THE EFFECT OF MORTGAGE FINANCING ON PERFOMANCE OF REAL ESTATE MARKET IN KENYA

BY

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DECLARATION

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

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

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DEDICATION

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ABSTRACT

Real estate market has been used as a vehicle towards economic development. Performance of real estate is triggered by growth in population as there is adequate demand thus real estate participants provide housing units through mortgage financing. The housing sector require mortgage financing which entails monthly repayment, initial payment, long maturity and constant increase in prices of properties. The objective of the study was to establish the effect of mortgage financing on performance of real estate market in Kenya.

The study considered a population of 19,177 outstanding mortgage loans drawn from 35 mortgage and financial institutions. The study employed stratified sampling techniques to draw a sample size of 392 respondents. Structured questionnaires and interviews were used as instruments of data collection to gather primary data from the respondents. Analyzed data was presented inform of tables, pie charts, percentages and bar graphs. SPSS Version 17.0 and advanced MS Excel were used to analyze quantitative data. Multiple regression analysis model was used to establish the effect of mortgage financing on performance of real estate market in Kenya.

The study revealed that positive relationship exists between mortgage financing and performance of real estate market in Kenya. Homeowners invest in real estate property in anticipation of future increase in prices and rental income. Financial institutions provide adequate information to potential homeowners thus there is flow of information hence reduction in cases of moral hazards and adverse selection. To boost performance of real estate market in Kenya, the government has introduced RIETs, private public partnership, introduction of pension funds to be used as security to access the mortgage market.

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LIST OF ABBREVIATIONS

CBK	Central Bank of Kenya
CMA	Capital Market Authorities
FSV	Force Sale Value
GDP	Gross Domestic Product
HFCK	Housing Finance Company of Kenya
HOSP	Home Ownership Savings Plan
IMF	International Monetary Fund
Ltd	Limited
LTV	Loan to Value
NHC	National Housing Corporation
NHP	National Housing Policy
NSE	Nairobi Securities Exchange
NSSF	National Social Security Fund
PPP	Private Public Partnership
RBA	Retirement Benefit Authority
RIETs	Real Estate Investment Trusts
S&L	Savings and Loans
SPSS	Statistical Package for Social Sciences
UN	United Nations

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Real estate industry is the leading indicator of development in any economy and is used to measure the economic growth and health of a country. It entails creation of permanent immovable assets, involves capital and labour intensive activities thus used as a vehicle for economic development since there is job creation. Demand for real estate is triggered by economic and population growth thus real estate participants construct houses to meet the demand and on return get cash flow from these investments. As the cycle continues, there is oversupply thus creation of trade off between supply and demand. (Carey, 2001).

Financing of real estate has unique characteristics of monthly repayment, long maturity and constant increasing in prices of properties. Due to these characteristics, the prices of houses keep on increasing which eventually leads to unaffordability by potential home owners. Sabri (2001) surveyed the theoretical framework of financing subsidized housing in a developing environment in Palestine and emphasized that private firms are used to subside the cost of houses. In support, Thomson and Buckle (2005) argued that subprime mortgage loans are highly priced because they have high administrative costs. Lending firms register losses due to high default rate and long redemption duration. Existences of subprime markets enable people to acquire houses other than being in rental properties.

Mortgage financing enables acquisition of mortgage properties by able potential homeowners through scheduled repayment and to the lender, it is an avenue of revenue generation since there are interest charges. Saxton (2007) proved that due to default rate, mortgage institutions have resorted to help their clients to reduce the incidences of default. These include advancing capital payment holidays where clients are allowed to repay their interest alone for a specified period, moratorium which involves deferment of repayment of principle and interest for a specified period during shortfall or decline of income of homeowners, by extending the repayment period which enable clients to pay less or little monthly repayment. CBK (2009) surveyed the housing supply in Kenya and documented that 1.5 percent of homeowners acquired their houses through mortgage financing credit while a third of homeowners acquired their houses through inheritance; half of Nairobi homeowners bought their houses while the percentage is negligible at 2 percent for other provisions. In Nairobi, 70.3 percent of real estate properties are permanent and 23.7 percent of homeowners are willing to use their property to access loans.

Property ownership drives the economic growth and it is a critical economic factor thus more attention should be paid to mortgage development market. Arvanitis (2013) emphasized that in the Kenya economy, developers and general population need to be educated on alternative cheaper building alternatives that are cost effective and reduces the construction time that entails use of pre fabricated materials. Secondly, in order to promote development of real estate, the government needs to support and invest in off - site infrastructure. Thirdly, for growth in the mortgage industry, sustainable long term funding is required. Bank loans alone cannot sustain long term funding thus alternatives like lease to own arrangements and establishment of REITs need to be established. Lastly, technology should be advanced to enable delivery of housing in large qualities to withstand the growing population.

In their paper, Hilbers et al., (2001) concluded that real estate development markets should be regulated and monitored on various occasions since unbalanced prices of real estate property lead to economic financial distress. Due to the international financial crisis experienced, property market tend to be controversial since studies have shown that banks and mortgage institutions engage in predatory lending practices by providing loans to borrowers who are unable to service the loans. This eventually leads to high default rates and seizure of collateral assets. On the other hand, subprime mortgage institutions provide credits to borrowers who couldn’t have accessed the credit market due to high interest rates.

In real estate markets, information is critical since the real estate market is heterogeneous, illiquid and thus prices of properties cannot be immediately be displayed. Secondly, the real estate properties are idiosyncratic thus difficult to assess their value through valuation. Hilbers et al., (2001) commented that in the economic market, there exists information asymmetry in two ways. First, sellers have superior information about the property, market economic conditions and government regulations that eventually affect the prices of property and their surroundings. Secondly, sellers possess perfect information about the conditions of the property in terms of deficiency, costs and age.

According to CMA (2012), vibrant economic growth has been experienced in mortgage industry over the last decade. This has been motivated by private partnership and appetite for investment in Kenya by foreign firms. In Kenya, buyers and developers have solely relied on normal mortgage financing thus a constraint to develop and finance large real estate at once. In 2011, the Kenyan government introduced Real Estate Investment Trusts (REITs) framework through CMA to boost financing of real estate projects. REITs have been used as investment vehicles to mobilize resources from corporate and retail in order to finance real estate development.

Social stability of potential homeowners indicates the performance of mortgage market. Through social network, potential homeowners are able to have informed data thus making sound decisions. Pittman (2008) published that social capital enables potential homeowners to identify mortgage institutions that provide best interest rates in the market. Through this, potential borrowers acquire better negotiation skills that eventually affect the mortgage terms. Policy makers, regulators and the government monitor the prices of houses since real estate properties are considered critical investment by households thus poses greater financial risks. Moreover, unstable price fluctuations in residential properties lead to adverse and wider effect to households than financial assets like stock and shares. There exists direct association between credit cycles, real estate cycles, macro economic factors and mortgage institutions lending capability. Residential properties are solely financed by mortgage institutions and banks thus increase in prices of residential properties leads to high cost of lending and repayment capability of the households.

1.1.1 Mortgage Financing

Through mortgage financing, there is development of mortgage market, acquisition of homes by potential homebuyers and employment creation. It is measured in terms of interest charged and mortgage terms. Mortgage financing enables acquisition of mortgage properties by able potential homeowners through scheduled repayment and to the lender, it is an avenue of revenue generation since there are interest charges. Sabri (2001) studied the theoretical framework of financing subsidized housing in a developing environment. He suggested that there exist various innovative methods offered by local firms, public organizations and co-operatives used to subsidize the housing sector. The state offer various methods to subsidize housing sector which include selling finished houses at lower prices and offering of direct grants. All these techniques are inefficient, expensive and eventually translate to low number of units on offer. Due to this, private firms are allowed to offer subsidized housing. Techniques used are the project basis and life project formulas incorporating present value of cash flows.

1.1.2 Performance of Real Estate Market

Mortgage players invest in real estate market and on return, they expect return. Performance of real estate market is measured in terms of rental income, risks of occupancy level and return on investments. Property rental income relate to the return gained out of the investment while risks is measured by the level of variability of income. Before investment, mortgage players gauge both expected risks and returns to ascertain the prices of real estate property. Increase in mortgage loans lead to improvement in liquidity and profitability levels in real estate industry. Saxton (2007) documented that financial markets have been revolutualized over the past two decades due to existence of mortgage brokers, increase in risk based pricing of mortgage properties and growth of secondary mortgage market. The financial markets experience increase in mortgage lending thus development of new emerging products at affordable rates. Mortgage boom and bust in the financial markets have been due to mortgage delinquencies where by potential homeowners took mortgage loans without any capacity to finance.

1.1.3 Mortgage Financing and Performance of Real Estate Market

For growth of real estate market, there is need for mortgage financing. Through mortgage financing, homeowners are able to acquire real estate properties at affordable rates. Garmaise and Moskowitz (2003) observed that there exist significant correlation between information and prices of real estate properties. Homeowners acquire nearby properties, avoid brokers since they are informed parties in the sale transactions and also consider their past income trends. Selection on the mode of finance is greatly affected by the information content that homeowners possess.

Moreover, Abdelgalil (2005) researched on the relationship between real estate and financial sectors. He concluded that an association exists at micro economic and macroeconomic levels since real estate sectors are considered as the major drivers of the economy. The private sector engages in real estate development which leads to oversupply of houses due to lack of government policies and regulations. Lack of regulations prompt private firms to advance generous credit to borrowers thus leading to competition among mortgage institutions. As perfect competition increase, there is adequate availability of finances for real estate sectors which translates to reduction in prices of real estate properties after increase in fundamental prices.

1.1.4 Mortgage Financing and Performance of Real Estate Market in Kenya

Mortgage institutions and commercial banks in Kenya are the key pillars in mortgage financing. The government through Central Bank of Kenya (CBK) has made tremendous amendments to the banking act to boost mortgage financing from 2011. CBK (2014) published that mortgage institutions operate current accounts to increase mobilization of financial deposits and financial institutions have increased their level of loans advanced from 25 percent to 40 percent of total liabilities for acquisition and improvement of land. Moreover, mortgage institutions provide various mortgage loans that include owner occupier, investment residential, construction loans, equity release and residential plot purchases. For owner occupied mortgages, banks offer up to 90 percent or 100 percent of the value of the property and it is intended for buyers to live in their respective houses. Investment mortgage are meant for buyer purposes (investment) but not for home construction. Construction loans entail provision of loan for purpose of construction of property only. The lender supervises the professionals e.g. engineers and architects. The loan is disbursed to the contractor on arrears basis. Lastly, residential plot purchase is advanced to citizens who are willing to acquire plots for the purpose of construction of their own residential property.

According to CBK (2012), mortgage loans grew from Kshs. 90.4 billion in 2011 to Kshs. 122.2 billion in 2012 indicating a growth of 35.2 percent. On outstanding mortgage loans, the number stood at 19,177 in 2012 compared to 16,029 mortgage loans in 2011. The survey further showed that high interest rates and provision of inadequate long term finances were the major constraints to development of housing units. In conclusion, the report indicated that certain strategies to improve development of mortgage market in Kenya. These include; establishment of property index aimed at guiding the general public on prices of real estate properties, regulation of the valuation process by the government to cub the problem of arbitrary overvaluation of properties, disclosure of full information and lastly, the government should support National Housing Corporation (NHC) in order to stabilize the mortgage market by providing affordable and cheaper housing units.

On aspect of performance of real estate market in Kenya: Prices of real estate properties both residential and commercial have increased over the last decades in Kenya as a result of increase in demand for property and mortgage loans advancements. Demand for real estate property in Kenya has been motivated by rural – urban migration and growth of middle income class population. Kenya has been viewed as the third most developed country in terms of real estate in Sub – Sahara Africa. The real estate industry accounts for 2.5 percent of Kenya’s GDP and it has grown at a rate of 34 percent annually from 2000. According to Ministry of Housing (2014), the government developed National Housing Policy in 2004 with the objective of addressing the supply and demand of housing. The major objectives have not been fully achieved due to rapid rural – urban migration, drastic increase in prices of housing units, increase in poverty levels and rapid population growth. There has been drastic change of real estate market in Kenya. In 2003, the Kenyan government entered into an arrangement with the UN Habitat for slum upgrading programme. This didn’t achieve its objective thus the project was turned into Private Public Partnership (PPP) arrangement in 2013. From 2004 , the government has implemented various housing projects under civil servants housing scheme fund whose main objective include development of real estate units for rental and sale for civil servants , provision of mortgage loans and lastly, mobilization of financial resources to achieve housing development motive. According to Mburu and Owiti (2013), there exists negative association between return on stock and mortgage uptake in Kenya.

1.2 Research Problem

Constant increase in real estate prices affect the financial soundness of an economy thus imbalances in macro economic conditions. Hilbers et al., (2001) argued that distortion in real estate prices is due to market imperfections whereby there is lack or little information on real estate and two or various identical properties posses different values and prices. Secondly, construction of real estate takes long time thus affecting supply side and land is considered to be a constraint. As time goes by due to lag in construction, prices keep on increasing until the building is ready for occupancy and there could be over supply of residential houses which forces prices of houses to fall. Presence of market imperfections lead to various economic bubbles or cycles.

Various economists, researchers and academicians have studied mortgage financing in different economies and they have drawn divergent conclusions. Zhu (2003) observed that mortgage financing significantly affects the prices of houses. In addition, Kormal (2009) noted that real estate development is a critical driver in economic development of a country and is significantly affected by per capital income, gross domestic product, interest rates and macro economic factors. Also, Saxton (2007) observed that several borrowers in US were forced to default and thus subprime mortgage institutions filed for bankruptcy due to lack of liquidity to finance their operations. In support, Froland (1987) established that direct association exists between mortgage rates, earnings per price ratio of shares and ten year bond rates.

A survey by Abdelgalil (2005) discovered that participants by private firms in real estate development lead to oversupply of houses due to lack of government policies and regulations. Due to competition, there is availability of finances for real estate sector which translates to reduction in prices of real estate properties after increase in fundamental prices. In Kenyan context, Nabutola (2004) commented that one third of Kenyans don't have access to affordable, decent and modern housing. In addition, Arvanitis (2013) emphasized that private sector in Kenya aims at providing cheaper and affordable housing units to low and middle income earners thus bridging the supply and demand gap. Moreover, Okumu (2010) established that market imperfections necessitated abnormal profits recorded by real estate firms. Getange (2010) surveyed the global financial crisis by commercial banks offering mortgage in Kenya, Wahome (2010) conducted a survey on factors influencing mortgage financing in Kenya and Lastly, Karimi (2010) studied the introduction of mortgage backed securities in Kenya capital market.

In summary, there has been significant growth in real estate market in Kenya that has aimed at bridging the demand gap due to the rapid growth of population and urbanization. Although this growth has been experienced, the mortgage market has recorded low occupancy level and the growing population has led to growth of slums. Various amendments have been effected to boost the mortgage industry but few have yield results. To best of my knowledge, no research has been done in Kenya on the effect of mortgage financing on performance of real estate market. From this perspective, the study intends to bridge and fill in the research gap and answer the research question, does the relationship exists between mortgage financing and performance of real estate market in Kenya?

1.3 Objectives of the Study

1.3.1 General Objective

The main objective of the study is:-

To establish the effect of mortgage financing on performance of real estate market in Kenya.

1.3.2 Specific Objectives

The specific objectives of the research will be:-

1. To ascertain the association between mortgage repayment and performance of real estate market in Kenya.
2. To determine the relationship between mortgage interest rates and rental income.
3. To examine the relationship between mortgage repayment and performance of real estate market in Kenya.

1.4 Value of the Study

The study will be of great importance to various stakeholders in the mortgage industry.

Property developers; the study will provide insight information on various mortgage opportunities available in Kenya. This will eventually enable them to develop products which are customized to fit homeowners' preference. Also, they will develop various strategies on how to finance real estate projects. To the mortgage institutions; as mortgage financiers, the study will enable them to provide innovative products to homeowners. More so, they will be able to access performance of mortgage loans to avoid the default rates and how to help homeowners during decrease in income.

Government and Regulators; the study will provide insight knowledge on how to meet the demand gap. The government will be able to pass policies and assess the current initiatives that are aimed at boosting mortgage development. To regulators, the findings of the study will enable them to enforce regulatory laws such as property price index. For potential homeowners; the study will provide them with different ways on how to improve their social capital. Through this, they will be motivated to access homes at cheaper and affordable rate through negotiation.

Consultants; the findings of the study will enable them to provide quality advisory services on mortgage financing and necessary steps to boost the mortgage industry. They will be able to collect adequate information about property prices thus reduction in cases of mortgage market imperfections. Lastly to the researchers and academicians; the study will create an avenue for further research to enrich the mortgage industry studies. Through various studies, information on mortgage industry in Kenya will be readily available for purpose of sound decisions by various players.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The Chapter discusses theoretical and empirical review on the effect of mortgage financing on performance of real estate market with an aim to answer the research question and objective. It focuses mainly on previous studies done in the field of mortgage financing and performance of real estate market by various researchers.

2.2 Theoretical Review

Mortgage financing entails advancement of mortgage loans to potential homeowners at agreed scheduled repayment over a certain period. Through this, there is transfer of assets to the borrower and income generation due to the lender. Theories on mortgage tend to distinguish the rights, obligations and possession between the lender and the borrower. Various theories on mortgages include:-

2.2.1 The Lien Theory

The lender acquires lien while the borrower acquires equitable and legal titles of the mortgage property. It is a mirror to encumbrances on the mortgage property. It protects the lender since incase of default by the borrower, the lender is entitled for legal repossession of the mortgage property. Medley (2011) proved that under lien theory, the borrower acquires the title upon signing of the documents but there are encumbrances which the lender holds incase of default by the borrower. In case of default, lenders face difficulties to repossess mortgage property since the borrower holds the title and possess the mortgage property and land.

Moreover, Denise and Wheaton (1992) documented that lien theory creates lien on land thus ownership is transferred to the mortgagor and mortgagee retains the security over the property. The mortgagor commits to adhere and make installment payments as per agreed terms thus during the mortgage period, the mortgagee holds the deed to the property while the mortgagor holds the title. Repossession of the property is more difficult by the mortgagee since there is creation of lien on property to the mortgagor.

2.2.2 The Title Theory

The lender retains the legal repossession until the mortgage is fully paid up. The lender holds the legal title while the borrower holds equitable title only. The legal title is vested in the lender until the mortgage loan is repaid. The borrower is recognized as the owner of the property and the lender has the right to rents and possession. In case of default, the lender is entitled to repossession of the property. Denise and Wheaton (1992) noted that upon signing of mortgage documents, the lender acquires full ownership of the mortgage property while the borrower acquires only control until the mortgage is fully paid off. This is used as a measure since the property is held by the lender as collateral. During the mortgage period, the borrower doesn’t have title to the property. Upon satisfaction of loan obligations, the lender delivers the deed to the borrower.

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

2.2.3 The Intermediate Theory

The theory is a combination of both the lien and title theories. Medley (2011) published that the theory applies the lien theory unless there is default where by the title theory is applied. The title is held by the lender until the mortgage loan is repaid off in full. Mortgage terms are critical and important thus need of distinction upon default. For title under intermediate theory, the mortgage institutions possess the ownership over the property on behalf of the borrower thus transfer of property to the third party in trust. If the borrower defaults, then the lender has the right to repossess back the mortgaged property.

Medley (2011) documented that for lien under intermediate theory, there is creation of protection by the lender since the borrower can't sell the property until the borrower has fully paid up the mortgage loan. Mortgage instrument is used to place lien on the mortgage property. Mortgage property is pledged to the mortgage institution thus the buyer can't sell the property until the mortgage loan is fully paid off. Although there is existing debt, the borrower has the right to ownership of the property while the mortgage institution has the right of security to the property.

2.3 Empirical Review

Various studies and researches have been done in the field of mortgage financing and performance of real estate market. Real estate development is critical and is used to assess the level of economic development of a country. Real estate property has been considered as a basic need and potential home owners strive to acquire real estate property. From this stand point, mortgage institutions and banks provide financing to ensure that this objective is met. Titman, Tompaidis and Tsyplakov (2004) surveyed the factors that affect mortgage margins between 1992 to 2002. They considered 26,000 individual mortgage loans and discovered that riskier mortgages record high profit margins. Due to higher default rate and poor performance of mortgages, lenders institute strict lending conditions. Moreover, riskier collaterals trigger for higher initial payment, higher interest rates and short repayment periods. Moreover, positive correlation exists between loan to value per lender and credit spreads since lenders concentrate on low or high risk mortgages. As mortgage firms advance more loans, they tighten the terms and conditions of loans due to past poor performance and higher default rate on existing loans. In addition, Dietrich and Wunderlin (2010) investigated the major drivers of margins of mortgage loans among the Swiss banks between 2000 to 2009. They considered 8,120 mortgage loans with fixed interest rates and found out that loan – specific factors; external macroeconomic factors like inflation and GDP growth significantly influence the mortgage loan margins

Residential real estate is a physiological basic need and is required by all. It requires substantial initial outlay thus people must beg, borrow or steal to acquire the housing units. Odame, Key and Stevenson (2006) conducted a study on measures of real estate from land registration and valuation systems in emerging economies between 1998 to 2005. They noted that size of plot, quality of landscaping, size of property and location are critical variables that affect prices of real estate properties in Ghana. In support, Tsatsaronis and Zhu (2004) found out that yield curve, inflation, banks' credit and mortgage market difference significantly affect prices of houses. They concluded that external financing is majorly used for acquisition of houses thus cost of mortgage loans play a critical role in determination of prices of houses. Carey (2001) and Hilbers et al., (2001) emphasized that in economies where supply of building and land are fixed, high prices will be charged and few people have the ability to repay the loan.

Cheong', Olshansky and Zurbruegg (2011) did a study on the influence of real estate risk on market volatility among listed real estate firms in the UK between 1990 to 2010. They emphasized that volatility in the financial industry is critical and plays a major role in the market volatility and market volatility is positively related to real estate industry thus leading to financial crisis. Financial services industry is vital to an economy and it is the major driver of market risks. Market volatility of real estate risks are major drivers of financial crisis experienced in the UK. RIETs are fundamental component in the economy since it is used to pool financial services but firms utilize RIETs for speculative purposes thus increase in real estate volatility. According to Singh and Komal (2009), real estate development is a critical driver in economic development of a country and is significantly affected by per capital income, gross domestic product, interest rates and macroeconomic factors. They studied the problems and prospects of real estate in India and found out that introduction of Real Estate Investment Trusts (RIETs) as investment vehicle has attracted more players in the real estate industry thus increase in the gross domestic product of the economy.

Real estate busts and booms have significant effect to the economy since real estate booms lead to high leverage level and growth in credit by firms which cannot be justified. Real estate busts on the other hand lead to overdue of debt thus significant to the financial economy. Saxton (2007) published that in the US, several borrowers were forced to default and thus subprime mortgage institutions filed for bankruptcy due to lack of liquidity to finance their operations. He reported that in August 2007, 243,947 default cases were reported for closure as compared to 113,300 in July 2007 which translates to 115 percent over the one month. These involved issues of auction notices, default notices and banks recalling back the loans. He emphasized that mortgage institutions didn’t establish the credit history, net worth and net income of borrowers, borrowers submitted false financial background information and appraisals.

Turkmen and Demirel (2012) studied economic factors affecting financial ratios: Real Estate Investment Trusts (REITs) case on Istanbul Stock Exchange between 2007 to 2010. They considered thirteen REITs listed at Istanbul Stock Exchange and they found out that total debt to equity, total debt to net asset value, acid test ratio, net asset value per share to common equity and earnings after tax to net asset are positively related to earnings after tax to equity ratio. From their findings, managers predict the future financial and economic volatilities and take necessary measure to maximize firms’ profitability. Also, Chen and Hong (2007) studied the association between real estate market and home mortgage loan in China. They concluded that China experienced tremendous growth in home mortgage after the lapse of welfare – oriented distribution systems that involved allocation of houses by employers to staff. Among the cities in China, there was great variance in price fluctuations, volume of sales and development of mortgage loans from commercial banks.

Lixin and Lin (2008) examined the association between debt financing and market value of companies in China. They sampled 272 Chinese Real Estate firms that had been quoted at Shanghai and Shen Zhen stock exchange between 2002 to 2007. They noted that there exists direct association between long term debt commercial credit financing and firms’ market values. Real estate firms reduce the number of short term borrowings and concentrate on long term borrowing to finance their projects. Moreover, they expand their sources of long term borrowings by issuing corporate bonds and equity. Since real estate firms are state owned, the government put in plan monitoring mechanisms to improve efficiency thus increase in firms' value.

Glindro, Subhanij, Szeto and Zhu (2008) emphasized that there was need for availability of housing prices to aid the Asian Government to institute policies and monitor the prices of residential property. They studied the factors that affect house prices in nine Asia – Pacific economies. On overvaluation, the prices of residential properties were higher than their fundamental prices due to housing market imperfections and very optimistic future expectations that prices of residential properties will go higher than the current prices. Existence of market imperfections were exhibited since there was lag in provision of houses to meet supply and advancement of credit loans by financial institutions. To cub the problem of overvaluation of residential properties, policy makers and regulators reduce the number of incidences of residential property price cycles by availing financial information about houses, regulating land usage and instituting transparent mechanisms to protect property rights. To control the housing bubbles, regulators adopt mechanisms to reduce and control overconfidence of constant increase of residential property prices.

Brent, Kelly, Taliefero and Price (2011) examined the determinants of mortgage delinquency in the US from 2004 to 2009. During this period; there was a sharp rise in delinquency level by borrowers. From their research, they found out that economic health of a country, income of the borrower and the type of loan are among the critical factors that determine mortgage delinquency risks. Delinquency is expensive both to the borrower and lender. To the borrower, the costs include penalties, interest expense and poor credit rating of the borrower. To the lender, slow loan repayment is equivalent to defaulted loans thus increase in administrative and provision of bad and doubtful debts.

An and Deng (2009) published that capitalization rate is significantly associated with expected rental cash flow growth and future rate of return. Investors gather adequate information to form opinions and they assess rental growth and expected return differently for different periods and properties. Capitalization rate, expressed in terms of rental income to value of real estate property, is vital determinant of real estate values since investors focus more on expected rental cashflows and rate of return of Real Estate Investment Trusts (REITs). When investors project that the growth rate of rental properties is weak and rate of return is high, then they use high capitalization rate to value the real estate property since they are sure that the likelihood of growth is minimal and they need to cushion themselves in the future. Goldstein (1991) supported that building owners use REITs to attract residential tenants thus creation of stronger relationship with tenants and reduction in real estate charges.

Fortin and Leclerc (2007) analyzed the determinants of mortgage indebtness in Canada and they discovered that new mortgage loans are significantly affected by interest rates charged while value of property is influenced by prices of housing units. Due to this, the debt to income ratio of households has constantly remained high. In support, Browne and Rosengren (2010) studied the credit crunch and real estate in the US. They noted that reduction in prices of real estate has led to reduction in consumer confidence, destabilized the financial markets and thus reduction in economic and financial growth. Moreover, Jones and Datta (2000) established that real estate market can only grow if potential home owners are motivated to invest and own a home. This mandate is achieved through provision of subsidies through interest on mortgage, provision of quality affordable housing units and offering mortgage interest at lower rates.

Singh et al., (2009) argued that growth of real estate has been motivated by public private partnership since investment in real estate market require huge long term investment and there has been creation of various business opportunities. These include brokerage that deals with assisting sellers and buyers, appraisal and valuation services, property management, real estate agent marketing and real estate property development. Okuney, Wilson and Zurbruegg (2002) carried out a study on casual relationship between stock markets and real estate in the US between 1972 to 1998. They found out that there exists significant unidirectional association between stock market and real estate market.

Fan, Huszar and Zhang (2011) studied the association between real estate prices and expected financial asset risk and return. They established that market incompleteness significantly changes the prices of financial assets and real estate. As the prices of real estate increase, the financial assets' returns also increase thus direct significant association between the two. Likewise, Earley and Herzog (1970) concluded that there exists direct association between the proportion of loan to value and the impact of delinquency. As the level of income of borrower increases, the level of delinquency reduces. Lieser and Groh (2011) examined the determinants of international commercial real estate investments among 47 European countries from 2000 to 2009 and they concluded that rapid urbanization , economic growth and demographic factors promote real estate investments and hindrance to real estate investments include political instability of a country, legal framework, socio –cultural issue and administrative bureaucracy. Investors assess the attractiveness of investments in host countries before undertaking any investment and the future returns must out way the related costs.

According to a study by Eldelstein, Qian and Tsang (2010), required rate of return premium on mortgage property is directly affected by macro economic factors, stable legal environment and corporate governance. Moreover, various players are involved that include facilitators, renovators, developers, renters and owners. The demand side of the equation is driven by renters and owners while the renovators and developers satisfy the supply side of the equation. He further noted that property rights, development rate, geographical location and physical characteristic of mortgage property significantly affect the cost and price of real estate property. Lai, Xu and Jia (2009) carried out a study on methods of real estate speculative bubble in China between 1990 to 2006. They concluded that globally, there is no real estate bubble in China. Further analysis indicated that macro – economic index and mortgage property investment are disjoined leading to excessive investment.

Froland (1987) documented that insurance companies, commercial banks, mutual funds and savings as major sources of mortgage financing in the US during housing market boom. Housing finance companies deliver housing units to households at affordable prices thus contributing to social stability and growth of mortgage market. Koetter and Poghosyan (2008) sought to establish the association between real estate markets and bank distress among German mortgage financial institutions between 1995 to 2004. They emphasized that the value of collateral increases the prices of real estate property which eventually leads to decrease in banks' profitability level. Moreover, there exists significant positive relationship between the proportion of price to rent and banks' profitability distress. Segmentation of the real estate market affects banks' profitability distress. Moreover, Froland (1987) concluded that there exists significant positive correlation between mortgage rates, earnings per price ratio of shares and ten year bond rates.

Essene and Apgar (2007) observed that consumer preference keep on changing and they access the mortgage market without any prior knowledge of the mortgage fit for them. Secondly, mortgage prices keep on changing thus complexity to the consumers due to lack of transparency on mortgage prices and lack of adequate information which come late in the process to make informed decisions. Lastly, consumers prefer mortgage products with current gain as opposed to future risks. Due to these reasons, consumers keep on shopping for mortgage that meet their needs while prices keep on increasing. Swyngedouw, Moulaert and Rodriguez (2002) carried a study on neoliberal urbanization in Europe and they focused on how liberalization and globalization forces react as a result of governance. They considered thirteen large scale urban development projects and their association with economic, political and social forces among various states in Europe. They established that urban development projects are major vehicles for economic planning and they accelerate socioeconomic polarization through real estate property prices thus the government redirects its social budget to investment in property market and labor industry.

Laquindanum (2010) noted that global financial crisis experienced has been due to over lending by banks to homeowners who don’t have capacity to repay the loans. Property prices is a critical indicator in financial and monetary stability of an economy since it is used as a source of information to indicate the risks faced by the market, inflation expectations and assist policy makers to make recommendations about the market. It affects cost of capital of the firm, profitability level of investments and the ability of the households to acquire mortgage property. Thus real estate property bubbles leads to disruption of financial economy and overall macroeconomic market. Sun (2009) documented that there exists positive relationship between stock prices and real estate prices in China.

Shrestha (2011) showed that Nepal Commercial Banks financed 60.9 percent of real estate properties. Growth in real estate market was due to lack of substitute investment opportunity in Nepal and citizens had a speculative mind of future increase in value of their property. This triggered to increase in demand for land thus inelastic supply pattern. Likewise, Yartey (2008) emphasized that direct association exists between stock market and banking sector development. High growth rate in banking sector might lead to reduction in development of stock market thus banks are utilized as substitute sources of finance.

In the Kenya context, Nabutola (2004) did a study on affordable housing in Kenya and established that one third of Kenyans don’t have access to affordable, decent and modern housing. The major constraints to affordable and modern housing are regulatory framework, finance, land and building materials. On land, most of the parcels are held by government and few individuals who hold land for speculative purposes thus constant increase in land prices. Financial constraint is measured in terms of high interest rates charged by the financial institutions. Access to home ownership Kenya has been fueled by provision of required documents thus hindering citizens to access the mortgage property market. These include provision of sustainable income, proof of ownership of collateral, initial down payment, high interest rates and regulatory framework. The Kenyan citizens have not been motivated to own houses thus majority of them live on rental properties for years leading to enrichment of few individual landlords.

Arvanitis (2013) argued private sector in Kenya aims at providing housing units to low and middle income earners thus bridging the supply and demand gap. In Kenya, the real estate industry is very dynamic. Firstly, housing units are overpriced due to high demand but slow undersupply of housing. Secondly, the real estate market structure is not well developed since there are few private developers who have capacity to deliver more than 200 housing units at once. This is motivated by lack of adequate finance and lack of technological knowhow to deliver and market large scale housing projects. Thirdly, difficulty in accessing finance. Private developers rely on debt to finance their projects. Due to long construction duration, prices of housing units increase since they are motivated by fluctuating interest rates, inflation and high leverage levels.

Waithaka (2013) established that Kenya has lagged behind her counterparts in Sub – Saharan Africa in the mortgage market due to high interest rates charged by the banks. Kenyan mortgage market is dominated by five main participants that control 71 percent of the real estate lending. These five participants include Housing Finance Company of Kenya, CFC Stanbic bank, Stan Chart Ltd, KCB group under S&L division and Co-operative Bank of Kenya. In 2012, KCB had the largest market share of 30 percent followed by Housing Finance Company of Kenya at 19 percent. It has been a hindrance for middle class income earners to access mortgage loans due to constant rising speculative prices thus creation of a bullish mortgage market leading to deficit in supply and high demand for housing units.

Kigige and Messah (2011) did a study on factors influencing real estate property prices in Meru, Kenya and noted that income, demand for housing units, realtors and location affected the prices of real estate properties. Income and demand contributed to 70 percent and 20 percent in change of prices of housing units while location and realtors were found to insignificantly affect the prices. In support, Ngugi and Njori (2013) found out that cost of capital, maturation period of loans, tax incentives and land registration system are key determinants to access of mortgage financing. They found out that there is strong positive correlation between access to mortgage finance and the determinants.

Walley (2011) documented that Kenyan mortgage market has been ranked third after South Africa and Namibia. The mortgage industry has tremendous growth and has finished the germination stage thus moving to development phrase. Policy players need to put measures to ensure that this growth is sustained to provide adequate housing for the future population. On housing market, he established that housing gap keep on increasing due to housing deficit of 156,000 housing units per year based on rural – urban migration and growth in population. To bridge this gap, mortgage industry need to be financed through mortgage financing and rental housing since the deficit has led to creation of slums and poor quality of housing units. On affordability, mortgage institutions and banks offer loans at variable rates from 14 percent over a period of 15 years. Based on this, only 2.4 percent of Kenyan population can afford the basic mortgage loans. Mortgage financing has been identified as the biggest obstacle towards development of mortgage market.

Mortgage institutions have developed lucrative products that enable buyers to access real estate property. These include fixed interest rate that is available for 10 to 20 years, full value financing of properties, amendment to RBA Act in 2009 that allow Kenyans to utilize up to 60 percent of their own contribution to finance mortgage loans. According to CBK and World Bank (2010) there has been growth of microfinance to provide mortgages to Kenyans. Jamii Bora has provided mortgages at cheaper prices of Kshs. 300,000 for three bedroom house and the affordable repayment periods of 5 to 20 years. This has been enabled its members from slums to access mortgage property. Commercial banks in Kenya have introduced real estate financing products that include plot, construction loans, owner occupier, estate development, equity financing release and company housing loans schemes.

Through mortgage financing, there is development of mortgage market, acquisition of homes by potential homebuyers, employment creation.

A study by Masika (2010) noted that the demand for real estate property has outstripped the supply side and the mortgage industry has tripled over the last decade. Due to mortgage financing, the real estate market has boomed thus attracting more foreign investors to the business. Macharia, Stock and Mbai (2012) documented that constant increase in prices of real estate property and land is a sign of formation of bubbles. Significant growth in real estate has been motivated by growth in middle class, urbanization, strong and stable legal environment, infrastructure growth and credit expansion by banks and financial institutions. For the growth in real estate market to be sustained, the government needs to create an investment climate to boost provision of affordable housing units. There are signs of over pricing in real estate property while incomes of homeowners tend to be constant. If the trend of high mortgage interest rates and high unemployment level persists, then the demand for housing units will decrease leading to housing bubbles.

Okumu (2010) concluded that due to market imperfection of real estate, the prices are solely determined by realtors and brokers thus making abnormal profits from poor Kenyans. According to the government of Kenya Vision 2030 blue print, it is documented that real estate is a key driver in economic growth and long term financing facilities provision of adequate and affordable housing to citizens. As a flagship project, the government projects to provide 150,000 residential units per year to meet the demand. At the moment, the demand has outweighed the supply of 135,000 housing units annually thus a deficit of 115,000 housing units per year. To boost long term financing, pension funds have been used as guarantee for acquisition of mortgage loans, creation of RIETs has also been used to pool resources for development of various projects and issue of government infrastructure and corporate bonds for development of projects has created potential for bond trading in Kenya.

Development of secondary mortgage market has increased through introduction of REITs and corporate bonds. Housing Finance Company of Kenya and KCB through S&L have issued corporate bonds and rights issue to finance the mortgage industry. There was oversubscription of the corporate bond by 41 percent thus HFCK opted for green shore option. This is evident in growth in mortgage industry financing. Other institutions that have successfully participated in secondary mortgage market include NSSF, insurance firms and pension funds. Mburu and Owiti (2013) concluded that return on stock and savings are inversely related to mortgage uptake in Kenya while interest rate and inflation are significantly related to mortgage uptake in Kenya.

MacOloo (1994) established that the Kenya construction industry has adhered to 1968 Kenya Building Code which is outdated. It mandates contractors to follow the rules which lead to delay in construction process. Time spend to construct eventually pushes the prices of houses higher since contractors strive to maintain their profitability level. The Kenya mortgage market need mortgage financing to enable households to acquire residential properties at affordable rates. Moreover, Jumbale (2012) concluded that significant direct association exists between prices of houses and real estate financing in Kenya.

2.4 Summary of Literature Review

Mortgage financing entails advancement of finances for the purpose of acquisition of real estate property. Riskier mortgages record high profit margins, higher repayment and interest charges. Mortgage institution institute strict lending conditions due to increase in the level of default to cushion them from risks faced. On this perspective, the government has introduced REITs as investment vehicles, amended the RBA act for use of pension funds to boost real estate market, private sector participation by subsidizing housing prices. Due to real estate market imperfections, the prices of real estate properties are overpriced and buyers are optimistic of future increase in prices of their properties.

Capitalization rate affects the expected rental cash flows growth and future rate of return. High rate of return leads to high capitalization rate thus increase in value of real estate properties. Consumers access mortgage market without prior knowledge and through social capital, potential homeowners are able to share knowledge that boosts their negotiation of mortgage terms. Property prices are used to indicate risks thus affects the cost of capital, profitability levels and ability of households to acquire mortgage. Although there has been growth in real estate market, rental charges and interest rates have increased thus leading to low occupancy level among the real estate properties. From all these developments, the research aims to determine the effect of mortgage financing on performance of real estate market in Kenya.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The Chapter focuses on the research methodology employed in carrying out the research. It covers the instruments and procedures used to collect data and methods utilized in data analysis. It details research design, population of the study, sample size, data collection and presentations.

3.2 Research Design

The research utilized descriptive research design to establish the effect of mortgage financing on performance of real estate market in Kenya. Descriptive research entails various steps and procedures to draw conclusions about the description of various variables under the study with an intention to answer the research question without any influence. The research was a survey and considered all mortgage and financial institutions licensed by CBK. Descriptive survey is used to collect data and administer questionnaires from the respondents to ascertain the current situation of variables under the study.

3.3 Population of the Study

The research considered all 35 licensed mortgage and financial institutions by CBK as at 31st December 2013 as per appendix I. The target population constituted 19,177 outstanding loan owners. The units of the study was drawn from the 35 mortgage and financial institutions. According to CBK (2013) there were 19,177 outstanding mortgage loans.

3.4 Sample Design

Stratified sampling technique was used and the researcher approached the mortgage and financial institutions to avail necessary information. To establish the effect of mortgage financing on performance of real estate market in Kenya, a sample of 392 respondents were considered as per table 3.1. The sample was calculated using Israel (2009) formula:

$$n = \frac{N}{1 + N\left(e * e\right)} \quad \text{.. (3.1)}$$

Let:

n = Sample Size

N = Population Size

E = Error of the sample at 95% confidence interval

For the units of the study, the study considered mortgage loan beneficiaries. For sampling purposes, out of 19,177 mortgage loan beneficiaries, only 392 were selected from the mortgage and financial institutions thus forming the sample size. Structured questionnaires were distributed in proportion of outstanding mortgage loans by mortgage and financial institutions. Table 3.1 shows the sample size and frame distribution.

Table 3.1 Sample Size and Frame Distribution

Target Group	**Population of the study**	**Sample Size**
Mortgage Loan Beneficiaries	19,177	392
Total	**19,177**	**392**

Source: Primary Data

3.5 Data Collection

The study used primary and secondary data. Structured questionnaires and interviews were used as instruments of data collection to gather primary data from the respondents (See Appendix II). To gather structured responses, closed – ended questionnaires was used and open –ended questionnaires enabled respondents to give more clarification pertaining to variables of interest. The questionnaires constituted of 5 point likert scale that were ticked by respondents from 1 for strongly disagree to 5 for strongly agree. Questionnaires were dropped and picked by researcher at various mortgage and financial institutions. Interviews were considered appropriate in order to gather accurate information and clarity from the respondents. Secondary data was used that entailed the property journals, mortgage institutions surveys and CBK documentations on mortgage loans.

On ethical issues, the researcher seeked consent from the respondents before distributing the questionnaires and approval from the university to collect required data. Confidentially of information, integrity and honesty were adhered to throughout the research period. The researcher considered gender balance and thus issued questionnaires on basis of 1:1 ratio for male to female in order to have balanced responses.

3.6 Data Analysis and Presentation

Cleaned and coded data was analyzed using descriptive statistics methods. This enabled the study to describe the various variables on mortgage financing and performance of real estate market. Multiple regression analysis was used to establish the relationship between various variables. Analyzed data was presented inform of tables, pie charts, percentages and bar charts. SPSS Version 17.0 and advanced MS Excel were used to analyze quantitative data and interpretation of the findings. At 95% confidence interval, F – test was utilized to estimate the co-efficient of various variables. In addition, t – test was used to determine the strength of the relationship between mortgage financing and performance of real estate market in Kenya.

3.6.1 Analytical Model

Multiple regression analysis model was used to establish the effect of mortgage financing on performance of real estate market in Kenya. Performance of real estate market was considered as dependent variable and it was measured in terms of rental income, risks of occupancy level and return on investment. On the other hand, mortgage financing was considered as the independent variable and it is measured in terms of mortgage terms, mortgage repayment, mortgage interest rates, mortgage risks, mortgage pricing and insurance.

Analytical Relationship between performance of real estate market and mortgage financing: Pittman (2008) model.

$$RI = b_0 + b_1MT + b_2MR + b_3MIR + b_4MI + E_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (3.1)$$

Let:-

RI = Rental Income (Performance of Real Estate Market)

MT = Mortgage Terms

MR = Mortgage Repayment

MIR = Mortgage Interest Rates

MI = Mortgage Insurance

b_i = Regression Coefficient

E_t = Error Term

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

The Chapter entails discussion of analyzed data, presentation and findings in order to draw conclusions on the effect of mortgage financing on performance of real estate market in Kenya. Dully filled questionnaires were received, data edited, coded and the findings were presented in form of tables, bar graphs and pie charts. Descriptive statistics were used to select data of interest and these included frequencies, mean, standard deviation, percentages, proportions, minimum and maximum. The chapter include four sections namely analysis and presentation, general findings, correlation output, regression output and summary of the findings.

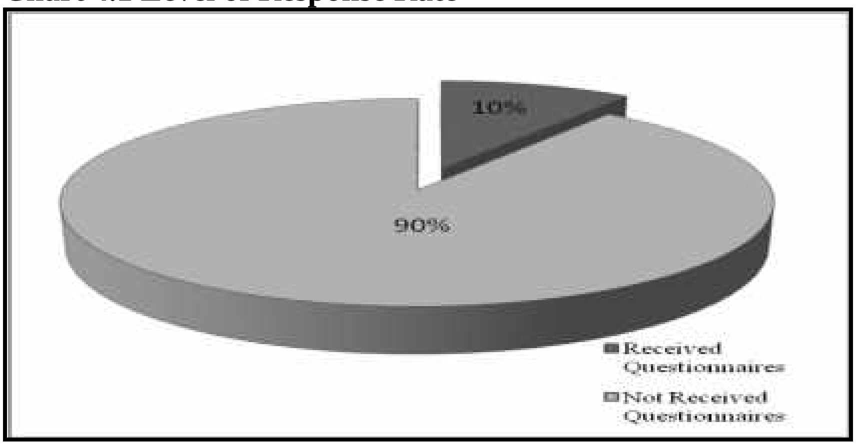
4.2 Analysis and Presentation

Respondents filled information relating to their background information that included gender, age bracket, level of education, length of their mortgage and monthly income. Information on these is discussed below.

4.2.1 Response Rate

Out of 392 questionnaires distributed, only 353 questionnaires were dully filled and returned translating to 90% response rate. Chart 4.1 shows the level of response rate.

Chart 4.1 Level of Response Rate



Source: Primary Data

4.2.2 Gender

The research considered gender balance and questionnaires were distributed on basis of 1: 1 ratio for male to female in order to draw a balanced response. Table 4.1 shows the gender distribution of respondents.

Table 4.1 Gender Distribution

Gender	Frequency (Sample)	Cumulative Frequency	Percentage (%)
Male	185	185	52%
Female	168	353	48%
Total	353		100%

Source: Primary Data

From table 4.1, out of 196 male respondents, 185 submitted their response indicating 94% response rate while 168 female submitted their response indicating 88% response rate. This indicates that male were concerned about the study as compared to their female counterparts.

4.2.3 Age of the Respondents

Age determined the level of amount which respondents could access due to their obligations. Table 4.2 shows the age distribution of the respondents.

Table 4.2 Age of the Respondents

Age Bracket	Frequency (Sample)	Cumulative Frequency	Reponses in Percentage (%)
1 – 29	15	15	4.3%
30 – 39	177	192	50.1%
40 – 49	124	316	35.1%
50 – 59	25	341	7.1%
60 and Above	12	353	3.4%
Total	353		100%

Source: Primary Data

From table 4.2, the highest level of 50.1% was recorded by age bracket between 30 – 39 years followed by between 40 – 49 years at 35.1% and the least level was registered by 60 years and above at 3.4%. Age bracket between 30 – 39 years is considered as the prime age since most of the population have completed their basic education and have settled down to raises their families. This triggers respondents to acquire mortgages for their family. Most of the population will finish repaying their mortgages between 40 – 49 years thus the second level of respondent rate. Age bracket 60 years and above, most of the respondents have completed their mortgage repayment and have reached retirement age thus least response level recorded.

4.2.4 Level of Education

The level of education determines the level of knowledge and exposure to mortgage issues thus considered important. Table 4.3 presents data of the level of education of the respondents.

Table 4.3 Level of Education

Level of Education	Frequency (Sample)	Cumulative Frequency	Reponses in Percentage (%)
Less than Secondary	20	20	5.7%
Secondary	30	50	8.5%
Bachelors Degree	194	244	55.0%
Post Graduate	88	332	24.9%
Other Specify	21	353	5.9%
Total	353		100%

Source: Primary Data

From table 4.3, most of the respondents indicated that they possessed bachelors degree at response rate of 55.0% followed by post graduate at 24.9%. The level of education enables people to have exposure and knowledge about the mortgage financing. To some extent, it determines the salary pay for individuals which trigger them to access the mortgage industry. Educated mortgage owners are very sensitive on performance of their mortgage loans in terms of interest and repayment amount.

4.2.5 Length of Mortgage Loan

The duration of the mortgage determines the interest charges and principal amount repayment. It enables mortgage owners to know their mortgage repayment plan. Table 4.4 shows data collected on the length of mortgage loan.

Table 4.4 Length of Mortgage Loan

Duration of Mortgage Loan	Frequency (Sample)	Cumulative Frequency	Reponses in Percentage (%)
Less than 5 years	0	0	0.0%
5 – 10 Years	10	10	2.8%
11 – 15 Years	25	35	7.2%
16 – 20 Years	106	141	30.0%
Over 20 Years	212	353	60.0%
Total	353		100%

Source: Primary Data

From table 4.4, most of the respondents indicated that their length of mortgage loans were above 20 years. Mortgage institutions in Kenya advance mortgage loans up to 25 years. 30% of the respondents indicated that their mortgage duration was between 16 – 20 years.

4.3 General Findings

Survey questions were derived from Section II of the questionnaire. Part A provided information on mortgage financing in Kenya and Part B gave information on performance of real estate market in Kenya. Data on these variables was collected and presented in tables 4.5 and 4.6 as discussed below.

4.3.1 Mortgage Financing Variables

On mortgage financing, the study considered the following variables: incremental interest rates, monthly repayment amount, insurance charges, monthly mortgage interest rate, collateral needed, duration taken for loan to be approved and to be disbursed. Table 4.5 shows data collected on these variables.

Table 4.5 Mortgage Financing Variables

Mortgage Financing Variables	**Distribution of Respondents**					**Mean**	**Standard Deviation**
	1	2	3	4	5		
Incremental interest rate	127	152	64	10	0	1.86	0.74
Monthly repayment amount	0	50	153	75	75	3.13	0.83
Monthly insurance charges	203	100	50	0	0	1.28	0.45
Monthly mortgage interest rate	258	75	20	0	0	1.21	0.41
Collateral used	25	257	51	20	0	2.07	0.45
Duration for the loan to be approved	15	50	85	203	0	3.86	0.35
Duration for the loan to be disbursed	0	76	126	151	0	3.21	0.77

Source: Primary Data

From table 4.5, 43.1% of the respondents indicated that their monthly mortgage interest rate increased between 2% - 3%. On average, the incremental interest rate stood at 6.05% on annual basis. Incremental interest rate is due to micro and macro economic factors and this affects the prices of mortgages thus discouraging potential homeowners to access the mortgage markets. The standard deviation of incremental interest rate was found to be 0.74. Lower incremental interest rate reduces the cost of mortgage in terms of interest charges.

Mortgage institutions should provide constant mortgage interest rate for the potential homeowners to establish the cost of mortgage before they commit their funds.

The findings showed that monthly repayment amount ranges between Kshs. 50,001 – Kshs. 75,000 depending on the mortgage amount, period and interest rate. Out of the respondents surveyed, 14.16%, 43.34%, 21.25% and 21.25% indicated that their monthly repayment amount stood at Kshs. 25,001 – Kshs. 50,000, Kshs. 50,001 – Kshs. 75,000, Kshs. 75,001 – Kshs. 100,000 and more than Kshs. 100,000 respectively. This indicates that mortgage owners have stable and potential income to sustain the monthly repayment amount. Further, it is clear that they commit their income towards mortgage repayment thus hindering them to undertake other profitable investment projects.

Mortgage properties are insured against fire, perils and death. Insurance cushion the mortgage institutions against damages in the event of any in eventualities. In case the mortgage property is destroyed through fire and perils, the insurance firms clears the mortgage balance amount. From table 4.5, 57.5% and 28.32% of the respondents indicated that their insurance charges per month ranged between less than Kshs. 2,000 and Kshs. 2,001 – Kshs. 4,000 respectively. Insurance charges are considered as other additional cost to the mortgage amount thus increases the cost of mortgage loan. Monthly mortgage interest rate is a key determinant of cost of mortgage and it has been considered as the greatest hindrance towards access to the mortgage industry. The respondents indicated that on average, monthly mortgage interest rate stood at 1.21% translating to 14.52% per annum. From the findings, 73.08% of the respondents indicated that their monthly mortgage interest rate stood between 0 – 5%. The standard deviation stood at 0.41%.

For mortgage institutions to advance mortgage loans, they require collateral as a security because in case of default, they can be able to dispose off the property and clear the mortgage outstanding amount. The study revealed that 72.8% of respondents indicated that mortgage institutions require title deed as collateral because they have first charge against the mortgage property. In Kenya, mortgage property prices keep on increasing each day thus the amount charged will be less than the mortgage property prices at time of default. This covers the mortgage institutions thus the level of default rate is minimized.

Mortgage institutions follow various steps and procedures before they commit to advance mortgage loans. They must ensure that valuation is done to determine the mortgage loan amount, title deed is charged against the mortgaged property, access the ability of potential homeowner, ensure that payment of legal fees, stamp duty , arrangement fees and mortgage property policy premium. All these affect the duration of the loan to be approved and authorized. Out of the respondents considered, 57.5% indicated that it takes more than 21 days for the mortgage loans to be approved and authorized and 35.69% of the respondents indicated that it takes 15 – 21 days for the mortgage loan to be disbursed to the customers.

Table 4.6 Mortgage Financing in Kenya Survey Outcome

PART A : Mortgage Financing in Kenya	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)	Mean	Standard Deviation
1. Procedures and steps of accessing a mortgage loan in Kenya are short and simple.	0	75	101	76	101	2.42	1.12
2. Mortgage and financial institutions maintain high level of customers' satisfaction in terms of mortgage requests.	25	176	77	50	25	3.57	0.82
3. Monthly repayment charges and period is adequate to finance the loan.	125	105	95	28	0	4.22	0.77
4. Mortgage financing affects performance of real estate market in Kenya.	151	127	52	23	0	4.57	0.49
5. For the last one year, I have read an article on Mortgage Financing.	76	76	76	75	50	3.15	1.36
6. I understand the concept of mortgage financing.	152	101	75	25	0	4.08	0.96

Source: Primary Data

From table 4.6, 28.61% of the respondents were each neural and strongly disagreed that mortgage institutions follow procedures and steps of accessing a mortgage loan in Kenya are short and simple. The mean stood at 2.42 and standard deviation at 1.12. From the findings, 49.85% of the respondents agreed that mortgage and financial institutions maintain high level of customers' satisfaction in terms of mortgage requests translating to mean score of 3.57 and standard deviation of 0.82. Monthly repayment charges and period significantly affect performance of real estate market and 35% of the respondents strongly agreed, its mean score was 4.22 and standard deviation at 0.77. The study revealed that mortgage financing affects performance of real estate market in Kenya and 42.78% of the respondents strongly agreed with the survey question as indicated by mean of 4.57 and standard deviation of 0.49. Mortgage beneficiaries were neutral that they had read an article on mortgage financing over the last one year as shown by mean of 3.15 and understood the concept of mortgage financing as indicated by mean of 4.08.

Mortgage institutions follow various steps and procedures before they commit to advance mortgage loans. They must ensure that valuation is done to determine the mortgage loan amount, title deed is charged against the mortgaged property, access the ability of potential homeowner, ensure that payment of legal fees, stamp duty , arrangement fees and mortgage property policy premium. All these affect the duration of the loan to be approved and authorized. Out of the respondents considered, 57.5% indicated that it takes more than 21 days for the mortgage loans to be approved and authorized and 35.69% of the respondents indicated that it takes 15 – 21 days for the mortgage loan to be disbursed to the customers.

4.3.2 Performance of Real Estate Market in Kenya Variables

Respondents were asked to indicate performance of real estate market in Kenya in terms of differential rental income and incremental rental charges. Data on these variables was collected and presented in table 4.7.

Table 4.7 Performance of Real Estate Market in Kenya Variables

Performance of Real Estate Market in Kenya Variables	Distribution of Respondents				Mean	Standard Deviation
	1	2	3	4		
Differential rental income	252	101	0	0	1.29	0.45
Incremental rental charges	100	76	177	0	2.22	0.86

Source: Primary Data

From table 4.7, 71.39% of the respondents indicated that differential rental income between monthly mortgage charges and rental income stood between Kshs. 0 – Kshs. 15,000 and 28.61% of them indicated between Kshs. 15,001 – Kshs. 30,000. Rental income affects performance of real estate since it indicates income due to the mortgage homeowners. On incremental rental charges, 50.14% indicated that the rental charges increased by Kshs. 10,001 – Kshs. 15,000 on annual basis. Incremental rental charges motivate potential homeowners to own mortgage property since it discourages them to stay on rental property.

4.4 Correlation Output

Data on various variables was applied on SPSS to establish Pearson's product correlation coefficient. Pearson's product correlation coefficient was used to establish the association between variables of interest at 5% level of significance. Table 4.8 shows the Pearson's product correlation coefficient between variables.

Table 4.8 Correlation Co-efficient Between Incremental Interest Rate, Mortgage Repayment Amount, Mortgage Insurance Charges, Mortgage Interest Rate and Performance of Real Estate Market

	Incremental Interest Rate	Mortgage Repayment Amount	Mortgage Insurance Charges	Mortgage Interest Rate	Performance of Real Estate Market
Incremental Interest Rate	1				
Mortgage Repayment Amount	0.267	1			
Mortgage Insurance Charges	0.123	-0.105	1		
Mortgage Interest Rate	0.335	0.121	-0.327	1	
Performance of Real Estate Market	0.123	-0.106	-0.050	0.437	1

Source: Primary Data

From table 4.8, positive association exists between incremental interest rate and performance of real estate market ($r = 0.123$) implying that as incremental interest rate increases, differential rental income move in the same direction thus encourages performance of real estate market. Weak negative correlation exists between mortgage repayment amount and performance of real estate market ($r = - 0.106$). Increase in monthly repayment amount reduces the repayment period thus decrease in expected rental income. Weak negative association exists between mortgage insurance charges and performance of real estate market ($r = -0.050$) and positive correlation exists between mortgage interest rate and performance of real estate market ($r = 0.437$). Increase in mortgage interest rate increases the cost of mortgage thus increases rental charges in terms of performance. This hinders potential homeowners to access the mortgage market.

4.5 Regression Output

Multiple regression analysis model was used to establish the effect of mortgage financing on performance of real estate market in Kenya. Regression outputs are shown in tables 4.9, 4.10 and 4.11.

4.5.1 Regression Model Summary

Data on dependent and independent variables was regressed to obtain the model summary as shown in table 4.9 below.

Table 4.9 Model Summary

Model	Multiple R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin Watson	Observation
1	.774[a]	.605	.476	.11083	2.633	353

Source: Primary Data

From table 4.9, Multiple R of 0.774 shows that there is significant positive relationship between mortgage financing and performance of real estate market in Kenya. Adjusted R Square of 0.605 shows that model is good for the study and 60.5% of the variables considered explain the performance of real estate market in Kenya. Durbin Watson statistic was 2.633 and it falls between 1 and 3 thus indicates that the model is good for the study.

4.5.2 Analysis of Variance (ANOVA)

Data on ANOVA is shown in table 4.10 below.

Table 4.10 ANOVA

Model	Sum of Squares, SS	df	Mean Square, MS	F Ratio	Significance F
Regression	16.191	4	4.048	25.194	.000[b]
Residual	55.911	348	0.161		
Total	72.102	352			

Source: Primary Data

From table 4.10 on ANOVA, the significant level of 0 was less than 0.05 thus this indicates that data collected was adequate for drawing conclusion on the population of the study.

4.5.2 Regression Coefficients on the Effect of Mortgage Financing on Performance of Real Estate Market in Kenya

Regression output on the effect of mortgage financing on performance of real estate market in Kenya is shown in table 4.11.

Table 4.11 Regression Output on the Effect of Mortgage Financing on Performance of Real Estate Market in Kenya

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	0.778	0.135	- 0.012	5.753	0.000
Incremental Interest Rate	- 0.007	0.033	- 0.152	- 0.227	0.821
Mortgage Repayment Amount	- 0.083	0.027	0.096	- 3.070	0.002
Mortgage Insurance Charges	0.096	0.052	0.491	1.831	0.068
Mortgage Interest Rate	0.543	0.060		9.011	0.000

Source: Primary Data

From table 4.11, the estimated multiple regression model was:-

RI = 0.778 – 0.007 MT – 0.083 MR + 0.096 MIR + 0.543 MI

The intercept between performance of real estate market and mortgage financing was 0.778 indicating that for any increase in any of the variables of mortgage financing, performance of real estate market increases by 0.778. Negative relationship exists between mortgage terms, mortgage repayment amount and performance of real estate market. Improvement of performance of real estate market leads to decrease of 0.007 in terms of mortgage terms and 0.083 in terms of mortgage repayment amount. Positive relationship exists between mortgage insurance charges, mortgage interest rates and performance of real estate market.

Improvement in performance of real estate market leads to increase of mortgage insurance charges by 0.096 and mortgage interest rate by 0.543.

4.6 Summary and Interpretation of the Findings

In summary, there exists positive significant relationship between mortgage financing and performance of real estate market in Kenya. To sustain growth in real estate market, mortgage financing is needed that enable potential homeowners to acquire real estate properties at affordable rates. Property ownership drives the economic growth and it is a critical economic factor thus more attention is paid to mortgage development market. Housing finance companies deliver housing units to households at affordable prices thus contributing to social stability and growth of mortgage market.

Information sharing among mortgage financial institutions has boosted growth in real estate market since homeowners have classified information pertaining to the property. There exists market imperfection in Kenya and this has led to economic bubbles and cycles. The prices of real estate properties are overpriced and buyers are optimistic of future increase in of their properties. Lack of information has led to price fluctuation since two or various identical properties posses different values and prices. Homeowners acquire real estate and they have options to let them out thus increase in rental income.

Market incompleteness significantly changes the prices of financial assets and real estate. As the prices of real estate increase, the financial assets' return also increase thus direct significant associations between the two. Consumers prefer mortgage products with current gain as opposed to future risks. Due to these reasons, consumers keep on shopping for mortgages that meet their needs while prices keep on increasing.

Regulation of mortgage market and development is critical since unbalanced prices of real estate property lead to economic financial distress. This forces financial institutions to engage in predatory lending practices by providing loans to borrowers who are unable to service the loans. This boosts the level of default rates and seizure of collateral assets. Further, due to higher default rate and poor performance of mortgages, lenders institute strict lending conditions. Riskier collaterals trigger for higher initial payment, higher interest rates and short repayment periods.

The government has taken initiatives to boost growth in real estate market and these include introduction of RIETs, private public partnership, introduction of pension funds to be used as collateral to access the mortgage market. RIETs have been used as investment vehicles to mobilize resources from corporate and retail inorder to finance the real estate development. In terms of performance, mortgage institutions gauge the risks and returns from the investment and increase in mortgage loans has led to improvement in liquidity and profitability levels in real estate industry. Riskier mortgages record high profit margins.

Investors gather adequate information to form opinions and they assess rental growth and expected return differently for different periods and properties. When investors project that the growth of rental properties is weak and rate of return is high, then they use high capitalization rate to value the real estate property since they are sure that the likelihood of growth is minimal and they need to cushion themselves in the future.

The study support various researches done by Lixin and Lin (2008) who concluded that there exists direct association between long term debt commercial credit financing and firms' market values. Moreover, study by Hilbers et. Al (2008) who supported that in economic market, there exists information asymmetry in two ways. First, sellers have superior information about the property, market economic conditions and government regulations that eventually affect the prices of property and their surroundings. Secondly, sellers possess perfect information about the conditions of the property in terms of deficiency, costs and age. Further, Garmaise and Moskowitz (2003) observed that there exists significant correlation between information and prices of real estate properties.

From the findings, negative relationship exists between mortgage repayment amount, mortgage terms and performance of real estate market. As homeowners increase their mortgage repayment amount, the duration shortens. They are motivated to clear mortgage loan at earliest time. Property prices are used to indicate risks thus affects the cost of capital, profitability levels and ability of households to acquire mortgage. Although there has been growth in real estate market, rental charges and interest rates have increased thus leading to low occupancy level among the real estate properties.

On mortgage terms, homeowners seek prior knowledge about the property through social capital. This improves their negotiation of mortgage terms. The findings support a study by Pittman (2008) that documented that through social network, potential homeowners are able to have informed data thus making sound decisions. This improves their negotiation skills that eventually affects the mortgage terms.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

The study revealed that positive relationship exists between mortgage financing and performance of real estate market in Kenya. Real estate market need financing which is provided by the financial institutions. Homeowners invest in real estate property in anticipation of future increase in prices and rental income. Financial institutions provide adequate information to potential homeowners thus there is flow of information hence reduction in cases of moral hazard and adverse selection. To boost performance of real estate market, the government has introduced RIETs, private public partnership, introduction of pension funds to be used as security to access the mortgage market.

Mortgage insurance charges increase the cost of mortgage thus positive relationship between mortgage insurance charges and performance of real estate. Mortgage insurance charges are used to cub the cases of death, perils and fire and it depends on the value of mortgage. Negative relationship exists between mortgage terms, mortgage repayment amount and performance of real estate. As mortgage owners increase their mortgage repayment amount, the duration of the mortgage shortens leading to negative relationship. Homeowners posses information through social capital that boost their negotiation of mortgage terms.

5.2 Conclusions

From the findings, the study concluded that positive relationship exists between mortgage financing and performance of real estate market in Kenya. Real estate market has been used as a vehicle towards economic development. Performance of real estate is triggered by growth in population as there is adequate demand thus real estate participants provide housing units through mortgage financing. Due to presence of market imperfections, there have been economic bubbles and cycles and lack of information has led to two or various identical properties possessing different values and prices. Mortgage financing has unique characteristics of monthly repayment, long maturity and constant increasing in prices of properties. Through mortgage financing, there is revenue generation in terms of interest charges. To boost mortgage financing, financial institutions reduce the default rate of mortgage repayment through provision of capital payment holidays and extension of repayment period.

Real estate developers have resolved in using cost effective building alternatives that have reduced construction time. Real estate market is heterogonous and illiquid thus prices cannot be immediately be determined. In terms of performance, riskier mortgages record high profit margins have higher initial payment, higher interest rates and short repayment periods. The findings support studies done by Kormal (2009) on real estate for economic development, Garmaise and Moskowitz (2003) on information sharing to reduce moral hazards and performance of real estate market. Development of real estate market has been hindered by high interest rates and provision of inadequate long term financing.

5.3 Policy Recommendations

The study proposes various policies to stakeholders. Firstly, financial institutions should under that mortgage market in Kenya is undergoing growth stage and thus need financing. They should come up with various initiatives that boosts attitude towards mortgage financing that will eventually improve performance of real estate market. These initiatives will motivate potential homeowners to possess mortgage properties. Secondly, financial institutions should train their staffs and sensitize customers. On staff, they will have adequate knowledge to convince the customers and provide necessary information pertaining to mortgage financing. To clients, they will be motivated to invest in real estate market thus boosting performance of real estate market. This will reduce the cases of moral hazards and adverse selection.

Thirdly, the government should institute laws that guide registration of real estate agents in order to reduce the level of information asymmetry thus lowering the risk of moral hazards and adverse selection. The law will cub cases of brokerage who are present in the market to make abnormal profits. Fourthly, the government should regulate mortgage interest rates to boost performance of real estate in Kenya and improve the political stability of the country to encourage investment in isolated areas of the country. Lastly, mortgage and financial institutions should improve on mortgage authorization process and loan systems to enable clients to access the mortgage market.

5.4 Limitations of the Study

During the research work, various problems were encounted. Firstly, there was scarcity and limited access of secondary and primary data on mortgage financing since less studies have been done in Kenya on areas pertaining to mortgage financing. This limited the scope of literature review. Secondly, respondents required further explanation on some issues on the questionnaires. This shows that the respondents didn’t fully understand the concept of mortgage financing and performance of real estate market in Kenya.

Thirdly, the study didn’t receive 100% response level. Some respondents didn’t respond to the questionnaires since they thought that the information will be used against them. They feared providing confidential information about their mortgage property details. The non –

response rate could have impacted on the research findings. Lastly, data collection exercise was tedious and expensive since the researcher faced limited time and financial constraints. This hindered the data collection exercise.

5.5 Recommendations for Further Research

From the regression output, further research is advocated for to focus on other factors that affect performance of real estate in Kenya. These factors include political, legal , social, economic and geographical. Further, various micro and macro economic factors affect performance of real estate in Kenya and they include per capita income, economic power of customers and social status. Secondly, some research needs to be carried out to establish how location of mortgage property affects performance of real estate market. From empirical review, location of mortgage property was documented that significantly affect performance of real estate market.

Thirdly, the study considered mortgage financial institutions only. Further research is advocated for to cover wide spread in terms of country wide spread. Based on country wide spread, the study will document which part of the country is performance perceived to be high and what drives the performance of real estate regionally. Fourthly, attitude of homeowners towards mortgage financing affects performance of real estate market. Further research is recommended to establish this relationship. Lastly, further research should be carried to establish the effect of mortgage insurance and legal fees on mortgage financing and how they eventually affect mortgage interest rates.

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APPENDICES

Appendix I: Mortgage and Financial Institutions licensed by CBK as at 31st December 2013

1. African Banking Corporation Ltd
2. Bank of Africa Kenya Ltd
3. Bank of Baroda Kenya Ltd
4. Bank of India Ltd
5. Barclays Bank of Kenya Ltd
6. CFC Stanbic Bank Ltd
7. Chase Bank Kenya Ltd
8. Commercial Bank of Africa Ltd
9. Consolidated Bank of Kenya Ltd
10. Co-operative Bank of Kenya Ltd
11. Credit Bank Ltd
12. Development Bank of Kenya Ltd
13. Diamond Trust Bank Kenya Ltd
14. Ecobank Kenya Ltd
15. Equatorial Commercial Bank Ltd
16. Equity Bank Ltd
17. Family Bank Ltd
18. Fidelity Commercial Bank Ltd
19. First Community Bank Ltd
20. Giro Commercial Bank Ltd
21. Guardian Bank Ltd
22. Habib Bank Ltd
23. Housing Finance Company of Kenya Ltd
24. I&M Bank Ltd
25. Imperial Bank Ltd
26. Kenya Commercial Bank Ltd
27. Middle East Bank Kenya Ltd
28. National Bank of Kenya Ltd
29. NIC Bank Ltd
30. Oriental Commercial Bank Ltd
31. Paramount Universal Bank Ltd
32. Prime Bank Ltd
33. Standard Chartered Bank Kenya Ltd
34. Trans – National Bank Ltd
35. Victoria Commercial Bank Ltd

Source: CBK (2013)

Appendix II: Questionnaire

Dear Respondent,

The questionnaire is designed to study **The Effect of Mortgage Financing on Performance of Real Estate Market in Kenya.** Due to your wealth of knowledge and information on mortgage financing and performance of real estate, you have been successfully selected to participate in the study. The questions are meant for research and academic purposes only and confidentiality of information will be maintained.

Thank you for your cooperation and time.

SECTION I: BACKGROUND INFORMATION

Please tick one of the boxes for each question:

1. **Gender**

Code	1	2
Gender	Male	Female
Tick		

2. **What is your age**

Code	1	2	3	4	5
Age Bracket	1 - 29	30 - 39	40 – 49	50 - 59	60 and Above
Tick					

3. **Level of Education**

Code	1	2	3	4	5
Level	Less than Secondary	Secondary	Bachelors Degree	Post Graduate	Other Specify
Tick					

4. **Length of your mortgage**

Code	1	2	3	4	5
Duration	Less than 5 Years	5 – 10 Years	11 – 15 Years	16 – 20 Years	Over 20 Years
Tick					

5. **Monthly Income (Kshs.)**

Code	1	2	3	4	5
Amount	Less Kshs. 30,000	30,001 – 60,000	60,001 – 90,000	90,001 – 120,000	More than Kshs. 120,000
Tick					

SECTION II: SURVEY QUESTIONS

PART A: Mortgage Financing in Kenya

Please tick one of the boxes for each question:

1. Over the mortgage repayment period, what was the incremental fluctuation on interest rates?

Code	1	2	3	4	5
Monthly Incremental Interest rate	0 – 1%	2% - 3%	4% - 5%	6% - 7%	More than 7%
Tick					

2. What is your monthly repayment amount?

Code	1	2	3	4	5
Amount	Less than Kshs. 25,000	25,001 – 50,000	50,001 – 75,000	75,001 – 100,000	More than Kshs. 100,000
Tick					

3. What are your insurance charges per month?

Code	1	2	3	4	5
Amount	Less than Kshs. 2,000	2,001 – 4,000	4,001 – 6,000	6,001 – 8,000	More than Kshs. 8,000
Tick					

4. What is your monthly mortgage interest rate?

Code	1	2	3	4	5
Interest rate	0 – 5%	6% - 10%	11% - 15%	16% - 20%	More 20%
Tick					

5. Which type of collateral do bank require to advance mortgage loans?

Code	1	2	3	4	5
Collateral	Payslip	Title Deed	Employee Contract	Business performance statement	Others
Tick					

6. How long does the mortgage loan takes to be approved and authorized?

Code	1	2	3	4
Days	0 – 7 Days	8 – 14 Days	15 – 21 Days	More than 21 Days
Tick				

7. How long does it takes for the mortgage loan to be disbursed to the customer?

Code	1	2	3	4
Days	Within 7 Days	8 – 14 Days	15 – 21 Days	More than 21 Days
Tick				

Please indicate by ticking in the appropriate box to the extent to which you agree with the statement below: (S.A – Strongly Agree, A – Agree, N – Neutral, D – Disagree and S.D. – Strongly Disagree)

PART A : Mortgage Financing in Kenya	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
7. Procedures and steps of accessing a mortgage loan in Kenya are short and simple.					
8. Mortgage and financial institutions maintain high level of customers' satisfaction in terms of mortgage requests.					
9. Monthly repayment charges and period is adequate to finance the loan.					
10. Necessary adequate information is provided when accessing the mortgage loan.					
11. Mortgage financing affects performance of real estate market in Kenya.					
12. For the last one year, I have read an article on Mortgage Financing.					
13. I understand the concept of mortgage financing.					

PART B: Performance of Real Estate Market in Kenya

Please tick one of the boxes for each question:

1. If you were to let out your property, what is the differential amount between monthly rental income and monthly mortgage charges?

Code	1	2	3	4
Differential Rental Income	Kshs. 0 – 15,000	15,001 – 30,000	30,001 – 45,000	More than Kshs. 45,000
Tick				

2. By how much has the rental charges increased on yearly basis?

Code	1	2	3	4
Incremental Rental Charges	Kshs. 0 – 5,000	5,001 – 10,000	10,001 – 15,000	More than Kshs. 15,000
Tick				

3. What is the rental charge for newly developed rental property?

Code	1	2	3	4
Rental Charges	Less than Kshs. 15,000	15,001 – 30,000	30,001 – 45,000	More than Kshs. 45,000
Tick				

SECTION III: ADDITIONAL INFORMATION

1. What role do you think mortgage and financial institutions play in Kenya?

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…………………………………………………………………………………………………

…………………………………………………………………………………………………

……………………………………..

2. What is your opinion on performance of real estate market in Kenya?

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……………………………………………………………………………………………….

3. What other strategies do you recommend mortgage and financial institutions to implement to boost performance of real estate market in Kenya?

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…………………………………………………………………………………………………

…………………………………………………………………………………………………

………………………………………………………………………………………………..

4. Any other remarks on mortgage financing and performance of real estate market in Kenya.

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…………………………………………………………………………………………………

…………………………………………………………………………………………………

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Thank you for your cooperation and time.