

# Determinants Influencing Performance of Mortgage Financing in Kenya; A Case of Housing Finance Company of Kenya

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## I. INTRODUCTION

The study's main objective was to examine how interest rates affect mortgage financing in Kenya. Theories that supported the study are asymmetric Information theory and credit risk theory, the descriptive survey was considered by the researcher since it facilitates the gathering of information over a wide geographic area and assists in describing the occurrences as they actually occur. 238 personnel from various departments of Kenya's Housing Finance Corporation made up the research population. To reach diverse employees and supervisors at different levels of management, a stratified random sample method was considered. By using questionnaires that were given to the sampled respondents, primary data was gathered. A reliability test was carried out and was accepted at 0.7 Cronbach to ensure the research instrument was reliable. Construct and content validity test was carried out to ensure the research instrument measured what it purported to measure. A pilot test was conducted on ten employees in Kenya's commercial bank mortgaging department in Nairobi. An ethical clearance letter, informed consent, and NACOSTI letter were availed to the respondents before collecting data. Data collected was presented in tables and frequencies. Inferential analysis was also utilized to further analyze the data. For parametric data, correlation analysis was done using Pearson correlation, and for non-parametric data, spearman moment correlation. According to the study's findings, the main regulations governing mortgage financing include interest rate setting on mortgage debt, governmental instruments, and fiscal actions. The study came to the conclusion that mortgage finance policies help property deals and foreclosures go through smoothly. The study made the suggestion that more research be done, taking into account the whole industry at the functional level and within the framework of the overall business strategy.

### 1.1 Background of the Study.

Mortgages are primary method of financing private ownership of both residential and commercial property in many nations. Mortgages on real estate are provided by financial institutions as security. Around 80% of the value of the mortgaged property is lent out as a considerable amount of money by financial institutions, to be repaid with agreed-upon interest over a certain period of time. Depending on local conditions, mortgage agreements provide for monthly payments for a term of 10 to thirty years (Dolde, 2016). The level of interest rate spread, which is a bank's primary performance measure, affects the investment portfolio of commercial banks. This has a direct impact on the appropriation of funding and the distribution of real capital to particular businesses and industries (Zarruk, 2019).

It was observed that low savings interest rates cause less supply than demand. When clients fight for the finite supply of loanable money, banks will then raise their interest rates, which will reduce the amount demand by borrowers and result in the establishment stability. This increases the interest rate spread (I.R.S). The high interest rates on mortgages deter potential commercial property owners and individual residential home builders. Borrowers are more inclined to do so when interest rates are lower because it is less expensive for them to do so. Whilst, high interest rates make credit more expensive, which discourages borrowers. In the event that the borrowers default, the banks retake when debtors are unable to repay debts, the purchased property is used as collateral and goes into foreclosure.

#### 1.1.1 Financial Performance of Mortgage Firms

The process of evaluating the financial outcomes of a company's operations and policies is known as performance. Cross-sectional analysis, ratio analysis, and trend analysis are some of the techniques used. By removing the size effect, ratio analysis gives a complete image of an institution's status (Chandra, 2015). Financial ratios are divided into the

following categories: profitability, liquidity, leverage, turnover, and value ratios. The outcome of enterprises is examined and studied in a number of researches (Humphrey, 2017). These studies evaluate an organization's success using Return on Assets and Return on Investment, captures the operating performance of a company.

### **1.1.2 Mortgage Firms in Kenya**

In the last five years, the mortgage market has more than tripled. By the middle of 2019, Kenya's mortgage market had increased from Ksh 22 billion in 2016 to Ksh 61 billion. This amounts to a growth rate of 33% on a yearly average, demonstrating a significant rise in mortgage financing. There have been a lot more new loans. However in 2016, there is a consistent increase in new loans, supporting the expanding mortgage market. In 2016, there were roughly 2,300 new loans, however by 2019; the portfolio in borrowing had increased to almost 7,000. The number of new loans reached 20,899 by May 2019, continuing the steady growth witnessed in earlier years.

### **1.2 Statement of the Problem**

Delivering sustainable housing to a nation's residents requires an effective and sustainable housing finance regime. The global housing finance business is a crucial source of funding for housing (Boamah, 2019). By providing long-term mortgage loans with reasonably reasonable monthly payments to borrowers, the housing finance industry makes a substantial contribution to solving the problem of inadequate or inadequate housing. The duration of a housing investment makes a significant amount of long-term financing necessary. When a healthy home finance market is in place, this can be sufficiently provided. According to Gevorgyan et al. (2016), financial institutions' ongoing development and offering of suitable mortgage products is a crucial strategy for increasing people' access to housing. The establishment of a sustainable home finance system depends on the ability of lenders to enforce their liens. According to a 2018 survey by the Kenyan Central Bank and the Development Bank in Kenya, the biggest obstacle to the country's housing market is long-term access to capital. Banks identified the biggest obstacle to the growth of their mortgage portfolio as being the availability of long-term financing. Based on a rating of mortgage market restrictions. High interest rates were also considered a significant restraint, along with the Credit risk and low-level incomes/informality limits intersect. Notwithstanding the difficulties and dangers mentioned above, little research has been done on the variables affecting mortgage lending in Kenya. With the aforementioned context in mind, the researcher set out to close the gap by undertaking a study to look at the variables affecting mortgage lending in Kenya.

### **1.3 Purpose of the Study**

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

### **1.4 Study Objectives**

- i. To determine how interest rates affect performance of mortgage financing in Kenya.

### **1.5 Research Questions**

- i. How does interest rate affect performance of mortgage financing in Kenya?

## **II. LITERATURE REVIEW**

### **2.1 Introduction**

The academic papers of other scholars on the subject of credit risk management were analyzed in this chapter. The literature will encompass theoretical and empirical research on the factors affecting mortgage finance. The theoretical review discussed credit risk theory as well as asymmetric information theory.

### **2.2 Overview of Mortgage Financing**

According to Xudong (2018), a mortgage is a debt that is secured by an asset that generates revenue, such as a retail space, office, hotel, or multifamily building. Donald & Thornton (2018) claim that a mortgage is a particular sort of real estate debt, just as the earlier definition. Additionally, a mortgage can refer to both the process of pledging real estate as security for a debt as well as the instrument that does so. According to Tuma (2015), a mortgage happens when owners pledge their interest as security or collateral for a loan. This implies that any type of property, such as a car, piece of land, or even a structure, is eligible for a mortgage. It is any legal or equitable charge, encumbrance, debenture, or loan arrangement that is registered under the Registration of Titles Act and represents a charge over an estate or interest in Uganda.

### **2.3 Theoretical literature**

The following theories served as the foundation for this study's investigation.

### 2.3.1 Asymmetric Information Theory

Askerlof (1970) uses the automotive industry as an example to develop asymmetric information. His major argument is that buyers commonly use market statistics to assess a class of commodities' value across a variety of markets. As a result, the vendor has a better grasp of a specific item, while the buyer receives the market average. This knowledge asymmetry, in Akerlof's opinion, promotes the seller to offer goods of lesser quality than the standard for the market.

### 2.3.2 Credit Risk Theory

Risks have never extensively examined until the past thirty years, despite the fact that people have been exposed to it since they were very young. Early credit risk research relies on conventional actuarial approaches, which have a significant drawback due to their total reliance on historical data. There are three main quantitative methods used to analyze credit risk to date (Crosbie et al. 2013). According to Merton's (2017) introduction of A default event arises from the evolution of a lender's assets, which is characterized by a diffusion process with constant parameters, according to the credit risk theory, also referred to as the structural theory.

### 2.4.1 Interest rates and Mortgage Financing

Inflation and currency rate volatility are two significant factors that have an impact on mortgage prices and, consequently, mortgage supply. Lenders run the risk of losing out on the value of regular repayments in the absence of suitable instruments. Because of this, predicted inflation has an impact on the nominal interest rate applied, resulting in high stated repayments and the front-loading of payments to make up for a gradual loss in purchasing power. Real interest rates could rise due to the high-risk premium even in cases where there is a potential of financial distress costs.

### 2.5 Conceptual framework

The paradigm demonstrates how independent factors (interest rates, rules and regulations, the political climate, and environmental risk) interact with one another and how they affect the dependent variable, mortgage finance. The independent variables in this case Housing Company in Kenya demonstrate how they affect mortgage finance in Kenya.

Independent variable

Dependent variable

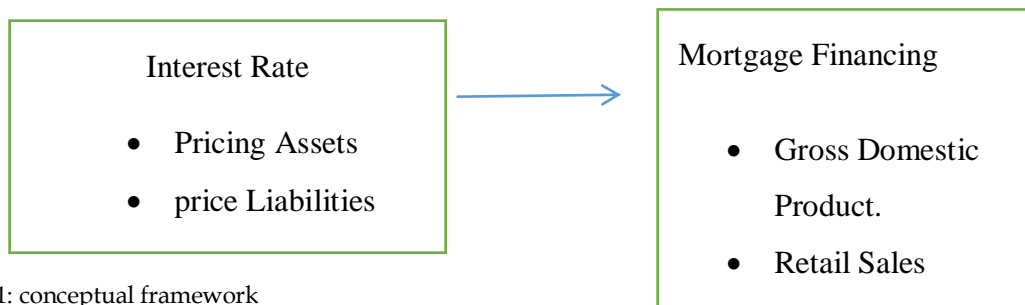


Figure 1: conceptual framework

### 2.5.1 Interest Rate and Mortgage Financing

Lenders, like banks, provide mortgages that enable homebuyers to amortize the purchase of a home over a number of years by making affordable monthly payments. Nonetheless, the interest rates and overall cost of mortgages vary greatly. Many factors influence mortgage rates, including supply and demand, which fundamentally regulates mortgage interest rates. Lenders may impose higher interest rates when many people apply for mortgages to purchase properties.

## III. RESEARCH METHODOLOGY

### 3.1 Introduction

In this chapter, the research design is covered. It also covers the target population, sample method, research tool, and data gathering method, reliability and validity testing. Data analysis and presentation, a pilot research, and ethical considerations.

### 3.2 Research Design

According to Cooper and Schindler (2016), the study design serves as the blueprint for data collection, measurement, and analysis. The research study employed a straightforward descriptive survey to collect data on how mortgage finance and independent variables like interest rate, profit, and other demographic parameters relate to one another.

Kraemer (2017) highlighted three features that set survey research apart. Survey research is utilized in the first place to quantitatively define particular characteristics of a given group.

### **3.3 Target Population**

The real estate companies, brokerage businesses, and banks were the sources of the purposeful selection of the participating respondents. The respondents were then chosen by simple random selection from the banking industry and mortgage/brokerage companies. Surveys for mortgage businesses were targeted at project managers, while those for banks were limited to Mortgage Finance Managers who work directly with mortgage clients. Additionally taken into consideration were the study instrument's validity, reliability, and pilot testing.

### **3.4 Sampling procedure**

The sources of the carefully chosen participants' answers were the banks, brokerage firms, and real estate firms. Following that, the respondents were picked at random from the banking sector and mortgage/brokerage firms. Project managers were the only ones included in surveys for mortgage companies, whereas only Mortgage Finance Managers, who deal with clients directly, were included in surveys for banks. Validity, reliability, and pilot testing of the study instrument were also taken into account.

The process of research, each person chosen is representative of the larger group from which they were chosen. Chandran (2018). To gather information on the various staff and management levels, stratified random sampling method will be used. Using this approach, the population is split into two or more meaningful strata according to one or more characteristics. According to Mugenda, any sample that is at least 10% and doesn't exceed 30% is sufficient for a study. Based on their departments, HFC employees will be separated into three strata. The sample size will then be determined by the researcher using proportionate sampling; for this study, 30% of each stratum's sample will be taken into account.

### **3.5 Research Instruments**

Primary data was collected by use of questionnaires which was administered to the sampled respondents. Questionnaires were selected as they have a wide coverage and the respondents can have enough time to respond to the questions.

#### **3.5.1 Data Collection Instruments**

The researcher obtained the information from HFCK Real Estate Companies in Kenya's Nairobi County. Data was gathered through a questionnaire from HFCK workers who were involved in mortgage lending. The use of a questionnaire was made possible by the ease with which information could be quickly and easily derived from it. (Oso and Onen, 2019). Due to the nature of the business in which they are employed, the target demographic was assumed to be literate, which reduced the amount of time needed for question interpretation. In order to gauge how much the respondents agreed with certain research factors, a Likert scale was utilized in the questions.

#### **3.5.2 Reliability**

A measure of it gives a flow of a research approach. 2019 (Diamond). Reliability in qualitative research can be achieved in a number of ways, according to Silverman (2015), including asking prior questions and protocols, applying fixed-choice reaction, and methodically gathering, field notes and transcripts for others to study through transcription and analysis needed. Being only questioner and employing the regularly repeated questions across board will help this study's reliability. The quantitative instrument that was utilized has pre-tested questions in it, and professional peers will review it. There are some questions that will also use fixed choice answers.

#### **3.5.3 Validity**

Another element taken into account in this study is validity. It is the assessment of that which is meant to assess is said to be valid (de Vans, 2011). Validity is determined by how accurately the analysis captures the phenomena it is intended to describe: (Diamond, 2019). Bias is one problem with validity. This is particularly troublesome in qualitative research because is acknowledged that questioners have personal biases when doing the study (Carr & Kemmis, 2016; Usher, 2016; Yates, 2014). According to Silverman (2018), triangulation, which involves combining multiple different techniques to gather and analyze data on the same phenomenon, can be used to cover validity in qualitative research.

### 3.6 Pilot Study

To assess their dependability, the research equipment were put through a pilot test. To verify the validity of the data collecting questionnaire, a total of 23 questionnaires were used in the pilot study. A pilot test using the key informants was conducted on a total of 23 key informant guides. These were chosen from the workforce of the KCB mortgage division. Secondary data was also examined through publications from real estate companies, pertinent Ministries, and the yearly CBK publishing reports. According to Mugenda & Mugenda (2015), research is done when a questionnaire is sent out to a small sample of people with the intention of pre-testing the questions.

### 3.8 Data collection procedure

The researcher began gathering data by requesting an introduction letter from Mount Kenya University's postgraduate programme. Data were gathered using a questionnaire that was self-administered. Establishing the link between mortgage finance and the other four separate impacts was the purpose of the questions. Because all of the respondents are geographically close to one another, domesticated by their employment, and familiar with the researcher, data collection took place over the course of two weeks.

### 3.9 Data Analysis and presentation

Collected data was categorized, coded, and tabulated. The information was then sorted and summarized in light of recurrent themes. Frequency distribution charts, descriptive statistics, and inferential statistics were used to examine the relationship of the data collected. The analysis employed SPSS software version 25 since it is more user-friendly and best suited for analyzing management-related attitudinal answers (Newton and Jeonghun, (2020). Inferential analysis was be utilized to further evaluate the data, with Pearson correlation for parametric data and Spearman moment correlation for non-parametric data being employed for correlation analysis. Percentage and frequency tables were used to illustrate the data. This will guaranteed that the data acquired, comprehended.

Model for regression took the following form:

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Where: Y = Dependent Variable (Mortgage Financing)

X = Independent variables

$B_0$  = Constant Term

$\beta_1$ - $\beta_4$  = Beta coefficients

$X_1$  = Interest rate,  $X_2$  = Policies and procedures,  $X_3$  - Political environment,  $X_4$  = Environmental risk, a - constant, e = error term

## IV. DATA ANALYSIS, PRESENTATION AND INTERPRETATION

### 4.1 Introduction

The analysis and study results were reported in this chapter according to the research methodology. Investigating the elements affecting Kenya's adoption of mortgages led to the results being presented. The research instrument used to collect the data was a questionnaire that was created with the study's goals in mind. Additional information was gathered from financial statements and annual reports of the home financing industry.

### 4.1 Response Rate

The response rate shows if there are sufficient data points for statistical analysis. A total of 71 questionnaires were distributed, and of those, 57 were completed and returned to the researcher, accounting for 80 percent of the population under investigation.

#### 4.2.1 Interest rates influence

Respondents were asked in the survey's first question if interest rates have an impact on how organizations' finance mortgages. While 17% of respondents said interest rates had no impact on mortgage financing, 83% of respondents said interest rates have an impact on mortgage financing. It is questioned if the remaining 17% of respondents accurately answered the question given that the majority of them tended to say that interest rates do affect mortgage finance.

4.2.2 Major causes of changes in interest rates

The main reasons for fluctuations in interest rates were also inquired of the respondents. A similar sizeable portion, or 57% of the respondents, said that inflation was a key factor in interest rate changes. According to 22% of respondents and 21% of respondents, currency volatility was a big factor in the change in interest rates. Potential dangers were also cited as a major factor in the change in interest rates. The primary reasons for fluctuations in interest rates are shown in the table below. In the first column, I describe the causes, and in the second, I give the respondents' opinions.

Table 1: Spearman Correlation Matrix

The table lists the key variables' significance levels together with the spearman's correlation matrix rates of interest rules and regulations.

Table 1: Pearson Correlation Coefficient

		Interest rates	Housing policies	Political risk	Environmental risk	Mortgage Financing
Interest rate	<b>Pearson Correlation</b>	1	.712**	.837**	.727**	<b>.812**</b>
	<b>Sig.(2-tailed)</b>		.000	.000	.000	<b>.000</b>
	<b>N</b>	57	57	57	57	<b>57</b>

Table 2: Model Summary

Model	R	RSquare	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.865 <sup>a</sup>	.813	.769	.08313	2.358

**a. Dependent Variable:** mortgage financing  
**b. Predictors:**(Constant), interest rate.

Source: Research Findings (2023)

V. SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The findings, the conclusion, and the suggestion of the study are summarized in this chapter. The study looked at the variables affecting mortgage lending in Kenya.

5.2 Summary of Findings

The overview of the research findings that served as the foundation for the study's conclusion and suggestions is provided below. The survey found that men made up the majority of the responders. The majority of responders, according to the research, were between the ages of 23 and 30. According to the survey, most of the respondents had earned a bachelor's degree. The survey also found that the majority of respondents had been employed by their organizations for 6-10 years.

5.3 Discussions

Kenya during the past year is a good case study of how the CBK interest rate may have a detrimental influence on mortgage lending. The CBK hiked the interest rate to 18% in order to stabilize the Kenyan shilling. Financial institutions increased their interest rates immediately after this rate modification, with some of them placing their lending rates at 25%. Mortgages increased as a result of this trend (CBK. 2017). The amount of unsold apartments by developers increased as a result. The comparatively high interest rate may also be the reason why mainly high-income families now



benefit from mortgage financing by formal financial institutions like HFC (Central Bank of Kenya & World Bank, 2019).

#### **5.4 Conclusions**

The analysis came to the conclusion that inflation was a significant factor in interest rate changes. The study also comes to the conclusion that fluctuating inflation makes it difficult for mortgage lenders to acquire long-term external financing. The study came to the conclusion that the two main policies governing mortgage financing are interest rate setting on mortgage debt and fiscal measures.

#### **5.5 Recommendations**

The study looked at the elements affecting Kenyan mortgage lending. The entire industry should be taken into account in further research, which should be done at the functional level and within the framework of the overall business strategy. An organization would therefore be able to determine if the demands and requirements of a market align with their strengths and skills. Additionally, it could be beneficial to do similar research from other schools that have chosen various tactics.

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