks able to sustain the maximum amount of relationship lending, similarly, Cetorelli and Peretto (2000) show that there are offsetting effects of bank concentration.

While bank concentration reduces the total amount of loanable funds, it increases the incentives to screen borrowers and thus the efficiency of lending. The optimal banking market structure is thus an oligopoly rather than a monopoly or perfect competition. However, all these models assume a high degree of enforcement of contracts and of the capacity of banks to screen potential borrowers and do not model differences in the legal and institutional environments in which banks operate. These assumptions are theoretically important and empirically relevant. The positive relation between market power and lending to small and young borrowers might only hold if lenders are able to recover their collateral in case of failure and if they are able to screen the

### **2.2.5 Theory of Demand**

The modern Theory of consumer demand as formulated by Edgeworth, Antonelli and Pareto, and worked out by Slutsky, Hicks and Allen, and Hicks is based on the assumption that the individual consumer allocates expenditures on commodities as if he had a fixed, ordered set of preferences described by an indifference map or by an ordinal utility function which he maximizes subject to restraints imposed by the money income he receives and the prices he must pay. From the point of view of the econometrician, this theory has served well by indicating criteria to govern the construction of aggregate commodity and consumer price indexes by providing certain plausible a priori constraints to be imposed on estimates of the parameters of empirical demand function and by suggesting several hypotheses to be subjected to statistical test. Consumer demand theory, however, not having taken variable preferences explicitly into account until very recently, has not asserted any hypothetical laws governing relations among the shifts in demand functions which a

change in preference orderings should cause. It is desirable that such hypothetical laws be derived, and that econometricians bring them under empirical test. The logical consequences of the assumption of fixed preferences differs markedly from experience in the modern economy, for in the latter it is commonly observed that the consumption behavior of real individuals and households is changed more or less systematically by advertising and other forms of selling effort, and by changes in social and technological factors exogenous with respect to the consumer economy. In econometric demand analysis, the introduction of time as an independent trend variable to "explain" the effects of changes in taste is at best an expedient it would be better to avoid, if possible, since trend parameters are not capable of causal or legal interpretation.

### **2.3 Empirical Review**

In their study on Accessibility of low-income earners to Housing Finance in Nigeria Adedeji and Abiodun (2012) observe that in Nigeria housing provision is fraught with a plethora of problems especially for low-income earners who incidentally constitute the majority of the population. Fundamental to this is the lack of access to housing finance by this segment of the society. In view of its enormous cost, housing is the item of the highest expenditure of every household and it can rarely be purchased directly from one's earnings. Access to housing finance is thus imperative in the acquisition of housing, but this has always eluded low-income earners a great deal. This paper examines housing problems and needs of low-income earners, activities of private developers in housing provision in Nigeria, housing finance system and activities of cooperative societies in housing delivery. Survey research was conducted at The Federal University of Technology, Akure in the year 2009. Three hundred and fifty (350) questionnaires were administered out of which two hundred and ninety-seven (297) were retrieved for analysis. Results obtained show that the level of accessibility of low-income earners to housing finance in Nigeria is still very low despite the intermediation of private developers and cooperative societies in sourcing housing finance.

In the study on urban residential housing and low-income earners in Makurdi Metropolis, Benue State, Nigeria, Onu and Onu, (2011) adopts survey research design to determine the challenges confronting earners in urban residential housing areas. The paper utilized both primary and secondary data sources. Data obtained were analyzed using descriptive statistics. The paper found that 57.8% of the respondents earn less than N10,000.00 (US\$62.50) a month which made it difficult for them to afford decent houses. The paper concluded that good urban government is necessary to promote increased access to land, credit and affordable housing that is environmentally friendly and conducive for the earners. The paper recommended that there should be a carefully planned land for housing in Makurdi which should be allocated to the target group of earners

Bakhtyar, Sopian and Abdulateef (2010) in their study on affordable quality housing for urban earners in Malaysia sought to introduce a financial model that enables the low-income people to live near their work stations. The main case study for this research was the Gasing Indah project, which included a mixed development on the border between Kuala Lumpur and Petaling Jaya in Malaysia. This case study makes a feasibility study on different regulations on both sides of the above border for a unique project. It means that, this project is a unique one with two different governmental restrictions and prices. The study finding discusses the implementation of Smart Growth principles, which can help urban managements to improve the urban quality for the residents. By making new extra value with the introduction of new aspects for density and estimating the saving of Smart Growth can provide the opportunity to shift from low-income housing to affordable quality housing.

Mashoko (2012) in the study on the role of low-income urban housing delivery schemes in curbing the housing problem sought to evaluate the role of the urban housing delivery schemes in curbing the housing problem in the city of Mutare, Zimbabwe. Through document interrogation, interviews, questionnaires and field observation it was established that although various housing delivery schemes have been implemented by local authorities, housing co-operatives, employers and donors, they have yielded little in alleviating the housing problem. Worse still, there is much deterioration of the existing ones mainly inhabited by the population. This study recommends the adoption of vertical housing development to overcome the major



setback of land, injection of more finance and to deal with the income problem to surmount non-affordability of housing by majority of the population.

The study by Karen, Alberto and Juan-Pablo (2010) on the impact of access to financial services on household investment in Kenya and Tanzania surveyed selected banks and households in Kenya and Tanzania to ascertain how access to financial services affects household investments. The study established that access to financial services enables households to invest in activities that are likely to contribute to higher future income purchase of necessities like housing and that a range of barriers prevent people accessing formal financial services,

Victoria Ijeoma Ononugbo, Akpan Ibanga Akpan, G. Solomon Osho, illiam Allan Kritsonis (2010) undertook a study on the housing needs for the low-income people of Enugu Metropolitan Areas Of Nigeria: The main purpose of this dissertation was to determine whether income, education, gender, family size, and constraints like high cost of building materials, high house rents, etc. are the factors that contribute to the Enugu residents decision to dwell in slums of Agangwu, Ngele-Effor, Ugwu-Aaron, and Ugwu-Bottle where they generate pollutions that devastate environment and human health, warranting the need for the low-income housing for these groups to avoid environmental devastation. Therefore, a survey design was applied using constructed questionnaires, oral interviews with policymakers, professionals, bankers, and contractors. Hypothesis was used to determine the source of the significance. The findings of the study revealed that low-income groups could not afford rent for a house in the city due to their low monthly salary (contributed by their educational background), large family size and strict government rules on land/housing, which pushed them to dwell in slums where there were no infrastructural services, no running clean water, no garbage pickups, and sewage services. Therefore, low-income housing was needed in Enugu Metropolitan areas of Nigeria to avoid environmental and health devastations caused by these groups in their slum dwellings, and future research was needed in these areas.

Finmark Trust (2010) study on the housing finance sector in Angola was designed to document the actual state of Housing Finance in Angola. On the supply side it researches what is available from, commercial banks and other formal financial

institutions. On the demand side, it explored some key features of housing finance need across the country. While the project was initially conceived of by FinMark to be largely a desk study, the lack of published data on Angolan housing finance meant that Development Workshop had to undertake some original research. The researchers built on what data was available, validated against first-hand information from key informants.

The study established that Banks have traditionally displayed conservative lending practices, and have often opted for investments in government borrowing instruments. The study made recommendations for some areas of intervention that could make housing financial markets work better for the poor in Angola. They include: The government should institute legislative frameworks to appropriately regulate and encourage all microfinance activity. There is a need to incentivise construction of housing for lower income groups, through government fiscal incentives targeting building materials and so on.

According to Rodríguez and Santiago (2009) in their study on the relationship between mortgage markets and housing prices, note that in the late 1990s several countries experienced a sharp rise in housing prices. These episodes have been recently followed by a markedly drop in housing prices in parallel with the world's economic and financial turmoil. The dramatic increase in lending during this period has been broadly blamed for these market dynamics. However, the empirical relationship between mortgage credit and housing prices remains largely unexplained. This paper analyses the relationship between housing prices and mortgage credit in a Spain, a county where housing prices and mortgage credit have experienced a very high growth in recent years prior to the financial crisis. they employed a quarterly database from 1987Q1 to 2008Q3. Using cointegration analysis and Vector-Error-Correction (VEC) models, we find that housing prices affect mortgage credit rather than conversely. Additionally, mortgage market disequilibria in the longrun are partially corrected via reductions in housing prices and housing price/rent indicators. The results also suggest that there were a regime shift in mortgage lending in Spain in 2001 –where mortgage credit securitization substantially increased- that exacerbated the short-term impact of housing prices on mortgage lending

Yates, Milligan, Berry, Burke, Gabriel, Phibbs, Pinnegar and Randolph (2007) undertook a study on housing affordability. The central aim of the study was to undertake evidence-based research on housing affordability in order to inform the development of policies that can effectively address housing affordability problems for lower-income Australians. The results from the study are based on an integrated approach incorporating. Quantitative analyses undertaken at a national level that identify the potential size of the housing affordability problem in Australia and households most affected, supplementary, focused quantitative and qualitative surveys to identify those experiencing problems and to learn about their experiences. At all stages during the research there was extensive consultation with a wide range of stakeholders. This involved by-invitation workshops, meetings with the policy research working group (PRWG). This report provides an overview of the major findings, that housing Affordability for lower income Australians. It identifies the major risks and challenges in relation to Australia's housing problem, as well as drawing out policy implications.

The major conclusions of the three-year research program are as follows: Housing affordability is a large and widespread problem, Housing affordability is a structural problem, causes of affordability problems are complex and diverse. Major driving factors can be found both within the housing system and beyond it, housing affordability problems are predicted to increase in the first half of the 21st century as a result of anticipated demographic and housing market changes, Affordability problems have specific spatial and cyclical dimensions, households most at risk of facing the multiple problems that arise from a lack of affordable housing are lower-income households in the private rental market. Housing markets have failed to provide an adequate supply of affordable housing for lower-income households, Individual households experience and address housing affordability problems in different ways, while housing provides shelter; it also influences a raft of non-shelter outcomes for individual households, such as workforce participation, access to jobs and services, family stability and educational attainment. Declining affordability has implications for economic performance and labour market efficiency, social cohesion and polarisation of cities, environmental considerations and the creation and distribution of wealth through home ownership.

Davenport (2003) undertook a study on the effect of supply and demand factors on the affordability of rental housing in United Kingdom. The focus of the study was the since low-income households face the greatest barriers to acquiring affordable housing. The paper used an empirical analysis of the supply and demand factors affecting affordability as measured by the percentage of cost-burdened households in a metropolitan statistical area (MSA). The cross-sectional OLS regression uses data from MSAs nationwide to examine the effects of household median income, fair market rents, population change, rental vacancy rates, percentage change in rental units, percentage of low- and high-income households, and percentage of low-rent or subsidized units. The results indicated the significance of income levels and demonstrate the need for increased effectiveness of housing policy to make housing more affordable to low-income households.

Shahid and Ike (2003) in a modified general equilibrium analysis of housing prices and interest rates models the rivalry between risk averse homeowners and mortgage lenders in a two-period intertemporal framework to show the following results: Interest rates, loan values and housing prices are non-linearly interrelated and endogenously determined in contrast to the capital structure theorems of Modigliani and Miller (1958) and Miller (1977); The relationship between interest rates and housing prices is not necessarily negative and depends on the source of the shock to the supply side of the economic system; Contrary to the static capital asset pricing model, an expected increase [decrease] in payoffs [risk] of a home can reduce its price if the subsequent increase in interest rates offsets any prospective increase in its demand; Taxes accentuate the economic impact of inflationary shocks leading to a reduction in social welfare. However, the elasticity of demand for a home (and its price) with respect to inflation depends on its hedging capability and on the risk profile of agents in the economy.

Mwangi (1997) in his qualitative study on the nature of rental housing in Kenya avers that both the urban population and the number of towns in Kenya have increased enormously over the last 35 years. However, housing production has remained far below the targets in the five-year national development plans and even further below actual demand for housing. Most of the urban population, especially low-income households, cannot afford to buy or build their own homes and, as a result, most of

the housing in towns is rental housing. The rental housing sector is a complex one involving many actors. Tenants' rights are poorly respected, especially in the informal settlements that provide most of the accommodation to low-income renters. Housing and environmental standards in these settlements are extremely low. Through three case studies, this paper explores some of the issues involved and puts forward proposals for a new policy on rental housing.

## **2.4 Summary**

The Kenyan housing finance system has grown rapidly over recent years in both value of loans and number of loans. The mortgage market is the third most developed in Sub-Saharan Africa with mortgage assets equivalent to 2.5 percent of Kenya's GDP. Only Namibia and South Africa rank higher, with Botswana just slightly smaller. Mortgage products are widespread and are offered by virtually all banks. A typical loan would be done at variable rates for around 14 percent for an amount of Ksh 4 million over a period of 15 years. Based on this, 2.4 percent of the total population could afford a mortgage for a basic house. This rises to 11 percent of the urban population. There is no viable market in rural areas given the low levels of income together with the high costs of developing a distribution network. The potential size of the mortgage market is currently around Ksh 800 billion or \$9.9 billion around 13 times the current level.

The housing finance companies have traditionally invested in the development of housing for high and middle-income buyers but, under pressure from falling interest rates, recognize the need to move down market and develop new lending products with greater reach. The general improvement in the financial sector in Kenya has had a positive impact on housing finance but the vast majority of Kenyans still cannot meet the terms of borrowing. In the 1980s, interest rates on mortgages were over 30%, making it almost impossible for individual borrowers to finance their housing through banks. The demand for urban housing in Kenya is severely constrained by low incomes relative to housing costs, and the limited financing options available to most households. In Nairobi, with a population of around 3 million people, nearly 60% of households live in slum areas. A recent survey of these settlements showed that 73% of households live below the poverty line.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This section presents the different methods that was used to collect, analyze, present and discuss the findings of the study by the researcher. This includes details on the research strategy, the different categories of respondents and how the data was collected during fieldwork. Also the ways through which the different data sets was analysed and presented.

#### **3.2 Research Design**

The study used descriptive approach in collecting data from the respondents. Saunders, Lewis and Thornhill (2000), argues that descriptive research portrays an accurate profile of persons, events, or account of the characteristics, for example behaviour, opinions, abilities, beliefs, and knowledge of a particular individual, situation or group. The descriptive method was preferred because it ensured complete description of the situation, making sure that there was minimum bias in the collection of data (Cooper and Schindler, 2003).

#### **3.3 Population**

Target population refers to the entire group of individuals or objects from which the study seeks to generalize its findings (Cooper and Schindler, 2008). The target population comprised of twenty three (23) commercial bank that offer mortgage facilities and one mortgage bank (Housing Finance Corporation Kenya) (see appendix D) .The target population consisted of a credit manager and their assistants for each bank, all totalling to forty eight (48) this was because they do handle housing application loans and process customer housing loan requests.

#### **3.4 Sample and Sampling Technique**

According to Bartlett, Kotrlik and Higgins (2001) the size of the sample depends upon the precision the researcher desires in estimating the population parameter at a particular confidence level hence there is no single rule that can be used to determine sample size. According to Troendle and Kai (2003) size of a sample should be determined by adequacy and resource consideration. This means that the sample

should be large enough to enable reasonable estimates of variables to be obtained, capture variability of responses and facilitate comparative analysis.

The study used census sampling procedure which involved the use of the entire population of forty eight (48) as a sample, consisting of bank managers and their deputies.

### **3.5 Research Instruments**

Primary data was collected from commercial banks that offer mortgages; the primary data for this study was be collected using the questionnaires.

The study used questionnaires because they are flexible and facilitates the capture of in-depth knowledge of the respondents, promotes respondent cooperation and allows the interviewer to probe further for clarification of issues. The questionnaire was designed to ascertain relationship between cost of finance and demand for purchase of housing units. The responses was then measured using a five-point Likert-type rating scale, where strongly Agree (SA) = 5; Agree (A) = 4; Neutral (N)=3; Disagree (SD) = 2; Strongly Disagree (D) = 1.

### **3.6 Data Collection**

The questionnaires was self-administered to respondents, containing mainly closed and open ended questions to allow for intensity and richness of individual perceptions in respondent responses. Each respondent received the same set of questions in exactly the same way.

### **3.7 Reliability and Validity**

The reliability and validity of research instruments determines the quality of data collected and hence that of the whole research (Bartlett, Kotrlik & Higgins, 2001). Validity refers to the accuracy or truthfulness of a measurement in terms of the likelihood that research questions will be misunderstood or misinterpreted and on whether the research instruments provides adequate coverage of research objectives. Reliability is synonymous with repeatability or stability and a measurement that yields consistent results over time is said to be reliable (Kothari, 2008).

The study questionnaires were developed by the researcher based on the study objectives. The questionnaire designed was then critiqued by peers and the supervisor who offered suggestions; secondly, a random sample of nine (9) respondents who were not included in the final sample was drawn from the target population to fill the pilot version of the questionnaire to validate the questionnaire. The data from the pre-test was then analysed using cronbach alpha statistics with a set lower limit of cronbach 0.7.

### **3.8 Data Analysis and Presentation**

The variables of the study included: cost of finance which was measured by the weighted average cost of finance which is the average interest rate and closing cost a borrower must pay to finance purchase of a house. The variable on demand for housing is described as willingness of households to pay for housing. It was measured by the price of houses and availability of financing.

Quantitative Data was analyzed with the aid of SPSS version 21. The regression model was used to reflect the degree of linear relationship between two variables and determine the strength of the linear relationship between the variables. The multiple linear regressions helped in explaining the relationships between independent (predictor) variables and the dependent (criterion) variable. It aided in modelling the relationship between the predictor variables and the criterion variable by fitting a linear equation:

$$Y = \alpha + b_1X_1 + b_2X_2 + \varepsilon$$

Y = demand for purchase of housing units

$\alpha$  = constant

$b_{1-2}$  = Regression Coefficient

$X_1$  = Interest Rates

$X_2$  = Deposit/ Collateral



$\varepsilon$  = error term

Y is the dependent variable which represents the demand for housing units in Nairobi County which is influenced by Interest rates and collateral requirements.

The purpose of the presentation of data was to highlight the results and to make data or results more illustrative by presenting in the form of figures and tables so that it is easy to observe general trends. Thus presentation of data will be in form of tables, pie-charts and bar graphs only where it provides successful interpretation of the findings. Descriptive data will be provided in form of explanatory notes.

## CHAPTER 4

### 4.0 DATA ANALYSIS & PRESENTATION OF FINDINGS

#### 4.1 Introduction

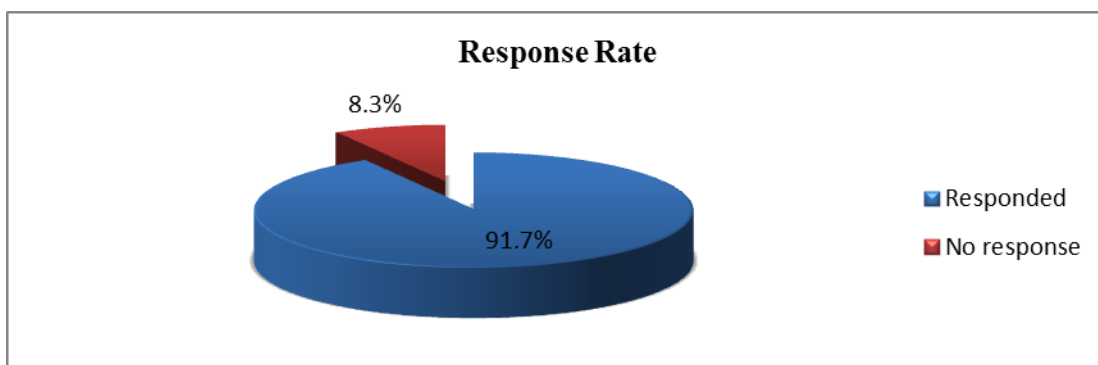
This chapter presents the analysis of study findings of the relationship between cost of housing finance and demand for purchase of housing units in Nairobi County based on the following research questions: how does, Interest rates, and collateral influence demand for purchase of housing units in Nairobi County? This chapter analyses the variables involved in the study and estimates of the model presented in the previous chapter

#### 4.2 Data Presentation

##### 4.2.1 Response Rate

**Table 4.1 Response rate**

Response	Frequency	Percentage
Responded	44	91.7
Did not respond	4	8.3
Total	48	100



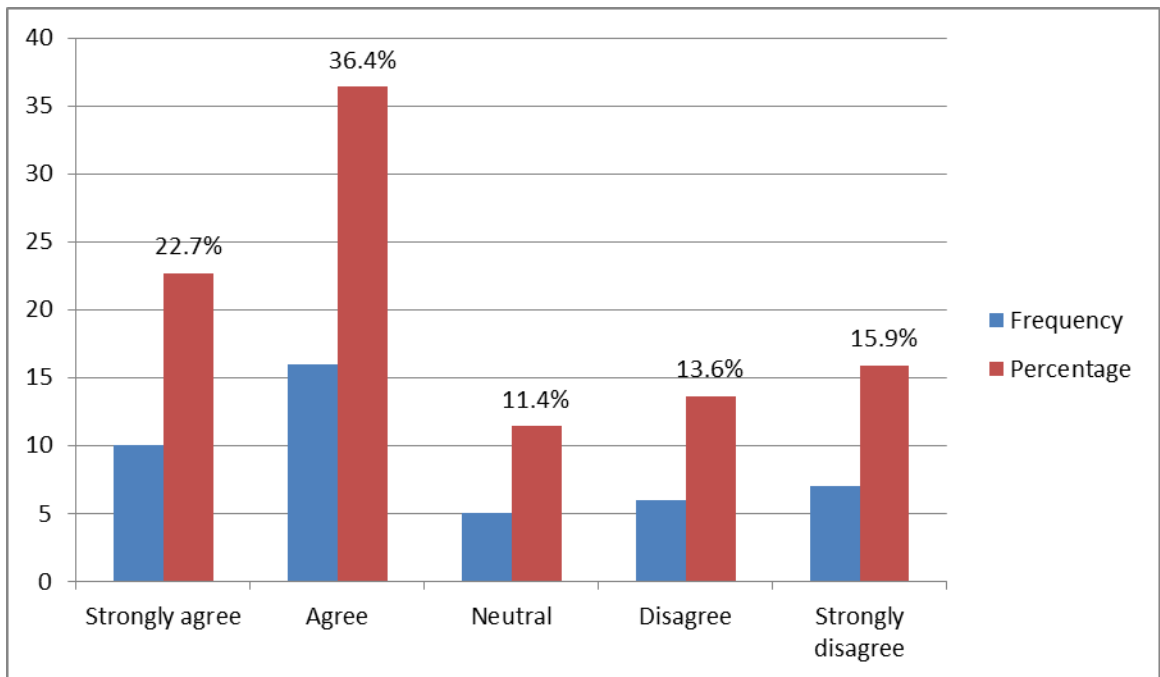
**Fig 4.1 Response rate**

The study above shows the total number of the respondents who responded and those who did not respond. The total questionnaires that were distributed to the field were 48 and out of these questionnaires, 44 questionnaires were returned fully answered which represent 91.7 % of the total questionnaires that were administered to the field, while 4 questionnaires which represent 8.3 % were not returned. From Table 4.1 and Fig. 4.1 above it can be concluded that the response rate was good.

#### **4.2.2. Demand for Purchase of Housing Units**

**Table 4.2: Demand for housing is determined by the ability to pay**

<b>Response</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Strongly agree	10	22.7	22.7
Agree	16	36.4	59.1
Neutral	5	11.4	70.5
Disagree	6	13.6	84.1
Strongly disagree	7	15.9	100.0
<b>Total</b>	<b>44</b>	<b>100.0</b>	

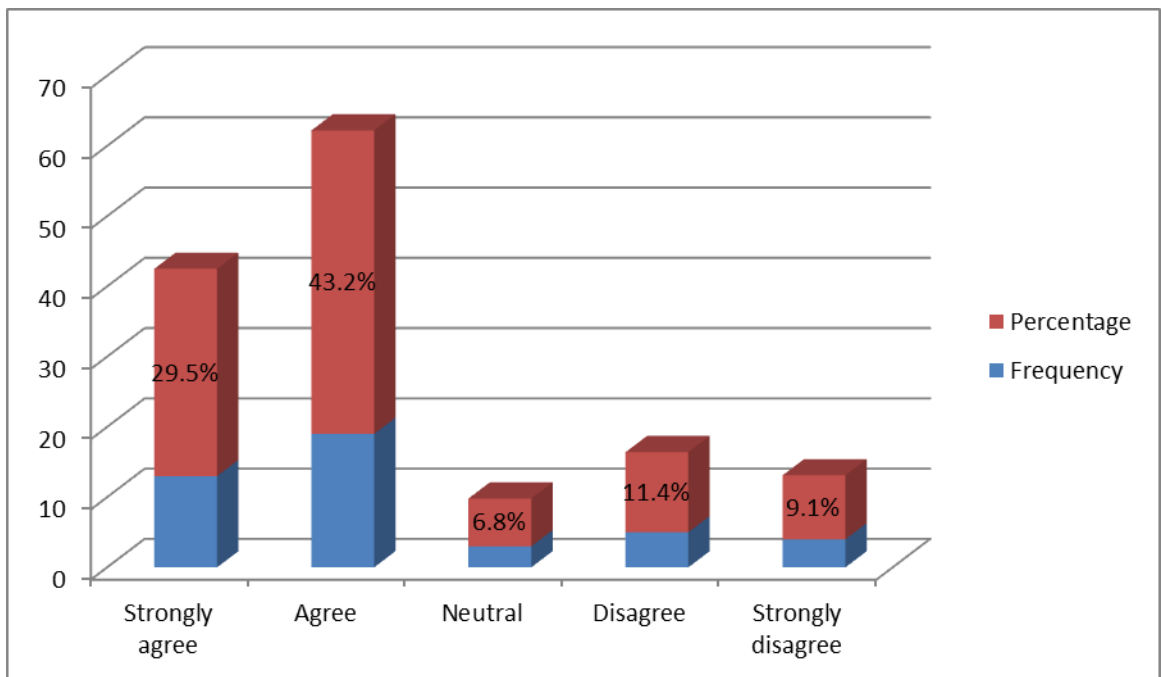


**Figure 4.2: Demand for housing is determined by the ability to pay**

The study above shows the views of the respondents on whether demand for housing is determined by the ability to pay. Based on the study 22.7% of the total respondents strongly agreed that resistance involves refusal to implement a change or reversal of change, 36.4% of the total respondents agreed demand for housing is determined by the ability to pay, while 11.4% of the respondents were neutral, 13.6% and 15.9% disagreed and strongly disagreed respectively that demand for housing is determined by the ability to pay. From the study it can be deduced that demand for housing is determined by the ability to pay.

**Table 4.3: Demand for purchase of housing units is influence by the prevailing housing prices**

Response	Frequency	Percent	Cumulative Percent
Strongly agree	13	29.5	29.5
Agree	19	43.2	72.7
Neutral	3	6.8	79.5
Disagree	5	11.4	90.9
Strongly disagree	4	9.1	100.0
<b>Total</b>	<b>44</b>	<b>100.0</b>	

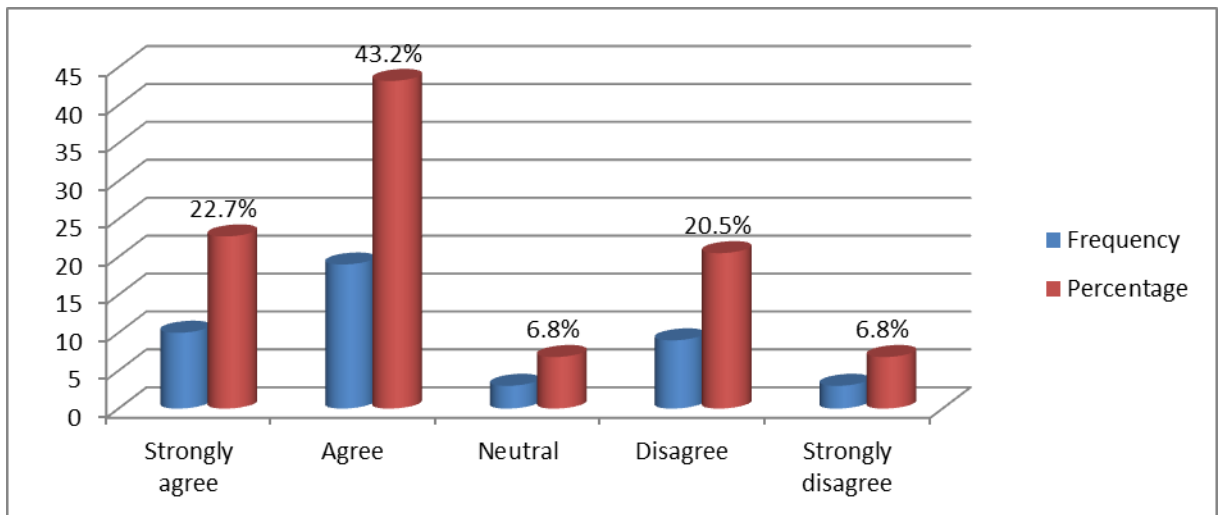


**Fig 4.3: Demand for purchase of housing units is influence by the prevailing housing prices**

According to Table 4.3 and Figure 4.3 above 29.5% of the total respondents strongly agreed that the demand for purchase of housing units is influence by the prevailing housing prices; 43.2% of the total respondents agree that the demand for purchase of housing units is influence by the prevailing housing prices; 6.8% indicated that they were neutral, while 11.4% disagreed and 9.1% strongly disagreed respectively that the demand for purchase of housing units is influence by the prevailing housing prices. From the study it can be deduced that the demand for purchase of housing units is influence by the prevailing housing prices.

**Table 4.4 Households housing preferences affects the demand for purchase of housing units**

<b>Response</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Strongly agree	10	22.7	22.7
Agree	19	43.2	65.9
Neutral	3	6.8	72.7
Disagree	9	20.5	93.2
Strongly disagree	3	6.8	100.0
<b>Total</b>	<b>44</b>	<b>100.0</b>	

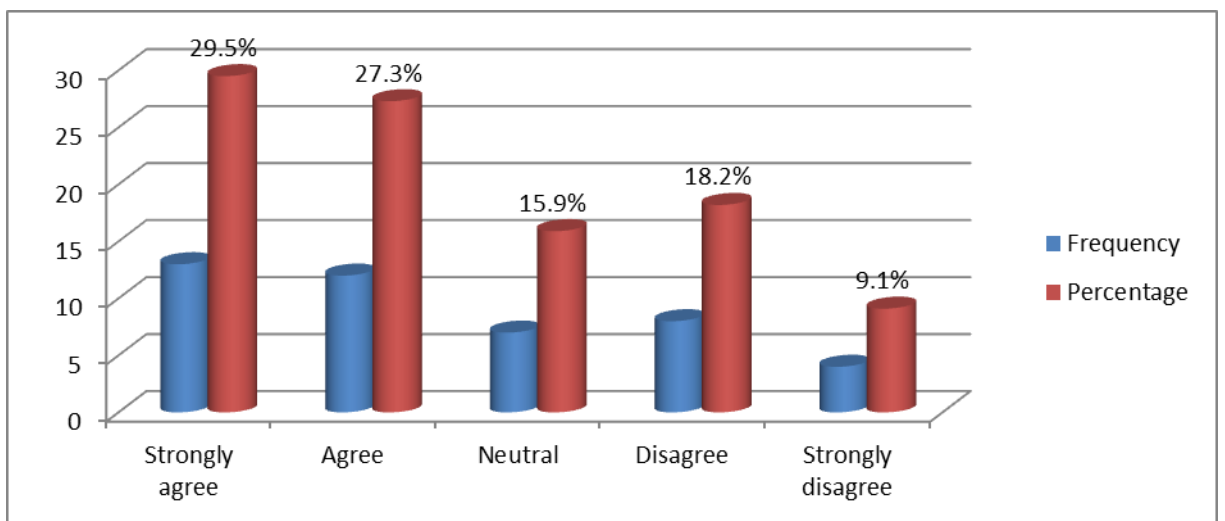


**Fig 4.4: Households housing preferences affects the demand for purchase of housing units**

From Table 4.4 and Figure 4.4 above, 22.7% of the total respondents strongly agreed that households housing preferences affects the demand for purchase of housing units; 43.2% of the total respondents agree that households housing preferences affects the demand for purchase of housing units; 6.8% of the respondents were neutral, while 20.5% disagreed and 6.8% strongly disagreed that households housing preferences affects the demand for purchase of housing units respectively. From the study it can be deduced that households housing preferences affects the demand for purchase of housing units.

**Table 4.5: Household Income Determines the Demand for Housing Units for Purchase**

Response	Frequency	Percent	Cumulative Percent
Strongly agree	13	29.5	29.5
Agree	12	27.3	56.8
Neutral	7	15.9	72.7
Disagree	8	18.2	90.9
Strongly disagree	4	9.1	100.0
<b>Total</b>	<b>44</b>	<b>100.0</b>	



**Fig 4.5: Household Income Determines the Demand for Housing Units for Purchase**

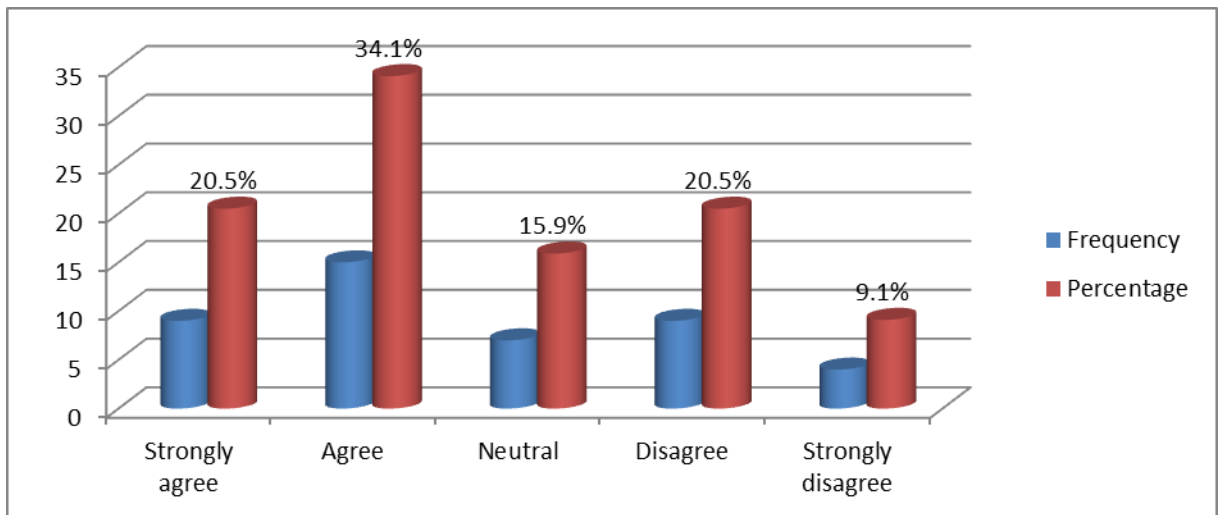
According to table 4.5 and figure 4.5 above; 29.5% of the total respondents agreed that household income determines the demand for housing units for purchase, 27.3%



of the total respondents strongly agree that household income determines the demand for housing units for purchase; 15.9% indicated that they were neutral while 18.2% and 9.1% disagreed and strongly disagreed respectively that household income determines the demand for housing units for purchase. From the study it can be deduced that household income determines the demand for housing units for purchase.

**Table 4.6: Financing arrangements with a financial institution affects demand for purchase of housing units**

Response	Frequency	Percent	Cumulative Percent
Strongly agree	9	20.5	20.5
Agree	15	34.1	54.5
Neutral	7	15.9	70.5
Disagree	9	20.5	90.9
Strongly disagree	4	9.1	100.0
Total	44	100.0	



**Fig 4.6: Financing arrangements with a financial institution affects demand for purchase of housing units**

According to table 4.6 and figure 4.6 above; 20.5% of the total respondents agreed that financing arrangements with a financial institution affects demand for purchase of housing units, 34.1% of the total respondents strongly agree that financing arrangements with a financial institution affects demand for purchase of housing units; 15.9% indicated that they were neutral while 20.5% and 9.1% disagreed and strongly disagreed respectively that financing arrangements with a financial institution affects demand for purchase of housing units. From the study it can be deduced financing arrangements with a financial institution affects demand for purchase of housing units.

#### **4.2.3 Relationship between measures of demand and Demand for Purchase of Housing Units**

**Table 4.7 Correlation Model**

Model	R	R Square	df	P-Value	Sig
1	.637 <sup>a</sup>	.406	5	.271	.001

## Dependent Variable: Demand for Purchase of Housing Units

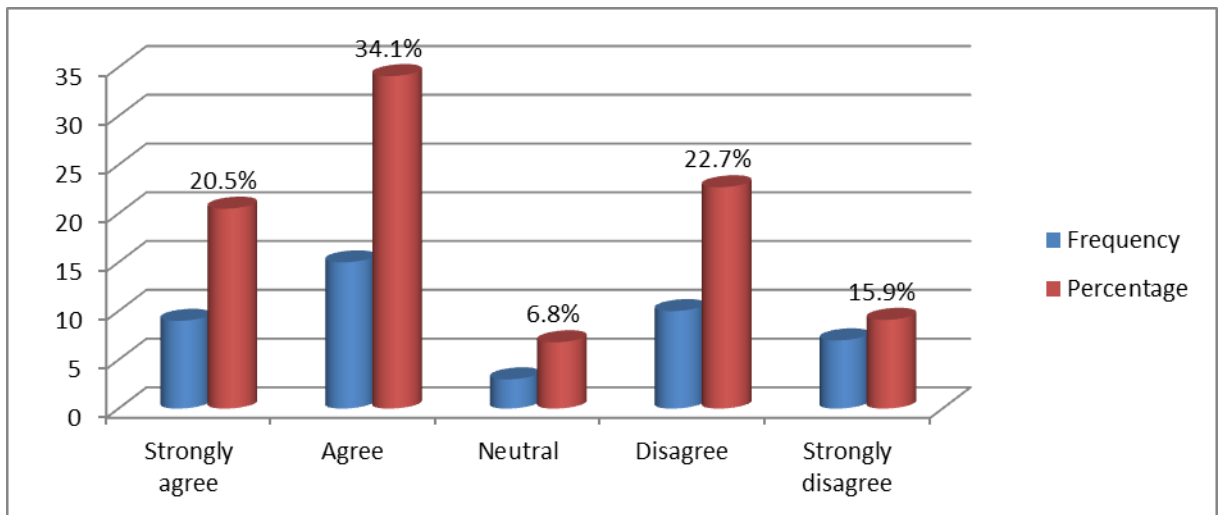
Table 4.7 above shows the correlations between ability to pay, prevailing housing prices, housing preferences, household income, access to financing and access to financing arrangements and demand for purchase of housing units. Holding the correlation coefficient (r) value at between plus and minus one (-1.00 and +1.0), the study used the significance level (alpha = .05 or 95%), (df= 5) and two-tailed test.

The results of the study indicated:( $r = .637$ ), ( $r^2 = .406$ ) indicating that 40% of the ability to pay, prevailing housing prices, housing preferences, household income, access to financing and access to financing arrangements firms' is related to demand for purchase of housing units. Since the correlation of determination of .406 is positive it can be concluded that the correlation is statistically significant, hence there is a positive relationship between demand for purchase of housing units and ability to pay, prevailing housing prices, housing preferences, household income, access to financing and access to financing arrangements

### 4.2 .4 Interest Rates, Fees and Commission

**Table 4.7: There are restrictions of accessing finance because of high interest rates**

<b>Response</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Strongly agree	9	20.5	20.5
Agree	15	34.1	54.5
Neutral	3	6.8	61.4
Disagree	10	22.7	84.1
Strongly disagree	7	15.9	100.0
<b>Total</b>	<b>44</b>	<b>100.0</b>	



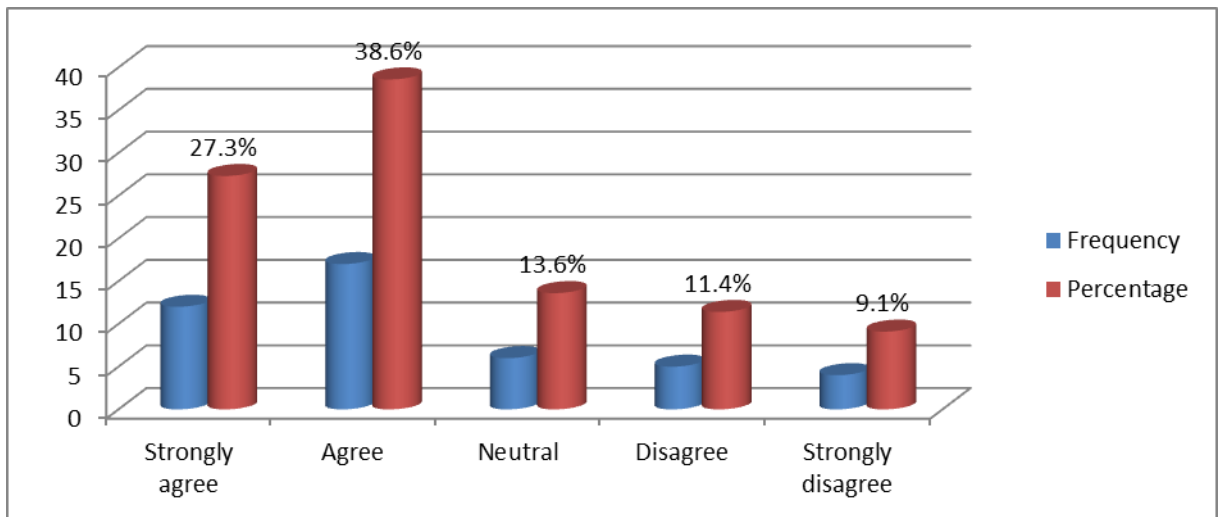
**Fig 4.7: There are restrictions of accessing finance because of high interest rates**

From Table 4.7 and Figure 4.7 above, 20.5% of the total respondents strongly agreed that there are restriction of accessing finance because of high interest rates; 34.1% of the total respondents agree that there are restriction of accessing finance because of high interest rates; 6.8% of the respondents were neutral, while 22.7% disagreed and 15.9% strongly disagreed that there are restriction of accessing finance because of high interest rates respectively. From the study it can be deduced that there are restriction of accessing finance because of high interest rates.

**Table 4.8: Bank levy legal, appraisal and ledger fees on loans making it expensive**

Response	Frequency	Percent	Cumulative Percent
Strongly agree	12	27.3	27.3
Agree	17	38.6	65.9
Neutral	6	13.6	79.5
Disagree	5	11.4	90.9

Strongly disagree	4	9.1	100.0
<b>Total</b>	<b>44</b>	<b>100.0</b>	

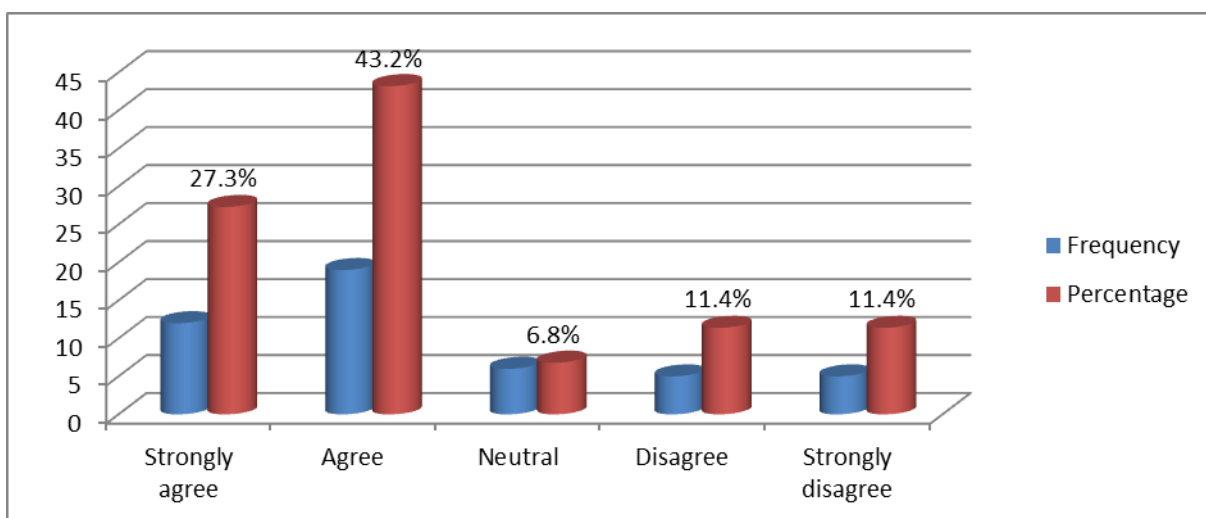


**Fig 4.8: Bank levy legal, appraisal and ledger fees on loans making it expensive**

According to table 4.8 and figure 4.8 above, 27.3% of the total respondents strongly agree that banks levy legal, appraisal and ledger fees on loans making it expensive; 38.6% of the total respondents agree, 13.6% and 11.4% of the total respondents were neutral and disagreed that banks levy legal, appraisal and ledger fees on loans making it expensive, while 9.1% of the total respondents strongly disagreed. From the study it can be deduced that banks levy legal, appraisal and ledger fees on loans making it expensive.

**Table 4.9: The conditions attached to financial products are favorable making them appropriate for most people’s needs**

Response	Frequency	Percent	Cumulative Percent
Strongly agree	12	27.3	27.3
Agree	19	43.2	70.5
Neutral	3	6.8	77.3
Disagree	5	11.4	88.6
Strongly disagree	5	11.4	100.0
<b>Total</b>	<b>44</b>	<b>100.0</b>	

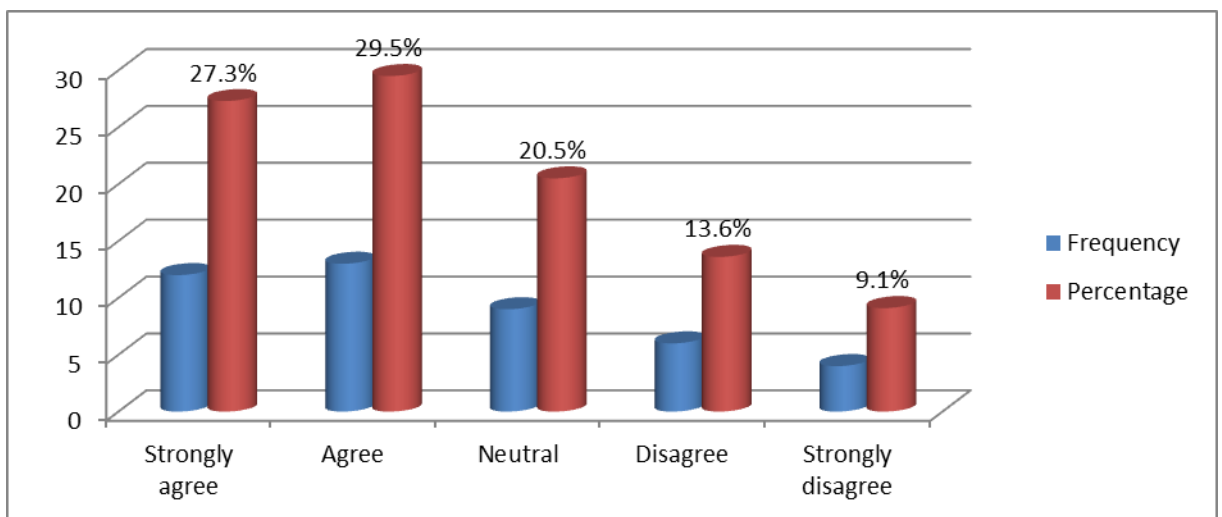


**Fig 4.9: Conditions Attached to Financial Products Are Favorable Making Them Appropriate for Most People’s Needs**, According to table 4.9 and figure 4.9 above, 27.3% of the total respondents strongly agree that the conditions attached to financial products are favorable making them appropriate for most people’s needs; 43.2% of the total respondents agree, 6.8% and 11.4% of the total respondents were neutral and disagreed respectively that the conditions attached to financial products

are favorable making them appropriate for most people’s needs, while 11.4% of the total respondents strongly disagreed. From the study it can be deduced that the conditions attached to financial products are favorable making them appropriate for most people’s needs.

**Table 4.10: Banks load closing cost on loan products making their financial products unaffordable to most customers**

Response	Frequency	Percent	Cumulative Percent
Strongly agree	12	27.3	27.3
Agree	13	29.5	56.8
Neutral	9	20.5	77.3
Disagree	6	13.6	90.9
Strongly disagree	4	9.1	100.0
<b>Total</b>	<b>44</b>	<b>100.0</b>	



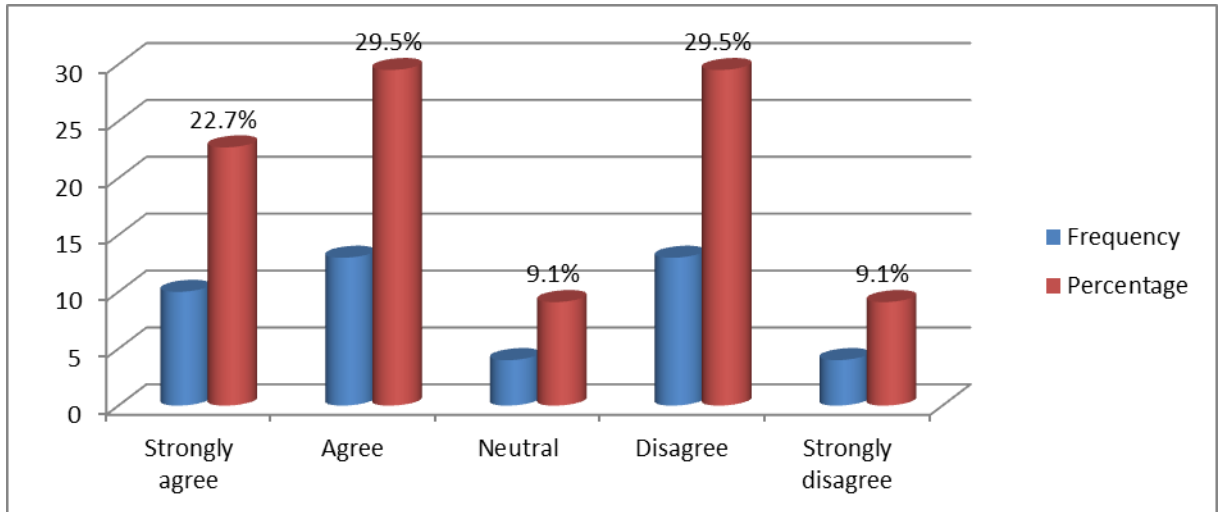
**Fig 4.10: Banks load closing cost on loan products making their financial products unaffordable to most customers**

From Table 4.10 and Figure 4.10 above, 27.3% of the total respondents strongly agreed that banks load closing cost on loan products making their financial products unaffordable to most customers; 29.5% of the total respondents agree that banks load closing cost on loan products making their financial products unaffordable to most customers; while 20.5%, 13.6% and 9.1% of the total respondents were neutral, disagreed and strongly disagreed respectively that banks load closing cost on loan products making their financial products unaffordable to most customers. From the study it can be inferred that banks load closing cost on loan products making their financial products unaffordable to most customers.

**Table 4.11: Banks load closing cost on loan products**

<b>Response</b>	<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>	<b>Cumulative Percent</b>
Strongly agree	10	22.7	22.7	22.7
Agree	13	29.5	29.5	52.3
Neutral	4	9.1	9.1	61.4
Disagree	13	29.5	29.5	90.9
Strongly disagree	4	9.1	9.1	100.0
Total	44	100.0	100.0	



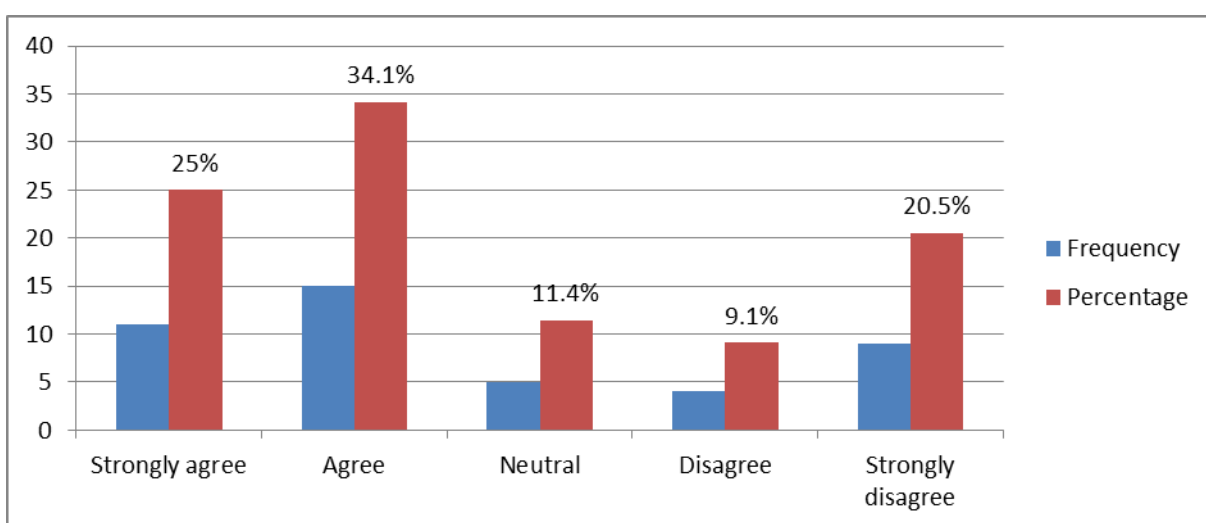


**Fig 4.11: Banks load closing cost on loan products**

According to table 4.11 and figure 4.11 above, 22.7% of the total respondents strongly agreed that banks load closing cost on loan products making their financial products unaffordable to most customers; 29.5% of the total respondents strongly agree that banks load closing cost on loan products making their financial products unaffordable to most customers; 9.1% and 29.5% of the total respondents were neutral and disagreed respectively that banks load closing cost on loan products making their financial products unaffordable to most customers, while 9.1% strongly disagreed. From the study it can be deduced that banks load closing cost on loan products making their financial products unaffordable to most customers.

**Table 4.12: Most banks charge high interest rates on financial services hence impeding the demand for houses**

Response	Frequency	Percent	Cumulative Percent
Strongly agree	11	25.0	25.0
Agree	15	34.1	59.1
Neutral	5	11.4	70.5
Disagree	4	9.1	79.5
Strongly disagree	9	20.5	100.0
<b>Total</b>	<b>44</b>	<b>100.0</b>	



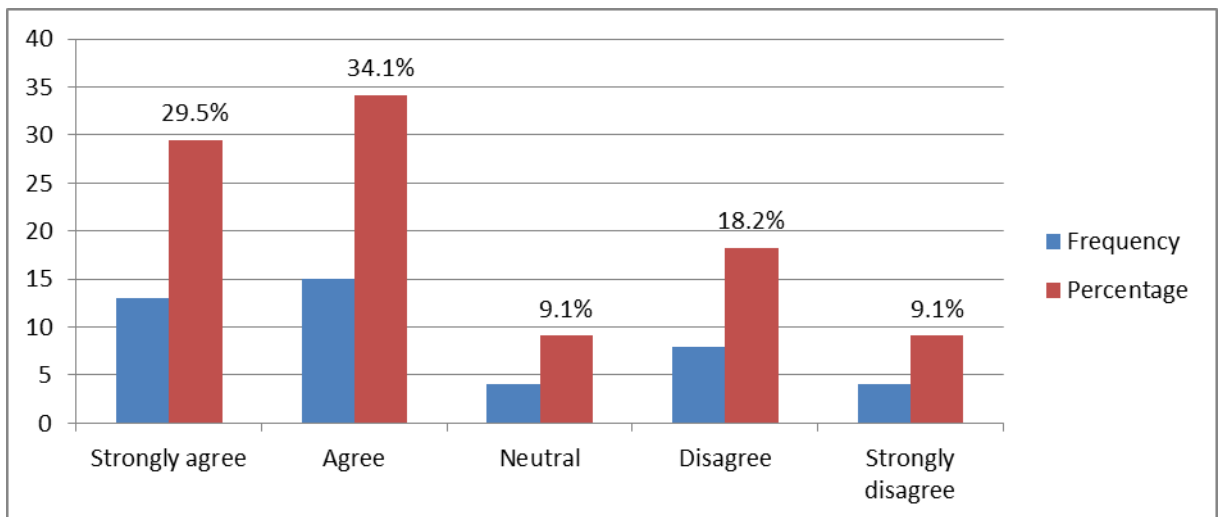
**Fig 4.12: Most banks charge high interest rates on financial services hence impeding the demand for houses**

From table 4.12 and figure 4.12 above 25% of the total respondents agreed that most banks charge high interest rates on financial services hence impeding the demand for houses; 34.5% of the total respondents strongly agreed that most banks charge high interest rates on financial services hence impeding the demand for houses; while, 11.4% and 9.1% of the total respondents were neutral and disagreed that most banks

charge high interest rates on financial services hence impeding the demand for houses, while 20.5% strongly disagreed. From the study it can be deduced that most banks charge high interest rates on financial services hence impeding the demand for houses.

**Table 4.13: High interest rates affect most potential home owners from borrowing to purchase houses**

Response	Frequency	Percent	Cumulative Percent
Strongly agree	13	29.5	29.5
Agree	15	34.1	63.6
Neutral	4	9.1	72.7
Disagree	8	18.2	90.9
Strongly disagree	4	9.1	100.0
<b>Total</b>	<b>44</b>	<b>100.0</b>	

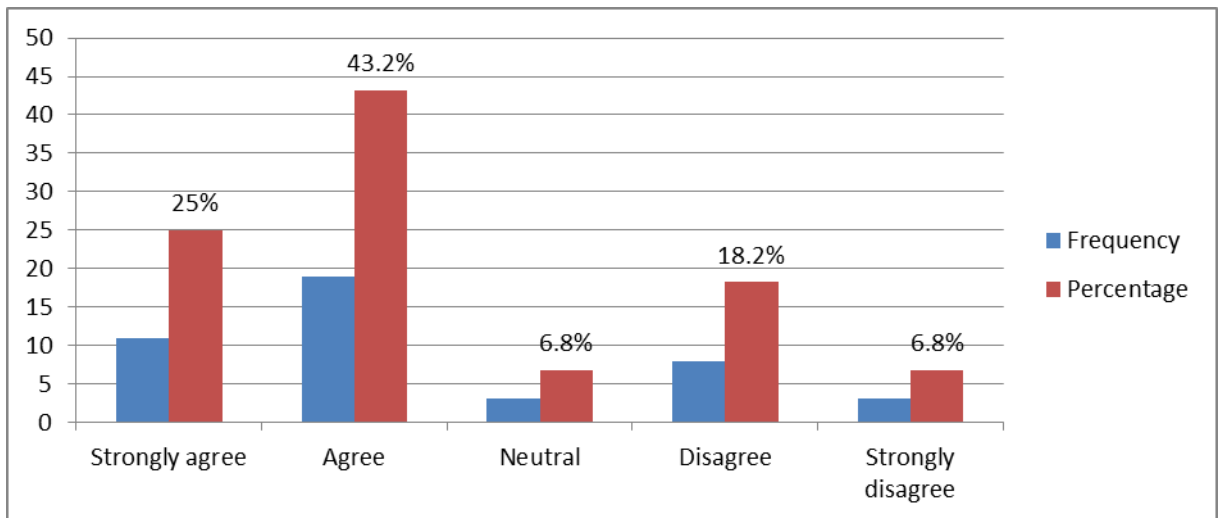


**Fig 4.13: High interest rates affect most potential home owners from borrowing to purchase houses**

According to table 4.13 and figure 4.13 above, 29.5 % of the total respondents strongly agreed that high interest rates affect most potential home owners from borrowing to purchase houses; 34.1 % of the total respondents agreed that high interest rates affect most potential home owners from borrowing to purchase houses; while 9.1% and 18.2% of the total respondents were neutral and 9.1% disagreed respectively that high interest rates affect most potential home owners from borrowing to purchase houses. From the study it can be deduced that high interest rates affect most potential home owners from borrowing to purchase houses.

**Table 4.14: Clients with low income cannot afford housing loans when interest rates are high**

<b>Response</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Strongly agree	11	25.0	25.0
Agree	19	43.2	68.2
Neutral	3	6.8	75.0
Disagree	8	18.2	93.2
Strongly disagree	3	6.8	100.0
<b>Total</b>	<b>44</b>	<b>100.0</b>	

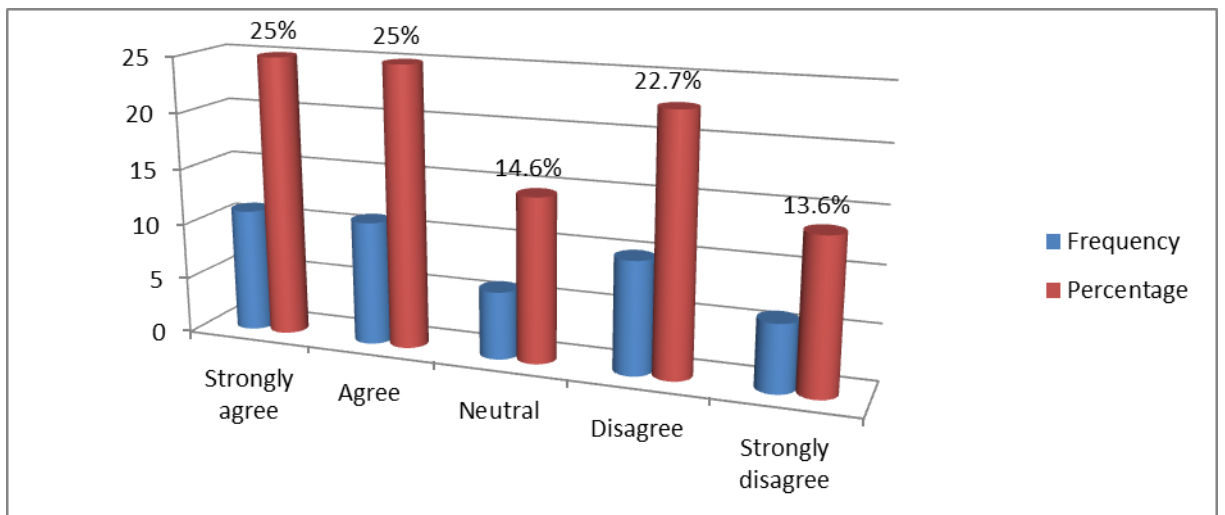


**Fig 4.14: Clients with low income cannot afford housing loans when interest rates are high**

According to table 4.14 and figure 4.14 above, 25% of the total respondents agreed that clients with low income cannot afford housing loans when interest rates are high, 43.2% of the total respondents agree that clients with low income cannot afford housing loans when interest rates are high; 6.8% indicated that they were neutral; while 18.2% and 6.8% disagreed and strongly disagree respectively that clients with low income cannot afford housing loans when interest rates are high. From the study it can be inferred that clients with low income cannot afford housing loans when interest rates are high.

**Table 4.15: High interest rates negatively affect the serving of loans hence resulting in low demand of housing units**

Response	Frequency	Percent	Cumulative Percent
Strongly agree	11	25.0	25.0
Agree	11	25.0	50.0
Neutral	6	13.6	63.6
Disagree	10	22.7	86.4
Strongly disagree	6	13.6	100.0
Total	44	100.0	



**Fig 4.15: High interest rates negatively affect the serving of loans hence resulting in low demand of housing units**

From Table 4.15 and Figure 4.15 above, 25% of the total respondents strongly agreed and agreed that high interest rates negatively affect the serving of loans hence resulting in low demand of housing units; 14.6% of the total respondents were neutral, while 22.7% and 13.6% disagreed and strongly disagreed respectively that high interest rates negatively affect the serving of loans hence resulting in low demand of

housing units. From the study it can be deduced that low employees morale accrue from changes which leave survivors unclear of what is expected of them.

#### 4.2.4.1 Relationship between interest rates, Fees and commission and demand for Purchase of Housing Units

**Table 4.16 Regression model**

R	R Square	df	P-Value	Sig
.499a	.249	5	.264	.009b

a. Dependent Variable: Demand for Purchase of Housing Units

**Table. 4.17 Coefficients<sup>a</sup>**

	B	Std. Error	Beta	t	sig
(Constant)	.728	.492		1.478	.147
Interest rate	.191	.142	.207	2.350	.185
Legal , appraisal and ledger fees	.336	.155	.322	2.170	.036
Closing cost on loan	.124	.160	.122	1.775	.043

a. Dependent Variable: Demand for Purchase of Housing Units

The results of the analysis on table 4.16 and 4.17 shows whether the coefficient on interest rate, legal , appraisal and ledger fees and closing cost on loan is different from 0 so that interest rate, legal , appraisal and ledger fees and closing cost on loan has an effect on demand for purchase of housing units or if alternatively any apparent differences from 0 is just due to random chance.

The study used a significance level (alpha) of .05 (95%), Degrees of freedom (df) of 5 and two-tailed test. The results of the study indicated: correlation coefficient (r), =.499; (r<sup>2</sup>) =.0.249; computed t-value (t=2.09) is smaller than the critical (t-value = 2.57) and greater than the (alpha=0.05 or 1.965); while the p-value = 0.264 is larger than the significance level of 0.05.

The analysis indicate that the results are not due to random change or sampling error and that there is a significant relationship between interest rate, legal , appraisal and ledger fees and closing cost on loan and demand for purchase of housing units .Hence it can be concluded that interest rate, legal , appraisal and ledger fees and closing cost on loan influence demand for purchase of housing units.

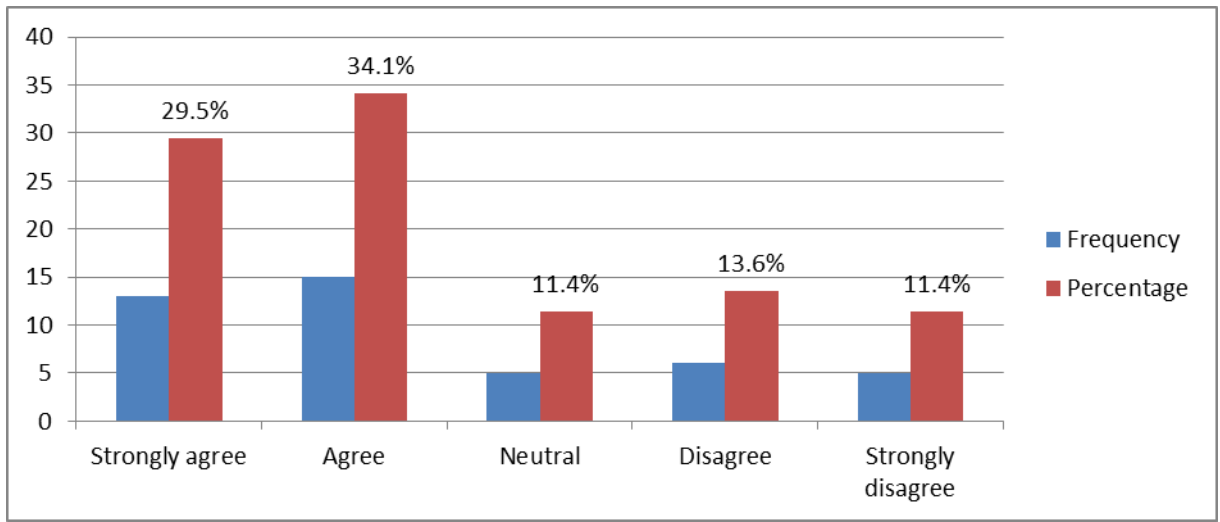
#### 4.2.5 Deposit /Collateral

**Table 4.16: Most financial institutions require initial deposit or in the absence of collateral**

<b>Response</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
Strongly agree	13	29.5	29.5
Agree	15	34.1	63.6
Neutral	5	11.4	75.0



Disagree	6	13.6	88.6
Strongly disagree	5	11.4	100.0
<b>Total</b>	<b>44</b>	<b>100.0</b>	

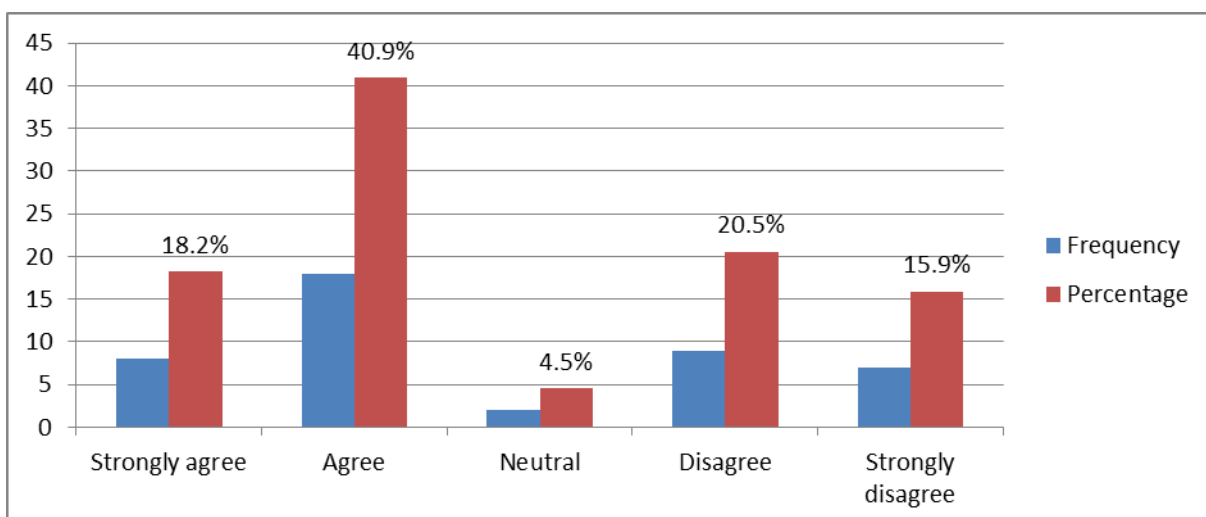


**Fig 4.16: Most financial institutions require initial deposit or in the absence of collateral**

From Table 4.16 and Figure 4.16 above, 25% and 34.1% of the total respondents strongly agreed and agreed respectively that most financial institutions require initial deposit or in the absence of collateral and this affect accessibility to financial services and leads to low demand for purchase of housing units; 11.4% of the total respondents were neutral, while 22.7% and 13.6% disagreed and strongly disagreed respectively that most financial institutions require initial deposit or in the absence of collateral and this affect accessibility to financial services and leads to low demand for purchase of housing units. From the study it can be deduced that most financial institutions require initial deposit or in the absence of collateral and this affect accessibility to financial services and leads to low demand for purchase of housing units.

**Table 4.17: Response on whether most prospective house owners are negatively affected by the requirement for deposit or collateral**

Response	Frequency	Percent	Cumulative Percent
Strongly agree	8	18.2	18.2
Agree	18	40.9	59.1
Neutral	2	4.5	63.6
Disagree	9	20.5	84.1
Strongly disagree	7	15.9	100.0
<b>Total</b>	<b>44</b>	<b>100.0</b>	



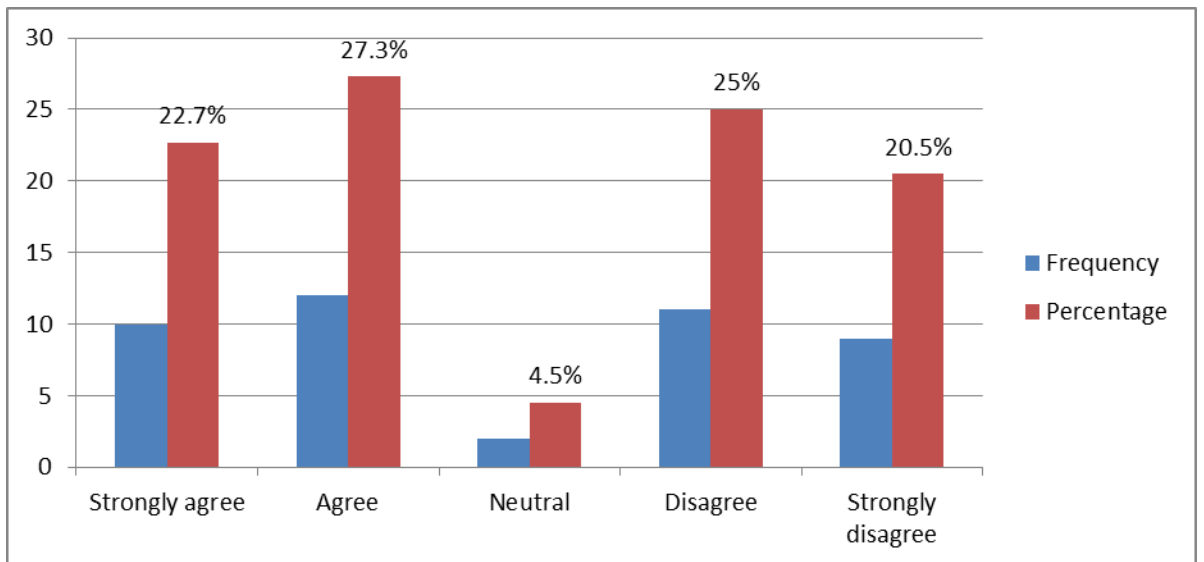
**Fig 4.17: Response on whether most prospective house owners are negatively affected by the requirement for deposit or collateral**

According to table 4.17 and figure 4.17 above, 18.2% of the total respondents strongly agreed that most prospective house owners are negatively affected by the

requirement for deposit or collateral; 40.9% of the total respondents agree that most prospective house owners are negatively affected by the requirement for deposit or collateral; 4.5% and 20.5% of the total respondents were neutral and disagreed respectively that most prospective house owners are negatively affected by the requirement for deposit or collateral while 15.9% of the respondents strongly disagreed that most prospective house owners are negatively affected by the requirement for deposit or collateral. From the study it can be deduced that most prospective house owners are negatively affected by the requirement for deposit or collateral.

**Table 4.18: Some banks offering mortgages require high threshold of deposit or collateral which some potential owners do not have**

Response	Frequency	Percent	Cumulative Percent
Strongly agree	10	22.7	22.7
Agree	12	27.3	50.0
Neutral	2	4.5	54.5
Disagree	11	25	79.5
Strongly disagree	9	20.5	100.0
<b>Total</b>	<b>44</b>	<b>100.0</b>	

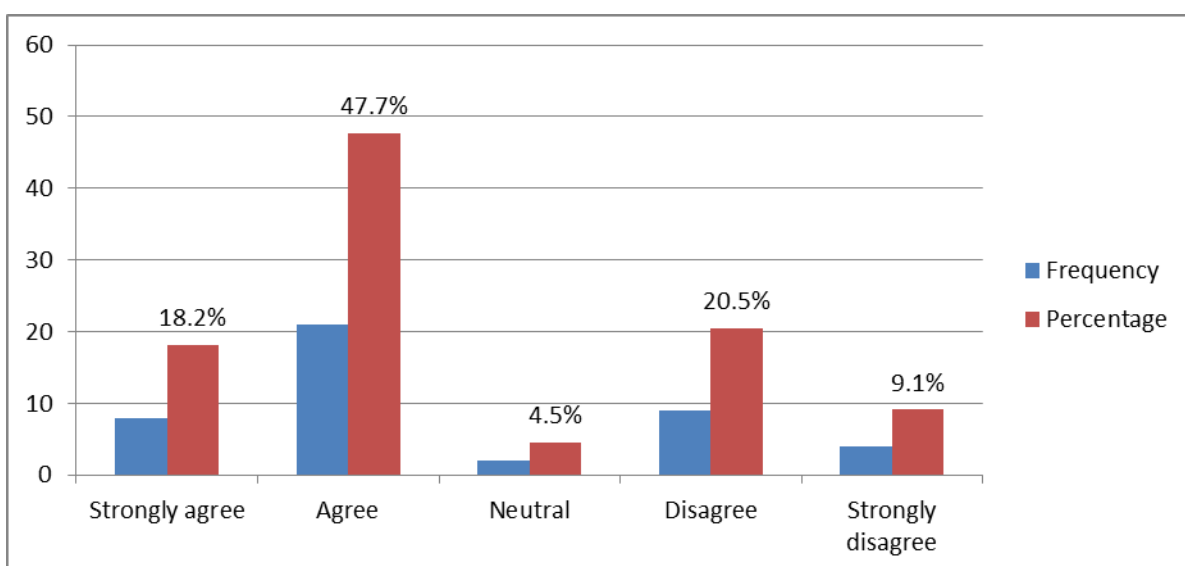


**Fig 4.18: Some banks offering mortgages require high threshold of deposit or collateral which some potential owners do not have**

According to table 4.18 and figure 4.18 above, 22.7% of the total respondents strongly agreed that some banks offering mortgages require high threshold of deposit or collateral which some potential owners do not have; 27.3% of the total respondents agree that some banks offering mortgages require high threshold of deposit or collateral which some potential owners do not have; 4.5% and 25% of the total respondents were neutral and disagreed respectively that some banks offering mortgages require high threshold of deposit or collateral which some potential owners do not have while 20.5% of the respondents strongly agreed that some banks offering mortgages require high threshold of deposit or collateral which some potential owners do not have. From the study it can be deduced that some banks offering mortgages require high threshold of deposit or collateral which some potential owners do not have.

**Table 4.19: Requirement for Collateral Negatively Affect Access Finance**

Response	Frequency	Percent	Cumulative Percent
Strongly agree	8	18.2	18.2
Agree	21	47.7	65.9
Neutral	2	4.5	70.4
Disagree	9	20.5	90.9
Strongly disagree	4	9.1	100.0
<b>Total</b>	<b>44</b>	<b>100.0</b>	



**Fig 4.19: Requirement for collateral negatively affects access to Finance**

According to table 4.19 and figure 4.19 above, 18.2% of the total respondents strongly agreed that requirement for collateral negatively affect women and people

low income because they cannot raise the deposit neither do they have access to collateral; 47.7% of the total respondents agree that requirement for collateral negatively affect women and people low income because they cannot raise the deposit neither do they have access to collateral; 4.5% and 20.5% of the total respondents were neutral and disagreed respectively that requirement for collateral negatively affect women and people low income because they cannot raise the deposit neither do they have access to collateral while 9.1% of the respondents strongly agreed that requirement for collateral negatively affect women and people low income because they cannot raise the deposit neither do they have access to collateral. From the study it can be deduced that requirement for collateral negatively affect women and people low income because they cannot raise the deposit neither do they have access to collateral.

#### **4.2.5.1 Relationship between Deposit/ Collateral and Demand for Purchase of Housing Units**

#### **4.2. Regression Model**

Model	R	R Square	df	P-Value	Sig
1	.576 <sup>a</sup>	.332	4	.253	.003 <sup>b</sup>

a. Dependent Variable: Demand for Purchase of Housing Units

## 4.2 Coefficients<sup>a</sup>

	B	Std. Error	Beta	t	Sig
(Constant)	1.110	.458		2.423	.020
Value of deposit /collateral	.513	.173	.528	2.963	.085
Cost of valuation of Collateral	.200	.168	.225	1.887	.042
Cost of access to collateral	-.237	.169	-.241	1.404	.098
Opportunity cost of collateral	-.039	.178	-.037	2.218	.028

a. Dependent Variable: Demand for Purchase of Housing Units

Based on a significance level (alpha) of .05 (95%), Degrees of freedom (df) of 4 and two-tailed test; the results of the study indicated: correlation coefficient (r), =.576; (r<sup>2</sup>) =.0.332; computed t-value (t=2.11) which is smaller than the critical (t-value = 2.77) and greater than the (alpha=0.05 or 1.965); while the p-value = 0.253 is larger than (alpha=0.05).

The results of the analysis shows that the relationship is not due to random chance or sampling error and that there is a significant relationship between value of deposit, cost of valuation of collateral, cost of access to collateral and opportunity cost of collateral and the demand for purchase of housing units .Hence it can be concluded that value of deposit, cost of valuation of collateral, cost of access to collateral and opportunity cost of collateral influence demand for purchase of housing units.

#### 4.2.6 Relationship between Cost of Finance and Demand for Purchase of Housing Units

**Table 4.2 Regression Model**

Model	R	R Square	df	P-Value	Sig
1	.789 <sup>a</sup>	.622	4	.217	.004

a. Dependent Variable: Demand for Purchase of Housing Units

**Table 4.2 Coefficients<sup>a</sup>**

	B	Std. Error	Beta	t	sig
(Constant)	.009	.355		.026	.979
Interest rates	.368	.119	.407	3.095	.004
Fees and Commissions	.361	.129	.342	2.798	.008
Deposit or collateral	.351	.114	.379	3.096	.004
Loan closing cost	-.165	.127	-.170	-.302	.201

a. Dependent Variable: Demand for Purchase of Housing Units



The study sought to determine whether the coefficients on the cost of finance (Interest rates, fees and commissions, deposit or collateral and loan closing cost) is different from 0 so that the cost of finance is having an effect on demand for purchase of housing units or if alternatively any apparent differences from 0 is just due to random chance.

The study used a significance level (alpha) of .05 (95%), Degrees of freedom (df) of 4 and two-tailed test. The results of the study indicated: correlation coefficient (r), =.789; (r<sup>2</sup>) =.0.622; computed t-value (t=2.17) is smaller than the critical (t-value = 2.77) and greater than the (alpha=0.05 or 1.965); while the p-value = 0.217 is larger than the significance level of 0.05.

The analysis indicate that the results are not due to random change or sampling error and that there is a significant relationship between cost of finance (interest rates, fees and commissions, deposit or collateral and loan closing cost) and the demand for purchase of housing units .Hence it can be concluded that cost of finance influence demand for purchase of housing units.

### **4.3 Summary & Presentation of Findings**

#### **4.3.1 Cost of Finance and Demand for Purchase of Housing Units**

The results of the measurement of demand for purchase of housing units showed a positive correlation of : (r= .637), (r<sup>2</sup>=.406) indicating that 40% of the ability to pay, prevailing housing prices, housing preferences, household income, access to financing and access to financing arrangements firms' is related to demand for purchase of housing units. The findings concurs with the observation of Schmuecker ( 2011) that demand for housing purchase of houses is influenced by household income, the price (or rent) of a dwelling, financing arrangements (including interest rate and the loan term), and household preferences for different attributes of a dwelling, such as location.

In addition the results of the relationship between cost of finance and demand for purchase of housing units indicated : positive correlation coefficient (r), =.78 and coefficient of determination; (r<sup>2</sup>) =.0.622; while computed t-value (t=2.17) is smaller than the critical (t-value = 2.77) and greater than the (alpha=0.05 or 1.965); while the p-value = 0.217 is larger than the alpha (0.05).these results shows that that there is a significant relationship between cost of finance and demand for purchase of housing units. The findings of the study are supportive of the findings of Luffman, (2006) who established that housing demand is a function of household income, the price (or rent) of a dwelling, financing arrangements (including interest rate and the loan term), and household preferences for different attributes of a dwelling, such as location. Mostafa, Francis and Chi Mun, (2006) avers that demand for housing is determined by the ability to pay and indeed access to financial services however it did not focus on the aspect of cost of that finance which this study has focused.

#### **4.3.2 Interest rates, Fees and commission**

Most (34.1%) of the respondents agree that there are restriction of accessing finance because of high interest rates; (38.6%) of the total respondents agree, banks levy legal, appraisal and ledger fees on loans making it expensive ; 29.5% of the total respondents agree that banks load closing cost on loan products making their financial products unaffordable to most customers

On the relationship between interest rates, fees and commission and demand for purchase of housing units: the results of the study indicated: correlation coefficient (r), =.499; (r<sup>2</sup>) =.0.249; computed t-value (t=2.09) is smaller than the critical (t-value = 2.57) and greater than the (alpha=0.05 or 1.965); while the p-value = 0.264 is larger than the significance level of 0.05. The findings shows that the results are not due to random change or sampling error and that there is a significant relationship between interest rate, legal , appraisal and ledger fees and closing cost on loan and demand for purchase of housing units. The findings are in tandem with the views of Okonkwo (1998) who observed that bank interest rates determine the cost of paying a variable

mortgage and that lower rates make interest payments more affordable. The study also complements the work of Kiyotaki and Moore (1997) who established that the cost of finance includes requirements for deposits, other charges such as appraisal fees, legal fees, stamp duty, ledger fees and interest rates: once the mortgage is taken out, interest has to be paid.

#### **4.3.3 Deposit/Collateral**

Results of the study showed that majority (40.9%) of the total respondents agreed that most prospective house owners are negatively affected by the requirement for deposit or collateral, while majority (27.3%) of the total respondents agree that some banks offering mortgages require high threshold of deposit or collateral which some potential owners do not have. On the relationship between deposit/ collateral (value of deposit /collateral, cost of valuation of collateral, cost of access to collateral and opportunity cost of collateral )and demand for purchase of housing units, the results of the study indicated: correlation coefficient ( $r$ ),  $=.576$ ; ( $r^2$ )  $=.0.332$ ; computed t-value ( $t=2.11$ ) which is smaller than the critical (t-value = 2.77) and greater than the ( $\alpha=0.05$  or 1.965); while the p-value = 0.253 is larger than ( $\alpha=0.05$ ). The results of the analysis shows that the relationship is not due to random chance or sampling error and that there is a significant relationship between deposit/ collateral (value of deposit, cost of valuation of collateral, cost of access to collateral and opportunity cost of collateral) and the demand for purchase of housing units. The findings of the study are in line with views of Alder and Mutero, (2007) and Okonkwo (1998) who noted in their studies that banks require a form of collateral, usually the land or property for which the loan is made and that that banks are demanding bigger deposits that many first time buyers don't have therefore demand for housing has fallen.

## CHAPTER FIVE

### 5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Summary

The research study established that the measurements of demand for purchase of housing units such as the ability to pay, prevailing housing prices, housing preferences, household income and access to financing arrangements firms are related to demand for purchase of housing units. On the relationship between cost of finance and demand for purchase of housing units, the study found out that there is a significant relationship between cost of finance and demand for purchase of housing units.

The research study found out that demand for purchase of housing units is negatively affected by the high cost of finance arising from high interest rates; legal, appraisal and ledger fees on stamp duty, title search, notary, insurance policy, credit check fees loans making it expensive; besides banks load closing cost on loan products making their financial products unaffordable to most customers. In addition non-recurring closing costs are frequently added, as well as loan origination fees and discount points. On the relationship between interest rates, fees and commission and demand for purchase of housing units, the study established that there is a significant relationship between interest rate, legal, appraisal and ledger fees and closing cost on loan and demand for purchase of housing units.

The research study established that most prospective house owners are negatively affected by the requirement for deposit or collateral as some banks offering mortgages require high threshold of deposit or collateral which some potential owners do not have. On the relationship between deposit/ collateral (value of deposit /collateral, cost of valuation of collateral, cost of access to collateral and opportunity cost of collateral) and demand for purchase of housing units, the study found out that there is a significant relationship between deposit/ collateral (value of deposit, cost of valuation of collateral, cost of access to collateral and opportunity cost of collateral) and the demand for purchase of housing units

## **5.2 Conclusion**

The measurements of demand for purchase of housing units such as the ability to pay, prevailing housing prices, housing preferences, household income and access to financing arrangements firms are related to demand for purchase of housing units. the cost of finance (Interest rates, fees and commissions, deposit or collateral and loan closing cost ) influence demand for purchase of housing units.

Demand for purchase of housing units is negatively affected by the high cost of finance arising from high interest rates; legal, appraisal and ledger fees on stamp duty, title search, notary, insurance policy, credit check fees loans making it expensive; besides banks load closing cost on loan products making their financial products unaffordable to most customers. Interest rate, legal, appraisal and ledger fees and closing cost on loan influence demand for purchase of housing units.

Most prospective house owners are negatively affected by the requirement for deposit or collateral as some banks offering mortgages require high threshold of deposit or collateral which some potential owners do not have. On the relationship between deposit/ collateral (value of deposit /collateral, cost of valuation of collateral, cost of access to collateral and opportunity cost of collateral) and demand for purchase of housing units, the study found out that there is a significant relationship between deposit/ collateral (value of deposit, cost of valuation of collateral, cost of access to collateral and opportunity cost of collateral) and the demand for purchase of housing units

## **5.3 Policy Recommendations**

There is need for banks to develop financial products that are appropriate and relevant to customers of all economic stratas on the basis of service and structure costs that do not lead the customer to encounter access and/or use difficulties. They also need to continuously review the cost structure on their products so as to enhance the uptake of finance for purchasing housing units

There is need for banks to regularly review the cost of their financial services such as interest rates; legal, appraisal and ledger fees on stamp duty, title search, notary, insurance policy, credit check fees loans so that they can unlock the bottlenecks that negatively influence demand for their products and the subsequent relation with the purchase of housing units making them accessible to relatively most of the clients

There is need for the government to promote increased access to affordable financial products through effective regulations and policies to overcome the major setback of land, injection of finance and to deal with the income problem to surmount non-affordability of finance and promote availability and flow of cheaper credit to housing sector

There is need for banks to consider other types of substitutes to collateral that currently negatively affect prospective home owners as some banks offering mortgages require high threshold of deposit or collateral which some potential owners do not have. Banks need to consider group security or individual credit history so as to improve the uptake of finance for the purchase of housing units

#### **5.4 Limitations of the study**

Matters concerning banking and financial status are more often regarded as confidential information hence there were some respondents who did not provide full information for fear of being reprimanded by their seniors for giving out information that they might consider confidential in terms of customer and bank confidentiality. However, the researcher assured the respondents of the confidentiality of the information that they provided and sought authority from management to undertake research in the institution.

There were some respondents who did not provide authentic information but instead provided general information making it difficult to obtain the required information. However the researcher alternated closed and open ended questions in order to get direct answers.

Some organization had poor record keeping hence there was scant information that could be accessed in terms of financial statements, however the researcher used other relevant documentation to collect the information required information , despite the fact that it took longer than anticipated

In order to assure manageability of the collected data, the study used questionnaire that rely on self-report responses, however the problem with using a questionnaire is that it is based on the assumption that participants would respond to the questions in an honest and accurate manner. Nevertheless, it is not always the case that participants answer in an honest manner. This is because participants often give answers that they believe to be desirable. However the researcher used qualitative data to complement the information obtained through the questionnaire

### **5.5 Suggestions for Further Studies**

This research study was limited to data collected from banks in Nairobi County however there are many other banks and customers in rural areas and other urban centres spread throughout the country. Hence there is need for other researchers to consider larger and different sample sets from other counties in the country so as to make comparison the results obtain other work.

It is evident that there is high shortage of housing in Kenya occasioned by high cost of housing financing hence to ensure that this demand is partially met the government need to under into partnership with the private sector to ensure that that the level of financing housing development is improved from the current level. This can be supplemented by tapping into finance made through cooperatives. However to facilitate the development there is need for research on public private partnership in the area of financing the cost of housing development in Kenya especially among the low income group

This research study did not focus on the housing finance mechanism which can be able to increase the supply of housing units and reduce the demand for the same thus there is need to for further research focusing on the various housing financing

mechanism using self-help groups and micro financing which are relatively cheaper in terms of cost

There is need for further research on the effects of government housing finance subsidies on housing demand as many households continue to struggle in the search of affordable housing units while the economy is the key factor pushing financing levels above income levels for low income households. Simultaneously, low-income households face a declining supply of subsidized units due to the increasing cost of housing finance and declining government housing support because of budget constraints. Most importantly, housing assistance should focus on programs aimed at increasing household income to reduce cost-burdens and provide low income households with resources for other necessities.



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## **APPENDICES**

### **APPENDIX I**

#### **LIST OF BANKS**

1. Barclays Bank of Kenya Ltd
2. CFC Stanbic Bank Ltd
3. Co-operative Bank of Kenya Ltd
4. Equity Bank Ltd.
5. Kenya Commercial Bank Ltd
6. Standard Chartered Bank Ltd
12. Commercial Bank of Africa Ltd
15. Family Bank Ltd
17. I & M Bank Ltd
18. National Bank of Kenya Ltd
19. N I C Bank Ltd
23. Consolidated Bank of Kenya Ltd
24. Housing Finance



## APPENDIX II

### RESEARCH QUESTIONNAIRE

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This questionnaire has been designed to assist the researcher collect data concerning the relationship between cost of finance and demand for purchase of housing units in Nairobi County. You have been identified as one of the respondents in the study and are requested to complete the following questionnaire. The information you provide will be used only for the purpose of this study and will be held strictly confidential and in no way will your name or answers be revealed out.

Please answer all the questions as best as you can.

#### Respondent Profile

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Respondent Status.....

Bank.....

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#### PART 2: Demand for purchase of housing units

5. Please tick the statement corresponding to the situation for each statement

	Strongly agree	Agree	Neutral	disagree	Strongly disagree
Demand for housing is determined by the ability to pay					
The demand for purchase of housing units is influence by the prevailing housing prices,					

Households housing preferences affects the demand for purchase of housing units					
Household income determines the demand for housing units for purchase					
Financing Arrangements with a financial institution affects demand for purchase of housing units					

**PART 3: Cost of Finance**

**6. Please tick the statement corresponding to the situation for each statement**

	<b>Strongly agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>disagree</b>	<b>Strongly disagree</b>
There are restriction of accessing finance because of high interest rates					
Bank levy legal , appraisal and ledger fees on loans making it expensive					
The conditions attached to financial products are favourable making them appropriate for most peoples needs					
banks load closing cost on loan products making their financial products unaffordable to most customers					

**PART. 4. Interest Rates**

**8. Please tick the statement corresponding to the situation for each statement**

	Strongly agree	Agree	Neutral	disagree	Strongly disagree
Most banks charge high interest rates on financial services hence impeding the demand for houses					
High Interest rates affect most potential home owners from borrowing to purchase houses					
Clients with low income cannot afford housing loans when interest rates are high					
High Interest rates negatively affect the serving of loans hence resulting in low demand of housing units					

**PART 5: Deposit /Collateral**

**12. Please tick the statement corresponding to the situation for each statement**

	Strongly agree	Agree	Neutral	disagree	Strongly disagree
Most financial institutions require initial deposit or in the absence a collateral and this affect accessibility to financial services and leads to low demand for purchase of housing units					
Most prospective house owners are negatively affected by the requirement for deposit or collateral					

Some banks offering mortgages require high threshold of deposit or collateral which some potential owners do not have					
Requirement for collateral negatively affect women and people low income because they cannot raise the deposit neither do they have access to collateral					

**Thank You for Your Co-Operation**