# ANALYSIS OF THE FACTORS INFLUENCING MORTGAGE FINANCING IN KENYA

### A CASE OF HOUSING FINANCE COMPANY OF KENYA

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# A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE AWARD OF MASTERS' DEGREE IN PROJECT PLANNING AND MANAGEMENT OF THE UNIVERSITY OF NAIROBI

#### NOVEMBER, 2012

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#### DECLARATION

I hereby declare that this research project report is my original work and effort and that it has not been presented in any other university for an award.

Itwa Signature:

Date: 16/11/19\_

AGUKO JUMA

L50/64006/2010

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

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### DEDICATION

I dedicate this work to my family members particularly my wife Pamela and my children Julius Gad, Crispin and Constance for their unrelenting support throughout this program.

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### ACRONYMS AND ABBREVIATIONS

- APR Annual Percentage Rate
- CBK Central Bank of Kenya
- CDC Commonwealth Development Corporation
- EU European Union
- GDP Gross domestic product
- GOK Government of Kenya
- HFC Housing Finance Company
- IMF International Monetary Fund
- NCM No-cost mortgage
- NSE Nairobi Stock Exchange
- US United States

#### ABSTRACT

The main objective of the study was to investigate the factors influencing mortgage uptake in Kenya. The study was guided by the following specific objectives; to examine the extent to which interest rate influence mortgage financing in Kenya, establish the extent to which housing policies and procedure influence mortgage financing in Kenya, to determine the extent to which political environment influence mortgage financing in Kenya, to determine the extent to which environmental risks influence mortgage financing in Kenya. A descriptive survey was employed in this study. It helped to describe the status of events and also helped to collect data over large areas. This study targeted 238 staffs in selected department in Housing finance Corporation, Kenya. Stratified random sampling method was conducted to capture the various levels of staffs and management. The data analysis method used was based on quantitative approach using descriptive statistics. Descriptive statistics such as means, standard deviation and frequency distribution were used to analyze the data. Data was coded and entered into the Statistical Package for Social Sciences (SPSS), Version 17, for analysis. SPSS was used to perform the analysis as it aided in organizing and summarizing the data by the use of descriptive statistics such as tables. In addition, data was analysed through inferential analysis where by correlation analysis was conducted using Pearson correlation for parametric data and spearman moment correlation was used for non-parametric data. The study also established that enhancing secure and transparent titled lands, so as to minimise the risk of mortgage lending can ensure growth in mortgage financing. The study established that respondents indicated that laws and institutions that are created to stimulate financial development and centralized/powerful governments which are incompatible with financial development affect mortgage financing in Kenya. The study revealed that laws and institutions that are created to stimulate financial development and centralized/powerful governments which are incompatible with financial development affect mortgage financing in Kenya. The study concluded that interest rate setting on mortgage debt; government instruments and fiscal measures are the major policies that govern mortgage financing. The study concluded that policies in mortgage financing facilitate smooth completion of property transactions and foreclosures. The study recommended that further study should be carried out incorporating the entire industry at the functional level and set within the context of the overall corporate strategy.

#### CHAPTER ONE

#### INTRODUCTION

#### 1.1 Background of the Study

Sustainable housing finance market bestows great benefits to households and the economy of nations. An efficient housing finance system can enable households to realize equity from their housing wealth and also facilitate the upgrading of the existing housing stock in a country. An efficient housing finance mechanism is germane in improving the spatial distribution of households and businesses across a country. Housing is extremely important in explaining the behaviour of private consumption expenditures (Benjamin et al., 2004). Housing finance is a vital component of a well functioning housing system in any country (Warnock and Warnock, 2008). The housing finance market impacts on the monetary transmission process via interest rate fixations (Wolswijk, 2005). Housing finance market leads to improve functioning of the housing market, facilitates economic development, and provides the lowest cost debt to most borrowers in a country (Joint Centre for Housing Studies, 2005).

Housing contributes significantly to the socio-economic development of nations. A well functioning housing sector will create employment through the construction of houses and related infrastructure (Sandilands, 2002). The real estate and construction sector contributes significantly to the gross domestic product (GDP) of nations. Chanond (2009) suggests that the residential real estate industry alone contributes about 10 per cent to the GDP of Thailand. A well functioning housing market is an important vehicle for savings mobilisation, wealth creation and business development; it leads to improved cities and broader economic development and macroeconomic stability; and can reduce the incidence and impact of squatter settlements (Joint Centre for Housing Studies, 2005). For instance, Pozo (2009) observes that the housing market is one of the main driving forces of economic activity in Spain. But for any nation to reap the full benefit of its housing sector the financing of housing must be efficient and sustainable. The mode of financing housing is extremely critical.

Kenya's mortgage market has more than tripled in the past five years. Kenya's mortgage market has grown from Kshs. 19 billion in 2006 to just over Kshs. 61 billion by May-2010 (nominal growth). This translates to an annual average growth of 34%, indicating an exponential increase in mortgage loans. The number of new loans has also been rapidly increasing. Since 2006, there has been a steady growth in new loans further validating the growing mortgage market. In 2006, new loans were approximately 1.278 whereas by 2009 the new loan portfolio had grown to over 6,000. By May 2010, the number of new loans was 2,966 which is line with the steady growth seen in the previous years. But the mortgage market is still relatively small by international standards with only 13,803 loans. While the growth rate in mortgage loans has been rapid at just under 50% since 2006 and has been growing steadily at 14% annually, the loan portfolio remains small (Central Bank of Kenya & World Bank, 2010).

Housing Finance Company of Kenya Limited was incorporated on 18 November 1965 under the Companies Act as a private company. At the time of incorporation, almost the entire business funding needs were derived from funds injection by the two main shareholders, the Government of Kenya (GOK) and Commonwealth Development Corporation of the United Kingdom (CDC). In 1992, it got listed at the Nairobi Stock Exchange (NSE) with Commonwealth Development Corporation (CDC) and Government of Kenya (GOK) retaining a shareholding of 30.4% each and Kenyan investors taking up the balance of 39.2%. In the current shareholding structure Government of Kenya (GOK) only controls 3.6% shareholding with the rest being in private hands.

In 2002, The Company rebranded its trading name to Housing Finance and adopted a vibrant new identity. In 2007, HF Company welcomed Equity Bank and British American Investments Company (Kenya) Limited as anchor shareholders. In 2008, Housing Finance successfully raised Kshs 2.3 billion in additional capital through a rights issue. In 2010, a bond Issue raised Kshs 7 Billion used to directly fund business growth.

The company vision is to be the leading provider of integrated solutions for the acquisition, development and improvement of property in Kenya with the mission being the leading integrated solutions enabler for the property industry. They offer innovative products and services, delivered less than one roof by exceptionally committed people to enhance shareholder

value. They operate across the property value-chain as suppliers and financiers that offer unique solutions to all while being environmentally responsible.

The mortgage products offered by Housing Finance are: Owner Occupier Mortgage, Plot Purchase Mortgage, Construction Mortgages, Fixed Mortgage, Home Freedom, Makao, Investment Residential Mortgage, VunaHela, Cyclical and Project Finance.

The company distributes its products through its various branch networks across the country and which include: The company maintains branches at the following locations: Main Branch - Rehani House, Kenyatta Avenue; Nairobi Moi Avenue Branch - Gill House, Moi Avenue, Nairobi, Kenyatta Market Branch - Maserah House, Kenyatta Market, Nairobi, Buru Buru Branch - Epren Centre, Buru Buru, Nairobi, Mombasa Branch - Permanent House, Moi Avenue, Mombasa, Nakuru Branch - AFC Building, Geoffrey Kamau Way, Nakuru, Nyeri Branch - Meghirutshi Building, Kimathi Way, Nyeri, Eldoret Branch - KVDA Plaza, Oloo Street, Eldoret, Kisumu Branch - Tivoli Centre, Court Road, Kisumu, and Thika Branch - Uhuru Street, Thika

#### 1.2. Statement of the Problem

The availability of finance is a key issue for any housing development activity. It affects developers, contractors and the ultimate buyers of the housing units. An efficient and sustainable housing finance regime is a pre-requisite for sustainable housing delivery for the citizens of a nation. Housing finance market is an important medium for financing housing around the globe (Boamah, 2010). Housing finance market contributes significantly to addressing the problem of housing inadequacy or insufficiency by providing homebuyers with long-term mortgage loans with relatively moderate monthly instalments. Housing investment has long duration and requires large amount of long-term finance. This can be adequately provided when sustainable housing finance market is in place. Gevorgyan et al. (2006) observes that an important means to achieve an increased access to housing by households is the design and provision of adequate mortgage products on a continuous basis by financial institutions.

Lenders lien enforcement rights are essential for the creation of a sustainable housing finance regime. The legal framework and financial control constitutes the fundamental basis of mortgage origination schemes and mortgage loan administration (Gutierrez and Ospina, 2009). Also, the

creation of a strong housing finance market requires the existence of strong legislative and regulatory framework and the strengthening of the financial sector (Gevorgyan et al., 2006). Warnock and Warnock (2008) notes that countries with stronger legal rights for both lenders and borrowers via collateral and bankruptcy laws have well developed housing finance systems. The basic infrastructure that can enable a well-functioning housing finance system includes information on the credit worthiness of potential borrowers, macroeconomic stability, and factors that promote funds mobilisation (Warnock and Warnock, 2008). Property rights, monetary policy, economic growth, risk assessment tools, and capital access are basic requirements for the success of housing finance markets (Duncan, 2004). The Brazilian housing finance system expanded rapidly as a result of sound economic environment and legal reforms (Eloy, 2010). Butler et al. (2009) note that the existence of secondary mortgage market, sources of long-term funding, income distribution and effective demand, financial sector size, macroeconomic stability, urban planning policies, and land titling and use policies are important drivers of growth in mortgage finance.

According to Central Bank of Kenya and World Bank (2010) in their survey done in Kenya, long term access to funds is the most critical constraint to the mortgage market in Kenya. Based on a ranking of mortgage market constraints, banks identified access to long-term funds as the top most impediments to the growth of their mortgage portfolio. Overlapping constraints of low level of incomes/informality and credit risk were listed as second and third respectively with high interest rates also being regarded as a major constraint. Despite the challenges and risks highlighted above, there is little research done on the risk management practices on mortgage uptake in Kenya. It is from the above background that the researcher seeks to fill the gap by conducting a study to investigate the risk management practices in mortgage financing in Nairobi, Kenya.

#### 1.3 Purpose of the Study

The purpose of the study was to investigate the factors influencing mortgage financing in Kenya.

#### **1.4 Research Objectives**

The study was guided by the following specific objectives

- i. To examine the extent to which interest rate influence mortgage financing in Kenya
- ii. To establish the extent to which housing policies and procedure influence mortgage financing in Kenya.
- To investigate the extent to which political environment influence mortgage financing in Kenya
- iv. To determine the extent to which environmental risks influence mortgage financing in Kenya

#### 1.5 Research Questions

The research sought to answer the following questions

- i. How does interest rate influence mortgage financing in Kenya?
- ii. To what extent do policies and procedure influence mortgage financing in Kenya?
- iii. To what extent does political environment influence mortgage financing in Kenya?
- iv. How does environmental risks influence mortgage financing in Kenya?

#### 1.6 Significance of the Study

The findings of this study would be useful to the management of mortgage companies and banks offering mortgages in Kenya. It would help them by provide the management with an independent unbiased view of factors influencing mortgage financing in Kenya. It would help them to be aware of the approaches they can adopt to improve mortgage uptake.

The findings of this study would be important to the government through the CBK, as it embedded with the task of formulating policies that relate to financing in the country as far as mortgage financing is concerned. As the sector grows, the government has to come up with policies that address the various challenges within the sector, so as to reduce any resultant chaos and to facilitate faster growth in the housing sector with minimum drawbacks.

The research would provide valuable information regarding the micro financial sector. Being upcoming entrepreneurs the academicians will be furnished with relevant information regarding

credit availability. It would also contribute to the general body of knowledge and form a basis for further research.

#### 1.7 Scope of the Study

This study sought to investigate the risk factors influencing mortgage financing in Kenya. The study was limited to Housing finance Corporation, a leading financial institution that has specialized in mortgage services in Kenya.

The study targeted the staff and management of HFC, and especially those in the credit, risks and administration departments since they interact with mortgage transactions regularly. A structured questionnaire was used to collect the data from the respondents. A pilot test was conducted to ensure reliability of the data collection tool. The collected data was analyzed through descriptive analysis and presented in tables and figures.

#### 1.8 Limitations of the Study

As with any pursuit for information, the researcher expected there to be shortfalls and factors that may hinder access to information. The following were some of the challenges expected during the investigation period.

Collected data may not have equal representation of all financial institutions offering mortgage financing. Further, the research relied on data collection from staffs in financial institutions that were not willing to give the expected information or fail to understand the intentions of the research. The researcher had difficulty in getting information from general staffs employees of financial institutions as they were sanctioned against giving information to researchers.

The fund available to the researcher was limited to do an extensive study. The researcher found that he had to exceed the budget due to fluctuations in prices of commodities such as fuel and therefore all other amenities that were required. Insufficient funds to support research implementation plan resulted to limited information availed for analysis and as a result some objectives were not be fully achieved.

The time allocated for the research was not enough to have enough data collected and analyzed to give comprehensive results for the research. Procedures for getting permission to collect data

from some of the respondents were tedious which means more time was spent collecting the data.

## CHAPTER TWO

#### LITERATURE REVIEW

#### 2.1 Introduction

This chapter reviewed literature from other scholars on the aspect of credit risk management. The literature covered the theoretical and empirical literature on factors influencing Mortgage financing. Theoretical review covered Asymmetric Information theory and the Credit risk theory.

#### 2.2. Theoretical Review

In this section, the study discussed theories that support the study and which showed the relationship between study variables. The study discussed Asymmetric Information Theory and Credit Risk Theory.

#### 2.2.1 Asymmetric Information Theory

The concept of asymmetric information was first introduced by George A. Akerlof's (1970) Paper. 'The Market for "Lemons": Quality Uncertainty and the Market Mechanism' (Akerlof, 1970). In the paper, Akerlof develops asymmetric information with the example case of automobile market. His basic argument is that in many markets the buyer uses some market statistic to measure the value of a class of goods. Thus the buyer sees the average of the whole market while the seller has more intimate knowledge of a specific item. Akerlof argues that this information asymmetry gives the seller an incentive to sell goods of less than the average market quality. The average quality of goods in the market will then reduce as will the market size. Such differences in social and private returns can be mitigated by a number of different market institutions.

The theory of asymmetric information argues that it may be impossible to distinguish good borrowers from bad borrowers (Auronen, 2003), which may result in adverse selection and moral hazards problems. Adverse selection and moral hazards have led to substantial accumulation of non-performing accounts in cooperatives (Bester, 1994; Bofondi and Gobbi, 2003). The very existence of cooperatives is often interpreted in terms of its superior ability to overcome three basic problems of information asymmetry, namely ex ante, interim and ex post (Uyemura and

Deventer, 1993). The management of CR in banking industry follows the process of risk identification, measurement, assessment, monitoring and control. It involves identification of potential risk factors, estimate their consequences, monitor activities exposed to the identified risk factors and put in place control measures to prevent or reduce the undesirable effects. This process is applied within the strategic and operational framework of the bank.

#### 2.2.2 Credit Risk Theory

Although people have been facing credit risk ever since early ages, credit risk has not been widely studied until recent 30 years. Early literature (before 1974) on credit risk uses traditional actuarial methods of credit risk, whose major difficulty lies in their complete dependence on historical data. Up to now, there are three main quantitative approaches to analyzing credit risk: structural approach, reduced form approach and incomplete information approach (Crosbie et al, 2003).

Merton (1974) introduced the credit risk theory otherwise called the structural theory which said that the default event derives from a firm's assets evolution, modeled by a diffusion process with constant parameters. Such models are commonly defined "structural models" and based on variables related to a specific issuer. An evolution of this category is represented by a set of models where the loss conditional on default is exogenously specified (can be deterministic or stochastic), nonetheless maintaining the endogenous nature of default event. In these models, the default can happen throughout all the life of a corporate bond and not only at maturity (Longstaff and Schwartz. 1995); Saā-Requejo and Santa Clara. 1997); the assets dynamics are generally modeled as a constrained diffusion with respect to an absorbing barrier, the latter being deterministic or stochastic and representing the default threshold. In the second approach, that of the "reduced form models," both the default event and the loss given default are exogenous to the firm. The pricing of any (exotic) credit derivative is achieved through the calibration of the default probabilities curve from the most liquid corporate bonds and (plain vanilla) credit derivatives written on the same firm (Jarrow and Turnbull, 1995; Jarrow et al., 1997; Duffie and Singleton, 1999).

Merton (1974) first builds a model based on the capital structure of the firm, which becomes the basis of the structural approach. In his approach, the company defaults at the bond maturity time

T if its assets value falls below some fixed barrier at time T. Thus the default time  $\tau$  is a discrete random variable which picks T if the company defaults and infinity if the company does not default. As a result, the equity of the firm becomes a contingent claim of the assets of the firm's assets value. Black and Cox (1976) extend the definition of default event and generalize Merton's method into the first-passage approach. In Black and Cox (1976), the firm defaults when the history low of the firm assets value falls below some barrier D. Thus, the default event could take place before the maturity date.

#### 2.3 Empirical Review

Mortgage debt in most countries has risen quickly in the last few years. In line with its growing size, mortgage debt has taken up a prominent place in economic analysis and macroeconomic policy-making. Changing property prices in combination with mortgage debt changes may have macroeconomic consequences, e.g. via taking up mortgage debt for non-housing consumption purposes ("mortgage equity withdrawal"). In addition, interest rate setting on mortgage debt (fixed, variable) may have implications for monetary policy transmission. Financial stability considerations may also rise in tandem with mortgage debt.

The Swedish housing market crisis in the early 1990s reflected a substantial reduction in fiscal subsidisation, as confirmed in a number of studies, although other factors also were important. Comparing mortgage debt levels with the degree of fiscal subsidisation, it is noteworthy that the Netherlands, the country with the highest mortgage debt-to-GDP level, provides the highest degree of fiscal subsidisation, while Greece, a country with one of the lowest debt ratios, on balance imposes a tax levy on mortgage-financed housing.

A more formalised approach to determinants of mortgage credit, and of the specific role of fiscal factors in that, is undertaken by using pooled regressions for mortgage debt for 15 EU countries, over the period 1982-2003. The estimates indicate that real mortgage lending growth is positively affected by stock market growth, by house price increases and by financial deregulation measures, while after-tax interest rates exerted a negative effect. The latter variable includes housing subsidy elements via the deductibility of mortgage interest payments that is allowed in most EU countries. Real growth of disposable income also positively affects mortgage demand in some versions of the estimates but not in all. A negative effect of consumer

price inflation on mortgage growth was found in some estimates. These results are fairly robust: while

#### 2.4 Factors Influencing Mortgage Financing

Predicting mortgage rates is difficult due to the various factors that influence the mortgage financing. Mortgage rates rises due to inflation: The interest rates are calculated in response to supply and demand in the financial market. They are independent of inflation. The bank will charge you the nominal interest rate for your mortgage and this will add on the annualized percentage rate of inflation. Mortgage rates rise also due to the reduced availability of credit: The financial markets operate on supply and demand in the market. If the supply is limited, then people who have more money or those who have purchasing power will pay for that item (Cranston, 2002).

Mortgage rate predictions are based on the supply of money, whether it is increasing or decreasing and likewise the trend in the demand is for money. Mortgage rates also rise due to increased risks: Mortgage rates are also influenced by investment decisions, i.e. risks involved. Mortgage rates will depend on the overall risks involved in the housing market. If the house value decreases, then the risks with the banks will suddenly rise and the predictions in the mortgage rates will go up (Warnock and Warnock, 2008). Mortgage rates fall down due to government intervention: For instance the US government plays a very powerful role in the financial market. The government can influence the overall market for money by issuing Treasury bonds at different interest rates and thus, it will affect the real interest rate.

With a favourable liquidity reserve financial institutions do not necessarily lend to all applicants that approach them for morgage facilities, even if the prevailing interest rate is acceptable to the borrower. Loans are secured on specific property and necessary steps are taken in avoiding default on repayment or depreciation of the security below the book value of the debt. There are various ways by which the lenders determine the ability of the borrower to repay and the suitability of the property as security (Jones and Maclennan, 1987).

The income being earned by a borrower determines the ability to repay the money borrowed. The total sum advanced therefore is usually restricted to some multiple of two to three times the applicant's salary (Mayes, 1979). This means that the applicant shall have secure prospects of a 11

UNIVERSELT UF NAIRU-KIKUYU LIBRAR" > U. Box BUIO- continuing income. However, in the recent past in the developed economies, it is considered that average home prices range from three to four times of annual income (Ball, 2003).

In the emerging economies, because wages are low and construction cost is high, average home prices are usually about eight times of annual income and to make it affordable, repayments have to be spread over a very long period of time. Windapo and Iyagba (2007) concluded in their study that a positive relationship exists between housing construction cost and building materials price, property price, foreign exchange rates because imported building materials are used for construction, labour cost and national disposable income.

#### 2.4.1 Interest rates and Mortgage Financing

One important factor that affects the price of mortgages, and thus mortgage supply is inflation and exchange rate instability. In the absence of appropriate instruments, lenders risk loss in terms of the value of regular repayments. For this reason, anticipated inflation affects the nominal interest rate charged, leading to high quoted repayments and thus the front-loading of payments to compensate for loss in purchasing power over time. Even where inflation is unanticipated in a risky environment, real interest rates may still increase due to high-risk premium. Furthermore, the uncertainty created by the persistent instability of a currency due to unstable inflation hinders access to external long-term finance for mortgage lending. A history of losses by institutions in the past can also increase the cost of external long-term funding, making short term domestic funding as the only available funding to lend long. These together increase the cost and reduce the availability of mortgage funding in a market. Most economies of developing countries has been characterized by regular increases in the level and also volatility of inflation, accompanied hy persistent swings in the value of the cedi against the major trading currencies on the foreign exchange market (Clayton et al; 2006).

All mortgages involve closing costs; these consist of lenders fees, mortgage broker fees, title Iees, closing agent (or lawyer's) fees, taxes, recording fees, etc. You can pay these costs out of pocket (bringing a check to closing) and have them deducted from the amount borrowed, thus reducing the loan proceeds received. A more recent option is to pay closing costs over time via a higher interest rate. This type of structure is marketed as a no-closing costs mortgage, or no-cost mortgage (NCM). Lenders are required to disclose closing costs and factor them into the calculation of the annual percentage rate (APR) of the loan (Warnock and Warnock, 2008).

Mortgage rates are often quoted with discount points that are paid upfront — a point is one percent of the principal of the loan. The more discount points the borrower is willing to pay, the lower the mortgage rate will be. We will refer to a mortgage with no upfront points as a par mortgage, and one that includes points as a discount mortgage. Points are also factored into the calculation of APR in order to make apples-to-apples comparisons across different mortgage structures of the same term (Van den Noord, 2003).

In comparing the tax treatment of housing, it had been suggested that government fiscal systems tend to favour ownership of dwellings over renting and debt-financing over other sources of financing. Thus, tax systems are not neutral, i.e. the decision for the owner to occupy the residence himself or to rent it out is affected by tax considerations. In a neutral system, imputed rent is taxed, mortgage interest payments are fully deductible, and capital gains are subject to a capital gains tax, as these tax elements normally also applies to landlords.

Governments seek to influence private agents' housing decisions as housing is considered a merit good with positive external effects, while income distribution arguments may also play a role. However, the financial involvement in the housing market appears to be trending downward, with a shift in emphasis from production to consumption subsidies, and an increased market orientation (Ball and Grilli, 1997). Van den Noord (2003) has quantified governments' involvement in housing markets for the euro area countries. He calculated the 1999 tax wedges and the resulting real cost of financing a house (nominal interest rate plus tax wedge minus inflation), taking into account information on tax interest deductibility, tax credits and imputed income from housing. His results, show that governments on balance subsidise housing, with few exceptions where it is neutral (Belgium, France, Germany), and one in which, on balance, a tax is levied on mortgage financed housing (Greece). It should be noted, though, that explicit government subsidies have not been included in the calculations.

#### 2.4.2 Policies and Procedures on Mortgage Financing

Another factor that has limited the mortgage financing is the legal framework within which lending operates. An efficient mortgage market requires a legislative framework that ensures smooth completion of property transactions and foreclosures. The main underlying factor that relate to mortgage has to do with lack of secure and transparent titled lands, increasing the risk of mortgage lending and the consequential reduction in the granting of mortgage loans. As noted by Gambrah (2001) the backlog of land title applications perpetuates multiple sale of land with the effect that the land market cannot operate effectively to either enable the development of a formal market for mortgage or to act as security for mortgage finance (Butler et al 2009).

Empirical research on mortgage debt has largely ignored the role of fiscal instruments affecting housing markets and mortgage credit. Nevertheless, it is obvious that various government instruments affect mortgage-financing decisions (Van den Noord, 2003). In particular, fiscal measures may affect housing-related decisions via the taxation of imputed rent on own houses, the deductibility of mortgage interest payments from income tax, and capital gains taxes on the revenue of selling a house. For instance, most EU governments subsidise owner-occupied housing, especially when mortgage-financed, on account of foreseen social and macroeconomic benefits. Simple analysis, based on a case-study (Sweden) and on a graphical comparison of mortgage debt and the degree of fiscal subsidisation, already hints at potential effects of fiscal instruments.

#### 2.4.3 Political Environment and Mortgage financing

The political environment and finance view stresses that political factors influence the development of institutions, including financial institutions, and argues that legal influences are of secondary importance. The politics and finance theory emphasizes that once a group gains power; it will shape policies and institutions to its own advantage (North 1990; Olson 1993). Thus, if the elite see themselves as being enriched by free, competitive markets, then they will put pressure on the state to create laws and institutions to stimulate financial development. If – as seems more common historically- the aristocracy feels threatened by competitive financial markets, there will be pressure on the state to restrict private transactions and hence the operation of free markets (Rajan and Zingales, 2001). A centralized/powerful state will be more responsive to and efficient at implementing the interests of the elite than a decentralized, open, and competitive political system (Finer, 1997).

The political environment and finance view of financial development predicts that political factors dominate legal factors in determining financial development (North 1990; Olson 1993). The political theories of North (1990) and Olson (1993) "...state, roughly, that institutions and policies are shaped by those in power to stay in power and amass resources." (LLSV, 1999) In applying this to financial institutions. Rajan and Zingales (2001) argue that the elite/powerful may or may not favor financial development. If self-made merchants form the ruling elite, then this ensures well arrangements that support financial development. If the landed aristocracy forms the elite, this suggests a less favorable climate for autonomous financial markets that compete with existing interests. Moreover, Rajan and Zingales (2001) accurately stress that a time-invariant factor, such as legal origin, will not explain important changes in financial development.

The politics and finance view emphasizes that centralized/powerful governments tend to be incompatible with financial development, especially in conjunction with an elite threatened by financial development. The proper functioning of financial institutions and markets requires limitations on government discretion, which might be incompatible with the ambitions of a centralized and powerful state. Similarly, a powerful, centralized government cannot credibly commit to not expropriate and default on claims, which is a key component of well functioning financial markets. A decentralized political system, on the other hand, may offer a more conducive environment for financial development (Rajan and Zingales, 2001).

Similarly, in some political environments, special interest groups may coerce governments to capture rents at the expense of others (Becker 1983). Thus, governments that reflect the interests of powerful special interests may be less likely to support financial market development than countries with less potent special interests. Similarly, voting systems that permit narrow interests to exert a disproportional impact on legislators will hinder the enactment of laws and regulations that foster competition and financial development when financial development threatens these narrow interest groups. In sum, the politics and finance view suggests that centralized, closed political systems that face little competition, and political structures without many checks on ruling party discretion will tend to have more poorly developed financial systems that face checks on legislative

and executive power. Titles and lease certificates and politics. About agricultural land as security is restricted. Marriage and securing loans.

#### 2.4.4 Environment Risks and Mortgage Financing

A financial institution's environmental risks are those of their clients/investees and are inherent in the nature of a client's/investee's operations. Environmental risks can be mitigated through compliance with environmental and international environmental standards. These risks are not static, but rather are dynamic over time and subject to change. Some potential environmental risks may not seem significant or relevant at the time of approval of a financial transaction, but may become so during execution, for instance as a result of higher regulatory standards and increased levels of enforcement. In other cases, environmental risks, such as spills or explosions, may seem unlikely to occur, but when they do, the environmental impact is potentially extremely high (Duncan, 2004).

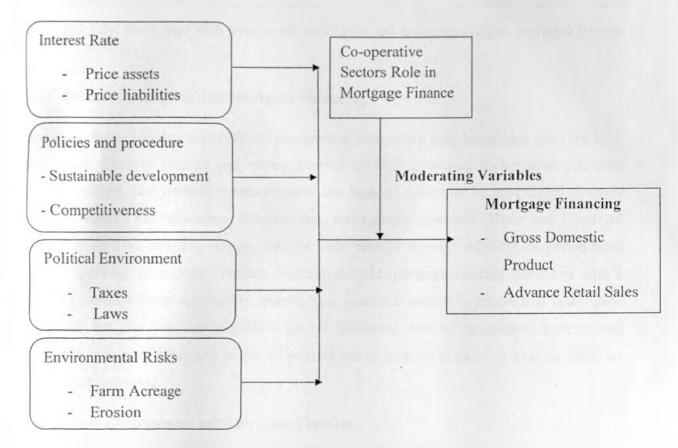
Residential mortgage financing is associated with a number of specific environmental risks related to safety of property to be financed such as site contamination, use of hazardous materials in construction, risk of flooding, land sliding, seismic activity and compliance with the applicable national construction and environmental standards and regulations. The Borrower shall be required to take into consideration these issues when financing residential property as part of the standard mortgage loan assessment procedure as well as observe the and comply with the environmental regulations and standards.

To reduce exposure to risk arising from the environmental risks of its clients/investees, financial institutions need to ensure that their clients'/investees' financial and operational sustainability is not undermined by adverse impacts on the environment and surrounding communities. Financial institutions need to have a clear understanding of potential environmental risks and implications for a client's/investee's operations prior to being linked to the client/investee in the context of a transaction. This requires proactive identification, assessment, and management of environmental and social risks before they become significant or result in an adverse outcome on the client/investee. A financial institution can best achieve this by developing and implementing

a Environmental Management System, to systematically assess the environmental and risks and opportunities arising from their clients'/investees' operations and manage its exposure to risk.

#### 2.5 Conceptualization

The following showed the study's dependent and the independent variables:



Independent Variables

**Dependent Variable** 

#### Figure: 1 Conceptual Framework

#### 2.5.1 Interest Rate and Mortgage Financing

To finance a home, lenders such as banks offer mortgages that allow home buyers to spread out the cost of the home over several decades by making reasonable monthly payments. However, mortgages vary widely in terms of their interest rates and overall cost. Mortgage rates are affected by various factors which include: supply and demand- This controls the interest rate of mortgages on a fundamental level. When many people are seeking mortgages to buy homes, lenders can charge higher interest rates. When the economy is moving more slowly and there are fewer buyers, lenders may be forced to reduce interest rates to attract borrowers. Supply and demand keeps mortgage interest rates in a constant state of flux. Mortgage interest rates may be largely impacted by the buyer's credit score and overall credit worthiness. Lenders are reluctant to offer loans to borrowers with a poor credit history. To attract more low-risk borrowers, they can offer low-interest mortgages to qualified borrowers with high credit scores, steady incomes and job stability. Borrowers with poor credit may be forced to accept a higher mortgage interest rate.

#### 2.5.2 Policies & Procedures and Mortgage Financing

Because mortgage banking encompasses numerous activities that pose significant risks, the bank should have effective policies and strong internal controls governing each operational area. Effective policies and internal controls enable the bank to adhere to its established strategic objectives and to institutionalize effective risk management practices (Duca and Rosenthal 1994). Policies also can help ensure that the bank benefits through efficiencies gained from standard operating procedures. Further, policies provide mortgage banking personnel with a consistent message about appropriate underwriting standards needed to ensure that loans made are eligible for sale into the secondary market. However, lack of appropriate policies and procedures, or lack of adherence to the set policies and procedures is likely to have an effect on the mortgage financing.

#### 2.5.3 Political Environment and Mortgage Financing

Political environment has an effect on the interest rate and inflation volatility, which can have long-lasting effects because consumers can be slow to adopt new financial instruments (Campbell, 2012). For instance, government-issued bonds affect mortgage rates; investment firms use mortgages as an investment product, selling a stake in home mortgages (known as securities) to investors who will profit from homeowners paying interest each month. However, government bonds offer a similar long-term investment opportunity. Because bonds and mortgage securities compete for the same investors, the performance of the bond market can drive investors away from, or toward, the mortgage security market, changing how much money is available for mortgage lending and, indirectly, the rates that mortgage lenders charge (IMF 2011). On the other hand, Political instability and insecurity also leads to high interest rates,

inflations and increased risks to mortgage institutions which further have an adverse effect on the mortgage financing.

#### 2.5.4 Environmental Risks and Mortgage Risks

Real estate development carries numerous risks, some of which are borne by the developer and some of which are passed on to the lender at the cost of higher interest rates. Historically, without increased compensation lenders have been unwilling to accept the risk posed by projects that rely upon environmentally-friendly, but unproven systems. Given the contribution to the current economic climate of lenders' it is unlikely that mortgage lenders will have an appetite for product-derived risk. Hence, the environmental risks also have an adverse effect on mortgage risks.

#### 2.6 Summary of chapter two

The review of the literature showed that regulatory and macroeconomic factors influence mortgage financing. Government involvement in mortgage markets also varies across countries, and it is likely that this explains at least some of the cross-country variation in housing finance. However, it is hard to disentangle regulatory effects from other factors that may affect household mortgage choice including experiences with interest rate and inflation volatility, which can have an effect on the mortgage financing.

Mortgages are rapidly becoming important financial instruments in emerging markets. In addition, long-lasting historical influences are likely to be less important in emerging markets because their rapid growth and financial evolution reduce consumer inertia. However only few studies have been conducted on mortgage financing in emerging markets and this poses a challenge in finding adequate data. For this reason, emerging markets are ideal laboratories in which to examine the factors influencing mortgage financing and specifically in the Kenyan context.

#### **CHAPTER THREE**

#### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter began by addressing the research design of the study. It further discussed the population and sample size and design. Research procedures were also discussed. A method of pretesting was reviewed and finally discussed the methods of data collection and data analysis methods to be used.

#### 3.2 Research Design

A descriptive survey design was employed in this study. Travers (1969) states that surveys are conducted to establish the nature of the existing situation or condition. It helped to describe the status of events and also helped to collect data over large areas. The survey design was chosen because it provided a means to contextually interpret and understand the risk factors influencing Mortgage financing. According to Orodho and Kombo (2002), the survey method was useful in measuring people's attitudes, opinions and habits.

#### **3.3 Target Population**

According to Ngechu (2004), a population is a well defined or set of people, services, elements, events, group of things or households that are being investigated. This study targeted 238 staffs in Housing finance Corporation. Kenya (HFC Human Resource Office, 2012).

#### 3.4 Sampling Procedure and Sample Size

Sampling is the process of selecting a number of individuals for a study in such a way that the individual selected represents the large group from which they are selected Chandran, (2003). Stratified random sampling method was conducted to capture the various levels of staffs and management. This method involved dividing the population into two or more relevant and significant strata based on one or a number of attributes. Mugenda proposes that any sample of at least 10% and not more than 30% is adequate for a study. The employee at HFC were divided into three strata based on their departments. The researcher

then picked the sample size using proportionate sampling; 30% sample from each stratum was considered for this study. This gave each category of staff a fair chance of representation, (Saunders, 2007). The study sample size was 71 staff of HFC as shown in the Table 3.1 below:

#### Table: 1 Sample Size

Departments	Population Number (N)	Sampling	Sample Size
Credit Department	80	30%	24
Risk Control/Mgt Department	65	30%	20
Administration	93	30%	28
Total	238		71

#### 3.5 Research Instruments

The researcher used both primary and secondary data. According to Sproul (1998), a self administered questionnaire is the only way to elicit self report on people's opinion. attitudes, beliefs and values.

Primary data was obtained through self-administered questionnaires with closed and open-ended questions. The questionnaires included structured and unstructured questions and was administered through drop and pick method to respondents who were middle managers in the organization. The closed ended questions enabled the researcher to collect quantitative data while open-ended questions enabled the researcher to collect qualitative data. Secondary data was collected by use of desk search techniques from published reports and other documents. Secondary data included the banks publications, journals, and periodicals.

The questionnaire was developed by the researcher and a pilot test was carried out before the actual study took place.

#### 3.5.1 Administration of the Questionnaire

The questionnaires were personally administered by the researcher with the help of two research assistants both of whom were trained in research methods. This method of administration was justified as it results in a higher response rate than the drop and picks method of administration. Further, personal administration of the questionnaires helped in carrying out data cleaning while on the field ensuring that data collected was adequate for the purposes of the research.

A letter introducing the purpose of the study and copies of the questionnaires was given to the respondents. Where necessary the researcher and the assistants discussed the questionnaires with the respondents to further clarify the answers.

#### 3.5.2 Reliability

Reliability is defined as '... a measure of how consistent a research method is' (Diamond, 1999). Silverman (1993) outlined a number of ways that reliability can be achieved in qualitative research: pre-testing interview protocols and questions; using fixed-choice responses; and systematically collecting, transcribing and reporting field notes and transcripts for others to review as necessary.

In this study reliability was achieved through being a sole interviewer/observer and using the same set of guiding questions for all interviews. The quantitative tool used (the questionnaire) was reviewed by professional colleagues and contained questions that were pre-tested. Fixed-choice responses were also used in a number of questions.

#### 3.5.3 Validity

Validity is another issue considered in this study. Validity is defined as a '... measure [that] measures what it is intended to measure' (de Vaus, 1991). Validity relates to how well the analysis actually represents the phenomena it purports to represent: '... to know [that] the means of assessment you have developed is accurate and appropriate' (Diamond, 1999). One issue related to validity is bias. This is especially problematic in qualitative research as it has been recognised that interviewers come to the research with their own biases (Carr & Kemmis, 1986; Usher, 1996; Yates, 2004).

Silverman (1993) stated that validity in qualitative research can be covered through triangulation using several different ways to collect and analyse data about the same phenomena. Triangulation has been defined as '... the use of two or more methods of data collection in the study of some aspect of human behaviour' (Cohen & Manion, 1994). Triangulation enables the

complexity of human behaviour and thought to be uncovered, as well as offering opportunities for introducing more creative and flexible elements to the research.

The term derived from navigation where different bearings were used to give the correct position of an object (Cohen & Manion, 1994). Triangulation provides validity checks by comparing data gathered in different ways. Another concept discussed in the literature is ecological validity, also called context validity. Ecological validity means that a theory which was applied to a specific setting need to be generated from studies that are undertaken within that setting in order to be confident about the applicability of any resulting theory (Dierking, 1992; Entwistle, 1997).

There are two ways validity was addressed in this study. First, the variety of instruments used i.e. the questionnaires and case studies ensured triangulation. These included learning diagrams, open-ended questions, rating scales, semantic differential scales, conversations and observations. Second, ecological validity were met through locating the study within the institution.

The validity of the research instrument was then tested for internal consistency by use of Cronbach's Alpha ( $\alpha$ ) with a 60% acceptance level. It indicates the extent to which a set of test items were treated to measure a single latent variable (Cronbach, 1951). The recommended value of 0.7 was used as a cut-off of reliabilities. Validity is the strength of conclusions, inferences or propositions. More formally, Patton (2002) define it as the best available approximation to the truth or falsity of a given inference, proposition or conclusion.

#### 3.7 Pilot Study

Cooper and Schindler (2010) indicated that a pilot test is conducted to detect weaknesses in design and instrumentation and to provide proxy data for selection of a probability sample. According to Mugenda and Mugenda (2003), a pilot study is conducted when a questionnaire is given to just a few people with an intention of pre-testing the questions. Pilot test is an activity that assists the research in determining if there are flaws, limitations, or other weaknesses within the interview design and allows him or her to make necessary revisions prior to the implementation of the study (Ngechu, 2004). A pilot study was undertaken on at least (10) respondents of Housing finance Corporation to test the reliability and validity of the questionnaire. The purpose of a pilot test was to test the reliability and validity of the

questionnaire and enabled the researcher to amend the questionnaire as appropriate so as to capture data accurately. And out of 10 questionnaire that were sent for pilot study, 100% were filled up and returned to the researcher.

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# 3.8 Operationalisation of Variables

The Operationalisation of variables is as shown in table 3.2

Objectives	Variables	Indicators	Scale	Tools of analysis	Type of analysis
To examine the extent to which interest rate influence mortgage financing in Kenya	interest rate influence mortgage financing	-Price assets -Price liabilities	Nominal ordinal	Frequency distribution tables & percentages	Descriptive
To establish the extent to which housing policies and procedure influence mortgage financing in Kenya	Housing policies and procedure influence mortgage financing	-Sustainable development - Competitiveness	Nominal ordinal	Frequency distribution tables & percentages	Descriptive
To investigate the extent to which political environment influence mortgage financing in Kenya	Political environment influence mortgage financing	-Taxes -Laws	Nominal ordinal	Frequency distribution tables & percentages	Descriptive
To determine the extent to which environmental risks influence mortgage financing in Kenya	Environmental risks influence mortgage financing	-Farm Acreage -Erosion	Nominal ordinal	Frequency distribution tables & percentages	Descriptive

# Table: 2 Operationalisation of Variables

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### **3.9 Ethical considerations**

This study was undertaken within ethical frameworks of social research. In particular, the researcher was guided by legal and moral principles of social research as outlined by Diener and Crandal (1978) cited by Brayman (2001) which are; where there is lack of informed consent, whether deception is involved, whether there is harm to the participants, whether there is an invasion of privacy.

The researcher sought appropriate authorization to conduct research in Housing Finance Company in accordance with financial institutions requirements. This included letter from the University of Nairobi to introduce the researcher to the study case. Permit to conduct the research was obtained. Temptation to deception comes when the researcher want to limit participants understanding of what the research is about so that they respond more naturally to the experimental treatment (Bryamn. 2001).

The principle of informed consent also entails the implication that even when people know they are being asked to participate in the research, they should be fully informed about the nature of the research and possible implication on them (Bryman, 2001). This means they should be aware of what they are entitled to including the right to withhold certain information or to withdraw information they have provided to protect themselves from harm. Informed consent also means that the right to privacy is surrendered for that limited domain (Bryman, 2001).

Every effort was made to maintain confidentiality by identifying the circumstances in the study that may pose harm to the participants. This may entail use of pseudonyms in extreme cases where information is critical to the study but care is needed to ensure individuals are not identified and exposed to harm. In ensuring there is no harm to the participants in the study. In this study, harm may entail risk to the participant's jobs for disclosing company information that fall under confidential, classified or secret.

According to Creswell, (2009) ethical issues apply in all stages of the study; from the selection of the research problem, in developing the purpose of the study, data collection, data analysis and interpretation and in writing and disseminating the research.

### 3.10 Data Collection Procedures

It took a period of two weeks to collect the data required as all the respondents were within close proximity to each other, domesticated by the nature of their employment and positively acquainted to the researcher. The respondents were required to complete questionnaire as honestly and as completely as possible. The researcher used assistants to distribute by hand the questionnaires to be completed by the selected respondents. Upon completion, the research assistants collected the questionnaires and ensure high completion rate and return of the completed questionnaires. The researcher used drop and pick method so as to give the respondents enough time as possible to fill the questionnaire.

### 3.11 Data Analysis

Data collected was sorted, classified and coded then tabulated for ease of analysis. The data was summarized and categorized according to common themes. Data collected was analyzed using frequency distribution tables, descriptive statistics and inferential statistics. The SPSS (version 17) computer software aided the analysis as it was more users friendly and most appropriate for analysis of Management related attitudinal responses (Newton and Jeonghun, 2010). In addition, data was analysed through inferential analysis where by correlation analysis was conducted using Pearson correlation for parametric data and spearman moment correlation was be used for non-parametric data.

Data presentation was done by the use of pie charts, bar charts and graphs, percentages and frequency tables. This will ensure that the gathered information is clearly understood.

The regression model will take the following form:

 $Y = a_{+} B_{1} X_{1+} B X_{2+} B_{3} X_{3-} B_{n} X_{n+} \varepsilon$ 

Where:

Y = Dependent Variable (Mortgage Financing)

Xi = Independent variables

 $X_1 = Interest rate$ 

 $X_2 =$  Policies and procedures

## X<sub>3</sub>-Political environment

## $X_4$ = Environmental risk

and the second s

a - the constant

 $\epsilon = error term$ 

### **CHAPTER FOUR**

### DATA ANALYSIS, PRESENTATION AND INTERPRETATION

### 4.1 Introduction

This chapter presented analysis and findings of the study as set out in the research methodology. The results were presented to investigate the factors influencing mortgage uptake in Kenya. The data was gathered from questionnaire as the research instrument designed in line with the objectives of the study. Additional data was collected from annual reports and financial statements of housing finance.

#### 4.2 Response Rate

Response rate indicates whether the data collected are enough for statistical analysis.

#### **Table: 3 Response Rate**

The table below shows the response rate of those sampled. A total of 71 questionnaires were sent out of which 47 were filled –in and returned to the researcher this accounts for 66 percent which is considered representative of the population under study.

Response	Frequency	Percentage			
Responded	47	66			
Not responded	24	34			
Total	71	100			

# Source: Survey Data, 2012

#### 4.3 Demographic information

The researcher begun by a general analysis on the demographic data got from the respondents which included; - the gender, age, academic qualification of the respondent and duration of business existence.

### 4.3.1 Age and Gender of respondent.

The table below shows the age and gender distribution of the respondents in the study. In the first column, respondents are classified in terms of age from 20- 30 class interval which to over 50 the highest class. The second column indicates the age frequency of a particular class. The third column records the percentages of the frequency of age groups. The third and fourth columns indicate the gender distribution of different of different age groups.

Age	Frequency	Percentage	Male	Female
20-30	16	34	7	9
31-40	15	32	7	8
41-50	12	26	8	4
Over 50	4	8	4	0
Total	47	100	26	21

Table: 4 Frequency	/ Distribution of	Age and Gen	der of Respondents
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#### Source: Survey Data, 2012

There are number things that can be noted from the demographic composition of the respondents. In terms of gender, 55% of the respondents were males while the remaining 45% percent comprised of females. Major gender disparities were notable in the age groups of 20-30 dominantly female and 41-50 age groups comprising mainly of males. In terms of age 34% of the respondents indicated that they were between 20-30 years of age, 32% of the respondents indicated they were between 31- 40 years. 26% of the respondents indicated they were between 41-50 vers and 8% of the respondents indicated that they were over 50 years.

# 4.3.3 Academic qualification

The academic qualification of respondents also formed part of the study. The findings are shown in the table below. The first column indicates the level of qualification, the second column shows the frequency of respondents with a particular qualification and the last column shows percentage of respondents with a given qualification.

# Table: 5 Academic Qualification

Qualification		Frequency	Percentage		
Diploma		4	8		
Bachelors		28	60		
Masters	÷.	15	32		
Total		47	100		

### Source: Survey Data, 2012

From the findings of the study, most respondents have attained bachelor degree qualification which forms 60% of the sample. Another 32% of the respondents have also attained master's degree qualification while only 8% have diplomas. These results indicate that the respondents comprise of very qualified group capable of provide accurate information for our study.

# 4.3.4 Duration of work the business.

Another demographic data that the study investigated was work experience in the industry that was measured in terms of duration of work in the business by the correspondents.

The table below shows works experienced classification in terms of years of work in the business by the respondents. The first column indicates work of experience in terms of years of work, the second column indicates the frequency and the third column indicates the percentage of respondents with a particular work experience.

# Table 6: Years of Work

Years of work	Frequency	Percentage		
1-5	9	19		
6-10	20	43		
11-15	6	13		
6-20	5	10		
Over 20	7	15		
Total	47	100		

### Source: Survey Data, 2012

The study sought to find out the number of years the respondents had worked in their institutions. From the findings, 43% of the respondents indicated that they had worked for 6-10 years, 19% of the respondents indicated that they had worked for 1-5 years, 15% of the respondents indicated that they had worked for over 20 years, 13% of the respondents indicated that they had worked for 11-15 years, 10% of the respondents indicated that they had worked for 11-15 years, 10% of the respondents indicated that they had worked for 11-15 years, 10% of the respondents indicated that they had worked for 11-15 years, 10% of the respondents indicated that they had worked for 11-15 years, 10% of the respondents indicated that they had worked for 11-15 years, 10% of the respondents indicated that they had worked for 11-15 years, 10% of the respondents indicated that they had worked for 16-20 years.

#### 4.4 Factors Influencing Mortgage Financing

In order to examine factors that influence mortgage financing the study employs primary data collected in the survey. A number of variables are identified that includes: interest rates, policies, political and environmental risk. In addition, the study will further use secondary data to analyse the effects of these variables on mortgage financing based on the findings of the primary data.

### 4.4.1 Interest rates influence

The first question of the survey asked respondents whether interest rates influence mortgage financing in the organizations. 83% of the respondents indicated that interest rates influence mortgage financing while 17% of the respondents indicated that interest rates did not affect mortgage financing. Given the propensity of a majority of respondents to indicate that interest rates that interest rates do influence mortgage financing, concern is raised whether the remaining 17% answered the question correctly.

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### 4.4.2 Major causes of changes in interest rates

The respondents were also asked about major causes of changes in interest rates. An equally sizable number or 47% of the respondents indicated that inflation was a major cause of change in interest rates, 32% of the respondents indicated that instability of currency was a major cause of change in interest rates, 21% of the respondents indicated that potential risks was a major cause of change in interest rates.

The table below summarizes the major causes of interest rate changes. The first column lists the causes while the second column indicates views of respondents.

Causes of Interest rates Changes	Percentage of respondents
Inflation	47
Currency Volatility	32
Potential Risk	21
Total	100

#### Table 7: Factors causing Interest rates Changes

#### Source: Survey Data

#### 4.4.3 Policies that govern Mortgage Financing

The next set of questions addressed the role of major policies that govern mortgage financing. From the findings, respondents indicated that interest rate setting on mortgage debt; government instruments and fiscal measures are the major policies that govern mortgage financing. Government debts instruments affects mortgage financing because they both target the same class of investors. Respondents noted that high government borrowing crow-out mortgage firms in the secondary market.

## . 4.4.4 Policies facilitating smooth completion of property

The other question asked respondents whether the policies in mortgage financing facilitate smooth completion of property transactions and foreclosures. From the findings, 91% of the

respondents agreed with the statement, while 9% of the respondents disagreed with the statement.

### 4.4.5 Growth in mortgage financing

The question as to whether legal framework within which mortgage financing operates can be improved to ensure growth in mortgage financing was also asked. The respondents were in agreement that there is need for a legal framework to enhance secure and transparent lands titles to lower risk of mortgage lending and lending rates. In addition, respondents suggested that legislation such as the Banking Act, the Building Societies Act, the Insurance Act and other legislation relating to land and housing development should be harmonized for smoothing sourcing of finances for Mortgages. Respondents also noted that there is need to facilitate development of a secondary mortgage market to mobilize additional resources for mortgage financing

#### 4.4.6 Political Inferences

The question of whether political Inferences affect mortgage financing in Kenya was addressed by the respondents. And the findings indicated that laws and institutions that are created to stimulate financial development and centralized/powerful governments are incompatible with financial development and affect mortgage financing in Kenya. Respondents cited taxes, stamp duty and business licensing for housing finance as major political hindrance to mortgage finance.

#### 4.4.7 Mortgage development in Kenya.

Another question asked in the survey was to find out whether the state has created laws to stimulate mortgage development in Kenya. From the findings, 57% of the respondents agreed to the statement while 43% of the respondents disagreed to the statement. Those in disagreement state stringent regulations by the central bank regarding interest rates on mortgage loans as a major hindrance to mortgage financing and lack of development of a secondary market. While those in agreement noted that through the housing policy of 2004, the government has enabled people of different income groups to form housing co-operatives that can provide loans for mortgage. They also noted that the establishments of National Housing Corporation that will in

UNIVERSITY OF NAINUR KIKUYU LIBRAF O. Box 3010future manage a mortgage guarantee scheme or other agencies which can provide guarantees to finances institutions.

# 4.4.8 Environmental risk on Mortgage Financing

The final part of the questionnaire dealt with effect of environmental risks on mortgage financing. From the findings, respondents indicated that spills or explosions, use of hazardous materials in construction, risk of flooding, land sliding, seismic activity were some of the environmental risks that influence mortgage financing. The respondents were able to point out both local authorities and national government regulations dealing with environmental risks. Such regulation ranges from environmental impact assessment to delineation of high – risk regions for mapping of different disasters.

#### 4.4.9 Risk Factor Analysis

#### Table: 8 Risk factor analysis

	Mean	Std. Deviation
Interest rates	4.1471	.92548
Lack of secure and transparent titled lands	3.8824	1.36548
Increasing risk of mortgage lending	3.8824	.91336
Policies and procedures	3.7059	1.29168
Political environment	3.6765	1.36450
Environmental risks	3.5882	1.32842

The main of objective of the study was to find out the extent to which the above mentioned factors influence mortgage financing. From the findings, respondents indicated that interest rates was to a very great extent as shown by a mean score of 4.1471, lack of secure and transparent titled lands was to a very great extent as shown by a mean score of 3.8824, increasing risk of mortgage lending was to a very great extent as shown by a mean score of 3.8824, policies and procedures was to a very great extent as shown by a mean score of 3.7059, political environment was to a very great extent as shown by a mean score of 3.6765, environmental risk was to a mean score of 3.5882.

# Table: 9 Spearman Correlation Matrix

The table provides the spearman's correlation matrix and associated significance level for the main variables Interest rates, Policies and procedures, Political risks, Environmental risk and Mortgage finance.

			INTRATE	PLCIES	PRISK	ENVRISK	MORT.FIN
Spearman's rho	INTRATE	Correlation Coefficient	1.000	552	.000	.000	.273
		Sig. (2- tailed)	•	.098	1.000	1.000	.446
		N	47	47	47	47	47
	PLCIES	Correlation Coefficient	552	1.000	640	.640	.321
		Sig. (2- tailed)	.098		.046	.046	.365
		N	47	47	47	47	47
	PRISK	Correlation Coefficient	.000	640	1.000	-1.000	853
		Sig. (2- tailed)	1.000	.046	•	.000	.002
		N	47	47	47	47	47
	ENVRISK	Correlation Coefficient	.000	.640	-1.000	1.000	.853
		Sig. (2- tailed)	1.000	.046	.000		.002
		Ň	47	47	47	47	47
	MORT.FIN	Correlation Coefficient	.273	.321	853	.853	1.000
		Sig. (2- tailed)	.446	.365	.002	.002	-
		N	47	47	47	47	47

For the above matrix, Political risk and environmental risk are negatively correlated at -1.000. Other variables such as interest rates are negatively correlated with policies and procedures such that a change in interest rates will affect policies and procedures. The find the variables statistically significant.

#### **CHAPTER FIVE**

# SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

## **5.1 Introduction**

This chapter provides a summary of the findings, the conclusion and the recommendation of the study is to investigate the factors influencing mortgage financing in Kenya.

#### 5.2 Summary of Findings

The following were the summary of the research findings upon which the conclusion and recommendations of the study were made.

The study established that majority of the respondents were men. The study found out that majority of the respondents was aged between 23-30 years. The study established that majority of the respondents had attained bachelors degree. The study also established that majority of the respondents had worked for 6-10 years in their organizations.

The first research question sought to establish whether interest rates influence mortgage finance in Kenya. The study established that majority of the respondents were in agreed that interest rates influence mortgage financing. The second research question was to establish the extent to which policies and procedures influence mortgage finance in Kenya. The findings indicated that 91% of those interviewed were positive that policies and procedures do influence mortgage financing. On the question of whether political environment influence mortgage financing, the study found that 57% the respondents agreed with the statement while 43% were in disagreement. The last question of study was to established the effect that environmental risk on mortgage financing and the findings indicated that environmental risk do affect mortgage financing mainly because properties located in risk areas are unlikely to be funded. Finally, majority of the respondents also indicated that inflation was a major cause of change in interest rates and that interest rate setting on mortgage financing. In addition, the study majority the respondents agreed that the policies in mortgage financing facilitate smooth completion of property transactions and foreclosures. Respondents also noted that enhancing secure and transparent titled lands will minimise the risk of mortgage lending can ensure growth in mortgage financing. Laws and institutions that are created to stimulate financial development and centralized/powerful governments which are incompatible with financial development were cited as some of the factors affect mortgage financing in Kenya and majority of the respondents agreed that the state has created laws to stimulate mortgage development.

#### **5.3 Discussions**

The housing sector plays an important role in the Kenyan economy and is therefore a major concern of the government. This concern is underlined by the fact that improvement in housing stock is a strategically for the countries socio-economic investment and stability. It is believed that continuous investment in housing will contribute, either directly or indirectly, towards poverty reduction through employment generation, rising of incomes, improved health and increased productivity of the labour force (National Housing Policy of Kenya, 2004). At present, the demand for housing still far outstrips supply (NHPK, 2004). According to some estimates, the current housing needs in Kenya are 150.000 units per year. However, it is estimated that on 20,000-30,000 units are developed annually, giving a shortfall of over 120.000 units per annum (NHFC, 2004). This shortfall in housing has been met through proliferation of squatter and informal settlements and overcrowding (Central Bank of Kenya & World Bank, 2010). To mitigate this perennial shortfall, 77 it's been the goal of the government since independence to facilitate, either directly of indirectly, the development of well-planned and affordable housing of acceptable quality (International Monetary Fund, 2011).

To spur development in the housing sector, the Kenyan government has consistently funded the development of affordable housing in the some urban areas (International Monetary Fund, 2011). At the same time, credit unions, mortgage brokers, banks and mortgage bankers etc have also contributed significantly in this area. HFK is one such institution. However, the involvement of the actors like HFK in the primary mortgage market depends upon several factors including: macroeconomic stability among others. In this regard, CBK interest rate is known to influence is known to influence mortgage financing. This view was held by a majority of respondents in this study. Similarly, it was the view of these respondents that inflation was a major cause of change

in interest rates. The adverse impact of inflation on interest rates has been reviewed by some investigators. For instance, Clayton et al (2006), currency volatility and inflation is a persistent feature most developing countries.

The study revealed that interest rate setting on mortgage debt; government instruments and fiscal measures are the major policies that govern mortgage financing. The relevance of these factors with respect to the Kenyan government can readily be appreciated. For instance, increase in domestic borrowing by the government can crowd mortgage lenders given then fact that risks on government bonds are much lower. It must also be appreciated that lending to the government would also be preferred by HFC. Since the government of Kenya relies on deficit financing of its expenditure, domestic borrowing is high. This has resulted in limited access to funding for housing development. For this reason mortgage lending has not reached all target groups. And qualifying terms for mortgages are still too stringent (Central Bank of Kenya & World Bank, 2010).

Another example of how the CBK interest rate can impact negatively on mortgage financing was well exemplified in Kenya in the past year. To stabilize the Kenyan currency, CBK increased interest rate to 18%. Immediately following this rate adjustment, financial institutions unadjusted their interest upwards with some institutions setting their lending rates at 25%. This development led to a net increase in mortgage (CBK, 2012). For this reason, there was a rise in the number of unsold units by developers. The relatively high interest rate may also explain the fact that at present, mortgage lending by formal financial institutions like HFC only benefits the high-income households (Central Bank of Kenya & World Bank, 2010).

The study also revealed that majority the respondents agreed that the policies in mortgage financing facilitate smooth completion of property transactions and foreclosures. According to Gambrah (2001) the backlog of land title applications perpetuates multiple sale of land with the effect that the land market cannot operate effectively to either enable the development of a formal market for mortgage or to act as security for mortgage finance.

In the past, inappropriate fiscal policies on real estate financing, inability to finance house loans to groups, low affordability due to poverty, absence of graduated payments of mortgages and lack of access to the large deposits of retirement benefit funds have hindered the development of the housing sector. In this study, a majority of the respondents agreed that the state has created laws to stimulate mortgage development. At present, the Kenyan government is working on a bill to harmonize the Banking Act, the Building Society Act, the Insurance Act and the various Acts relating to land and housing development and amend the sections in these Acts that have so far proved to be a hindrance to the sourcing of housing finance (National Housing Policy of Kenya, 2004). Proposal to amend the Retirement Benefits Authority Act, to recognize retirement benefits for workers as a suitable security against mortgage are also under consideration. At the same time, proposals to amend the investment guidelines of the Retirement Benefits Authority to permit holding of mortgage backed securities by pension funds is also under deliberation.

### **5.4 Conclusions**

The study concluded that inflation was a major cause of change in interest rates. The study also concludes that unstable inflation hinders access to external long-term finance for mortgage lending.

The study concluded that interest rate setting on mortgage debt: government instruments and fiscal measures are the major policies that govern mortgage financing. The study concluded that policies in mortgage financing facilitate smooth completion of property transactions and foreclosures.

The study concluded that laws and institutions that are created to stimulate financial development and centralized/powerful governments which are incompatible with financial development affect mortgage financing in Kenya.

# 5.5 Recommendations

The study has explored the factors influencing mortgage financing in Kenya.

- 1. Further study should be carried out incorporating the entire industry at the functional level and set within the context of the overall corporate strategy. This would enable an organization to know the needs and requirements of a market so as to find out whether they match their strengths and capabilities.
- 2. Further it may be useful to carry out comparable studies from other institutions that have adopted different strategies.

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# APPENDICES

### **Appendix I: Introduction Letter**

Aguko Juma P.O. Box 28403-00200, Nairobi.

Dear Respondent.

This questionnaire is designed to gather information on "Analysis of the factors influencing mortgage financing in Kenya". The study is being carried out for a management project paper as partial fulfillment of masters' degree in project planning and management of the University of Nairobi.

The information you shall avail will be treated with confidentiality and no instances will your name be mentioned in this research. Also, the information will not be used for any other purpose other than for this academic exercise.

Your assistance in facilitating the same will be highly appreciated.

A copy of this research paper will be made available to you upon request.

Thank you in advance

Yours sincerely

AGUKO JUMA MA (PPM) Student University Of Nairobi

## **Appendix II: Questionnaire**

### Section A: General Information

1. Please indicate your Gender.

Male () Female ()

- 2. Department .....
- 3. What is your age bracket?

25-30 Years () 31-40 Years () 41-50 Years ()

Over 50 years ()

4. What is your highest level of education?

Diploma () Bachelor degree () Masters Degree ()

Others (please state).....

5. How many years have you worked in this institution?

1-5 years () 6-10 years () 11-15 years () 16-20 yrs ()

Over 20 years ()

## Section B: Factors Influencing Mortgage Financing

- 6. Do interest rates influence mortgage financing in your organization?
  - a. Yes () b) No ()
- 7. What are the major causes of changes in interest rates?

Inflation	()	Potential Risks (	)	Instability of currency ()
b). others (indicate)				

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8. Which major policies govern mortgage financing?
9. a). Do the policies in mortgage financing facilitate smooth completion of property transactions and foreclosures?
Yes () No ()
b). Explain your answer
10. In your opinion, how can the legal framework within which mortgage financing operates be improved to ensure growth in mortgage in financing?
11. Which political interference affect mortgage financing in Kenya?
12. Has the state created laws to stimulate mortgage development in Kenya? Yes () No ()
b). If yes (Explain)
13. Which environmental risks influence the mortgage financing?
14. To what extent do the following factors influence mortgage financing? Use a scale of
1-5 where; 5 is to a Very Great extent, 4- To a great extent, To a moderate extent, 2- to a very little extent and 1 - to no extent
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	Very great	extent	Great extent	Moderate	extent	Low extent	No extent at	all
Lack of secure and transparent titled lands								
Increasing risk of mortgage lending							+	
Interest rates							-	
Policies and procedures	-							
Political environment								
Environmental Risks								

# THANK YOU FOR PARTICIPATION