

AN INVESTIGATION INTO THE FINANCIAL FACTORS AFFECTING GROWTH OF MORTGAGE FINANCING IN KENYA

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Abstract: The increase in size and openness, in both the markets and the financial institutions in Kenya has allowed the mortgage sector to expand phenomenally, raising concerns about the potential rise of risks. A concern regarding the mode of financing and risks associated has been overlooked with the country experiencing boom and therefore creating a major flux hence with the surge in residential housing prices between the year 2000 and 2015. Hence the need to conduct this research to bridge the gap between popular concern and academic inquiry by investigating the financial factors that affect development of mortgage finance in Kenya.

The population of study was financial institutions providing mortgage financing and the consumers of mortgage finance in Kitengela town. The collected data was coded, entered and analyzed using the STRATA program; the analysis of the result was based on descriptive statistics (mean, standard deviations, frequencies and percentages). The study used both primary and secondary data from published licensed mortgage financial institutions operating in Kenya annual reports and financial statements. The independent variable was financial factors affecting mortgage finance while dependent variable was development of mortgage in Kenya. Study results made recommendation which aims at improving the risks associated with mortgage finance as well as measures which would ensure risk management, equity and sustainability of the mortgage finance in Kenya and this effect has been characterized by changing models and rising influence of the real estate market in institutional portfolios. This is evidenced by the correlation between the independent variables and dependent variable under the study.

Keywords: Mortgage Financing, Interest Rate, Real Estate, Economic Growth.

1. INTRODUCTION

Real estate as defined by the Oxford English Dictionary refers to a legal term that encompasses land along with improvements to the land and anything attached to the land including builds, roads and any other improvement fixed in the location.

Mortgage as explained in the Wikipedia, the free encyclopedia refers to a loan secured by real property through the use of a mortgage which evidences the existence of the loan and the encumbrance of that reality through granting the mortgage which secures the loan. Mortgage lending companies are those that offer residential, commercial and other mortgages to various individual and institutional investors such as commercial banks, pension funds and credit unions.

According to Marples (2008) the high value of real estate's makes it difficult for most people to acquire a real estate property this states that the real estate mortgage industry is increasingly growing and becoming competitive. Currently sitting at Ksh. 61.4 billion, it includes a total of 13,803 mortgage loans, according to the research by World Bank the potential mortgage market is Ksh. 800 billion (World Bank report no. 63391_KE). Consider this example; a fixed rate mortgage has been made available for between 10 and 20 year terms. Some banks like KCB, and Housing Finance have

recently introduced 100 percent financing for the full value of a house. The Retirement Benefit Authority in 2009 allowed that pension contributions of up to 60 percent could be used to secure a mortgage.

Mortgage lending companies as stated earlier are those that offer residential, commercial and other mortgages to various individual and institutional investors such as commercial banks, pension funds and credit unions. The World Bank Report identifies the major sources of mortgage finance which include Housing Finance, Savings & Loan, East African Building Society, Standard Chartered Bank, Barclays Bank, I&M and CFC Stanbic Bank. Even with these sources, mortgage lending is still accessible to only a tiny minority. Efforts to expand this industry should be made. Newer products are been created by the new entrants and aggressive marketing.

Research by the World Bank (2011) indicates however that the two largest mortgage lenders are liquidity constrained. This means that this undermines their further growth. The government has put in place measures to encourage lending by banks.

This has been illustrated by the Central Bank of Kenya which reduced cash reserve ratios for banks from 5% to 4.5% in 2009, intended to free up more money for lending. In 2009, S&L Mortgages, the housing finance subsidiary of Kenya Commercial Bank (KCB), signed a KSh35.3 billion (\$441 million) housing deal with the Government of Southern Sudan to finance the construction of 1,750 housing units for public servants.

In Kenya an emerging housing microfinance sector is available. A number of pioneering SACCOs and NGOs are using this lending methodology to provide housing finance for the poor. Such an example is the Jamii Bora. Different organizations have provided technical and financial support to scale up housing micro finance and housing support services. A critical component of this work involves identifying appropriate and sustainable finance for it to be able to extend housing credit to its members.

According to World Bank (2011), only 11 per cent of Kenyans earn enough to support a mortgage. This implies that most middle-income earners cannot afford an average mortgage necessary to buy an entry-level house. Middle-income households as defined by the National Bureau of Statistics refer to those whose monthly incomes fall between KSh23 671 and KSh121 086. This therefore highlights the huge problem of affordability in the country.

According also to the World Bank (2011) the main source of housing supply is the resale market as households in existing housing trade up to better accommodation, making their current housing available for purchase by the new demand. As a proportion of mortgages, the resale mortgage market constitutes as much as 60 percent of transactions. It's restricted by the limited supply of good housing stock, given that much of the existing structures in urban areas are in need of repair and rehabilitation. Mortgage able stock is also generally geographically restricted to the largest towns of Nairobi and Mombasa.

According to Housing Finance Year Book (2012) of the 45 commercial banks in the Kenya, about 25 have mortgage portfolios. The largest mortgage lender is the Kenya Commercial Bank (KCB), as a result of its acquisition of Savings & Loans. Overall, the two largest mortgage lenders in Kenya control over half the mortgage market in the country. A typical loan is offered at a variable rate of about 14 percent over a period of 15 to 25 years; with a repayment period of 25 years, the monthly payment would be about US\$75 per month. This means that only about 2.4 per cent of the country's population and approximately 11 per cent of the urban population can afford a mortgage loan.

According to Housing Finance Yearbook (2012) Kenya is currently experiencing a real estate property boom in the home ownership sector. The rental housing remains undersupplied.

This has had an effect on the property prices increasing by five per cent in 2010. A highly speculative property market and high demand for housing has driven Kenya's residential property price inflation steadily up over the last eight years. Even with lower economic growth in the early part of the decade, as well as the aftershocks of the post-election violence, the residential property sector has performed well against these odds.

Generally, the system is generally considered inefficient, inaccurate and prone to delays and corruption. Kenya as a country needs to reform laws dealing with money laundering. The main reform that has occurred is the adoption of the national land policy, a positive step in resolving the protracted question of the reliability, accuracy and legitimacy of the land administration system in the country. Also to encourage more supply, developments of greater than 20 low-cost units are exempt from VAT.

According to World Bank Doing Business Report (2012) the Kenyan mortgage market is likely the third largest in sub-Saharan Africa after South Africa and Namibia, with mortgage assets equivalent to 2.5 per cent of Kenya's GDP. The country is very well positioned to support the future growth of its mortgage market by tapping into its capital market. Real estate mortgage boom has been contributed by the Kenyan Diaspora. It's responsible for almost 35 percent of the mortgage loan volume as non-owner occupied borrowers. Healthy profits have been recorded by suppliers of housing finance across the board over the last couple of years. This is because of this upward turn in the property market.

According to Dias, M. (2012) the high cost of living in the country is one of the factors that have prevented many people from buying homes. As tough economic times bite across Kenya, many people are tightening their belts to ensure the little they have pushes them to the next day. Also factors such as high fuel and food prices have occasioned a rise in the cost of living making life unbearable for many Kenyans. The high cost of living versus low income among Kenyans has pushed the plans of buying a house down the priority ladder.

The World Bank research estimates the potential size of the mortgage market to be about Kshs 800 billion– that is about thirteen times its current size. The World Bank also identified a number of obstacles to growth into this area. This included factors such as the affordability constraints, limited capacity for effective risk management, limited availability of long term funds for mortgage lending, and insufficient housing supply. The Central bank of Kenya's (CBK) monetary policy committee between July and December last year raised the central bank rate from 6.25 percent to 18 percent and commercial banks raised their rates in response, the 12 percent increase made it more expensive for commercial banks to access borrowing from the CBK, resulting in a double increase of the rates of interest on the financial products offered by the banks.

This included mortgages and ordinary loans advanced to the public. Currently, interest rates within local banks range between 19-28%. This scenario has kept most borrowers away from mortgage loans for the time being. The real estate prices have soared upwards to the extent that the great majority of Kenyans cannot afford a mortgage. In areas such as Kitengela there has been high concentration of housing. Even with this, developers have kept this market away from potential buyers due to their unreasonably high and unaffordable prices. This has led to Kenyans postponing the buying of a real estate.

Statement of the Problem

The Kenya Vision 2030 anticipates that more than half of our nation's population is going to be residing in urban areas following the current population trends. Thus, Kenya will need to plan for decent and high quality urban livelihoods for her population to achieve the millennium development goals on housing and national statistics, Kenya has a large housing gap which is growing every year and is increasingly prevalent in urban areas. The current annual housing deficit is estimated at 156,000 units per annum based on the population growth and urban migration taking place with Kenya Government projecting to build 200,000 housing units annually to bridge this gap(Vision 2030, KEBS statistics , 2015)).

According to KEBS statistics (2015) , Nairobi county has been able to construct only 2248 housings in between 2009-2014 with 80,000 approved spatial plan for residential units, this shows the shortfall comparing the rise of population and approved housing unit hence makes 30% of the population to leave in low income areas which is estimated to be 1million out of estimated 3.3 million people resulting to Government expenditure of Kshs. 1billion in the financial year 2014/2015 to bridge the gap of housing and community amenities. Mortgages have a big role to play in filling this gap; mortgages have great potential to reach MDG and vision 2030 levels as estimated by HFG2015 that large number of working population are increasingly seeking for mortgage loans with the corporation experiencing a steady growth of 10% annually over last 10 years to a tune of kshs. 60 billion

According to Walley. S (2011), real estate mortgage market if developed well can be able to contribute to economic growth and development. The real estate mortgage finance also helps in creation of employment and contributes to innovation and creativity in the country as well as aiding in poverty alleviation, reducing inequality and increases productivity.

Kenya's real estate mortgage market if developed well can grow and become competitive. Real estate mortgage financing has been experiencing some constraints which have led to slower growth rate.

The major constraint has been finance which is most important. If there is to be growth of mortgage financing in Kenya then finance has to be accessible to people. Access to finance allows mortgage financing institutions and borrowers to undertake productive actions to expand their businesses and to acquire the latest technologies, thus ensuring their competitiveness and that of the nation as a whole.

Despite the dominant importance in provision for homes, land or other real property, Mortgage Financing has faced difficulties in its growth. These difficulties have led to the majority of the population who are low-income earners and institutions not to actively engage in mortgage financing. In regard to this problem, this research addresses the financial constraints and mortgage growth rate in Kenya.

The general objective of the study was to undertake an investigation into the financial factors affecting growth of mortgage financing in Kenya.

2. LITERATURE REVIEW

Development of Mortgage Financing In the World

According to The Developing World, (1992); Meadows, The United States of America has the most active mortgage market in the world, and mortgage services are provided by a number of entities, including individual and organizational mortgage providers. Other types of mortgage brokers work in both individual and as organizational capacities. With all the players involved and with intense competition spur constant innovation; there are numerous types of mortgage products available in the US.

There are two basic types of mortgages in the United States: fixed-rate mortgages and variable-rate mortgages. Fixed-rate mortgages offer an interest rate that stays the same throughout the tenure of the mortgage. Variable-rate mortgages, which are also known as adjustable-rate mortgages, or floating-rate mortgages, offer rates that can be changed, adjusted or that fluctuate. Normally, fixed-rate mortgages have terms of either 15 or 30 years, which is the length of time the mortgage borrower has to pay off the mortgage. In the case of floating-rate mortgages, terms are normally only one year duration. According to Bertrand M. Renaud mortgage brokering evolved with the urbanization of the United States. The first Mortgage Brokers was Sonneblick & Goldman. Founded in 1893 in New York City, Sonneblick & Goldman got their start arranging debt financing for hard to finance real estate projects.

The Federal Housing Authority (FHA) was established in 1934. The Federal Home Loan Bank Board (FHLB) was established in 1935. Essentially, one of the purposes of these programs was to broaden borrower's qualifications for home mortgages. The roles of the mortgage banker and mortgage broker were to arrange mortgage loans for borrowers who could not obtain traditional bank financing. They both sold their loans to investors, the broker to wealthy individuals, and the banker via government agencies.

Bertrand M. Renaud explained that the mortgage financial markets became clearly defined at the start of the 1980s. Conventional mortgage loans were the domain of the Savings and Loans (S&Ls). Government mortgage loans were the domain of the Mortgage Bankers. The Mortgage Brokers handled everything else: second mortgages and credit risk first mortgages.

According to Richard K. Green in his book about The American Mortgage in Historical and International context he stated that in 1949, mortgage debt was equal to 20 percent of total household income; by 1979, it had risen to 46 percent of income; by 2001, 73 percent of income. Similarly, mortgage debt was 15 percent of household assets in 1949, but rose to 28 percent of household assets by 1979 and 41 percent of household assets by 2001. (Bernstein, Boushey and Mishel, 2003).

Richard Green also explained that the enormous growth of American home mortgages has been accompanied by a transformation in their form such that American mortgages are now distinctively different from mortgages in the rest of the world. In addition, the growth in mortgage debt outstanding in the United States has closely tracked the mortgage market's increased reliance on securitization (Cho, 2004).

According to Susan M. Wachter the structure of the modern American mortgage has evolved over time. She describes the historical evolution. The U.S. mortgage before the 1930s would be nearly unrecognizable today: it featured variable interest rates, high down payments and short maturities.

Before the Great Depression, homeowners typically renegotiated their loans every year. The U.S. mortgage provides many more options to borrowers. American homebuyers can choose whether to pay a fixed or floating rate of interest; they can lock in their interest rate in between the time they apply for the mortgage and the time they purchase their house and also choose the time at which the mortgage rate resets.

According to Geoffrey Mintz the Director of the Foundation for International Business and Economic Research (FIBER) he stated that the newly industrialized states, as well as socialist countries that have liberalized their economies, are facing somewhat different challenges than countries in which private property has a longer history. Many of the formerly socialist countries initially granted all of the land ownership to the government, which in turn passed the ownership in many cases to individuals, for instance by selling an apartment to the family that had rented it. In countries where property has been handed down through generations many ways of maintaining ownership and mortgage records particular to that local region may have to be considered by lenders.

According to Alan R. Fowler in study of a Brief History of the modern American mortgage market the United States mortgage market is undergoing an unprecedented restructuring, forced by a series of painful events to try to reinvent itself into something that can still meet the demands of at least a large portion of the home buying public. The repercussions of the chaos in the mortgage markets have been felt around the world. A surprisingly diverse group, including investors, financial institutions, hedge funds and homeowners worldwide are suffering the effects. Sussheila Dhillon and Brian Handal in their study of the American Mortgage Market observed that the falling values, which began in 2006, would expose the flaws in the mortgage system. This was because many people were in homes that they could not afford, they started with little or no equity and once values began to fall, many owed more than their home was worth and security holders began to see defaults far beyond what they expected based on the risk levels assigned to them. This led to the closing or devaluation of many financial firms and caused a liquidity crisis in financial markets around the world due to the sheer size of the mortgage securities market, and its complexity. According to Thomas N Herzog in his study of History of Mortgage Finance with Emphasis on Mortgage Insurance he explained that in order to understand the essence of the history of mortgage, it is crucial to understand who is lending the money that is being guaranteed, who is regulating the lender, and who is regulating the mortgage insurer.

Development of Mortgage Financing In Africa

According to Zhang, X UN-HABITAT Executive Director, Housing is one of the most basic human needs. However, many low-income developing countries are troubled by the high rate of urbanization. Between 2000 and 2030, the urban areas of the developing countries will absorb 95 percent of world's population growth. The main reason for high levels of urban poverty and rapid expansion of unplanned urban settlements and slums has been the excessive levels of urbanization in relation to the economic growth, which has been characterized by a lack of basic infrastructure and services, overcrowding and substandard housing conditions.

The main important task to meet the human settlements challenges is to devise mechanisms and systems by which an adequate and steady flow of long-term financial resources from both the public and private sectors could be mobilized and channeled into human settlements development and particularly in low income housing development and slum upgrading.

The Habitat Agenda recognized that housing finance systems do not always respond adequately to the different needs of large segments of the population, particularly the vulnerable and disadvantaged groups living in poverty and low income people.

It calls UN-HABITAT to assist member states to improve the effectiveness, efficiency and accessibility of the existing housing finance systems and to create and devise innovative housing finance mechanisms and instruments and to promote equal and affordable access to housing finance for all people. Commitments to strengthen the functions of UN-HABITAT were echoed by the General Assembly Resolution A/56/206 in housing finance and mobilization of domestic resources for housing and infrastructure. The main plea was for the private sector to invest in mortgage schemes targeting the poor. An author found out that Africa is home to the world's poorest people with 60 per cent of its population living below the poverty line. Addressing the first West African conference on affordable housing in Accra, Ghana and Africa in general, Tibajuka said that Africa is home to the world's poorest people with 60 per cent of its population living below the poverty line. She also found out that 72 per cent of urban people in Africa live in the slums creating conditions of deprivation, exclusion, unemployment and other anti-social vices that curtail economic growth.

The main argument was that governments need to work together with the private sector to establish financing schemes that deliberately target low-income earners and the poor. Mr. Kufuor of Ghana said among the reforms proposed by his government in the housing finance sector is provision of long-term mortgage and landownership policy to encourage title deed holding was also encouraged by the government.

According to development analyst Bright Simons, government owned or sponsored mutual fund driven housing schemes and the pseudo-mortgage arrangements that allow public sector employees to own their own property have proven to be relevant. He stated that housing schemes and mortgages tend to be inseparable in Africa, particularly as the secondary market is effectively vacant.

According to Dominic Adu, chief executive of Ghana Home Loans (GHL) financing mortgages in Africa could be a major challenge to institutions unless they are totally committed. GHL is a specialized residential mortgage finance company which has offered loans valued at over \$80 million dollars since its inception in 2006. Dominic Adu explained that the company found itself operating in an environment where even identifying the applicant was a challenge, let alone establishing their credit-worthiness in the absence of credit bureaus. Coupled with manual title searches and registration processes the GHL also had to deal with the cost and delays in registration of titles and collateral.

According to Nelly Nyagah in his study of Africa Mortgage Market is Transforming he stated that the real estate mortgage industry can be reformed through the following, Adequacy of financing terms – long term and low interest rates More government regulation and control Amending the Land Use Act and computerizing land titling through the use of GIS (Geographic Information system) to hasten and reduce cost of transactions in land thereby enhancing accessibility for development purposes, Establish cooperative housing and by ensuring stability of economic factors such as interest rates, inflation and exchange rate.

Development of Mortgage Financing in Kenya

Kenya, in common too much of Africa has a large housing gap which is growing every year. The gap is also increasingly prevalent in urban areas. The current annual housing deficit is estimated at 156,000 units per annum based on the population growth and urban migration that is taking place in Kenya.

The current levels of construction according to Ministry of Housing are 50,000 units a year. There is need for urgent solution to tackle the housing deficit and HF is taking a market band policy lead in Kenya. About 2.19 million houses are needed over the next 10 years according to the Developing Kenyan Mortgage Market (2011).

The Kenyan mortgage industry market has gone through the first stage and is preparing to enter its second development phase. The mortgage market is the 3rd most developed in sub-Saharan Africa with mortgage assets equivalent to 2.5% of Kenya's GDP. Namibia and South Africa rank higher than Kenya, with Botswana just slightly smaller.

The central bank of Kenya and the World Bank survey 2010 estimates that that 11% of Kenya's urban population can afford a mortgage. Assuming a housing unit with an average value of Kshs 3.2 million (\$39,600) this means a potential pool of 249,260 loans with affordability and housing supply a potential mortgage market size of kshs.800 billion or 9.9 billion exists in Kenya.

Mortgage Finance Delivery in Kenya

A number of insights into the Kenyan banking sector were highlighted in DeClene and Wood (2004) report .The Kenyan banking sector is emerging from severe financial and reputational damage resulting from corruption for example insider lending and expansionist monetary policies. This has led to economic recession and severe government debt during the late 1980s – 1990s. It was during this period, banks stopped lending to the private sector. This was mainly because of an increasingly high level of non-performing loans. A lack of corporate governance and political interference also contributed to this situation.

The newly elected government has counted this problem by putting an anti-corruption strategy at the top of its agenda, which has focused on strengthening the banking regulatory framework.

Currently there are forty-three registered commercial banks and one mortgage finance company in Kenya according to the World Bank.

Merrill, et al (2006), in a report prepared for Overseas Private Investment Corporation (OPIC) noted that a number of positive developments in the housing market over the past few years. This includes competition and innovation being introduced into the mortgage market. Nevertheless, Kenyan bank margins are exceptionally high, making it prohibitive for the majority of the population to access funds from the commercial banks. The housing market for upper and upper-middle income households in Kenya is becoming more active, there is a large and growing gap – estimated at approximately 150 000 units per year – between the current supply and the aggregate need for housing in Kenya. The main reason for massive slums in Kenya has been the rapid growth of the population, combined with very low incomes. Also the shortage of affordable land, infrastructure and housing has caused to massive growth to slums.

DeClene and Wood (2004) report also stated that the Kenyan Government needs to address the following problems facing real estate mortgage. Firstly is the legal framework. One of the most serious impediments is a confusing multiplicity of land laws, which affects property registration and titling. Government is working to consolidate title. The main disadvantage is that the process that is going to be slow and costly. Secondly, there exist excessive privacy laws that prohibit the formation of a credit bureau.

Thirdly, although Kenya has relatively strong foreclosure and enforcement laws, the ability to foreclose and evict to recover collateral on a home loan in the event of default can be made difficult due to excessive debtor rights. Lastly, is a longer-term concern, In Kenya the secondary market can be used to raise funds in the capital market. Mortgages are funded largely from customer's deposit. Asset-liability mismatches will at some point impair primary lenders' ability to meet growing mortgage demand as there is no secondary market.

Financial Constraints

One of the major financial constraints in the money market in Kenya real estate mortgage is that it's expensive due to relatively higher risks that raise interest rates. The exception is the central government and the local authorities who have obligation to provide decent housing for all their citizens. Unfortunately for a variety of reasons the revenue collected through taxes and service charges is not sufficient to cover housing needs as there are other priorities. The large and growing gap between what is needed and what is offered has led to strategies been devised.

For many financial institutions such as the banks, building societies, and mortgage companies, the mismatch between the short term nature of their deposits and the longer term nature of mortgage lending, in combination with the unavailability of longer term sources of finance, remain constraints. Interest rates for mortgages are therefore still at fairly high levels despite the improving macroeconomic climate. Pension funds and insurance companies represent a potentially huge source of longer term funds.

According to Giddings, W. (2011) the macroeconomic stability is returning to many countries in Africa, and with implemented or planned deregulation of the banking sector in several countries (e.g. Kenya, Ghana, Uganda, Nigeria, Tanzania and Zambia) the liquidity situation of many of the well-managed banking institutions in Africa has improved considerably. The availability of resources to invest in areas such as mortgage finance, therefore, does not appear to be a major constraint to increased housing production, particularly among the large regional merchant banks such as Barclay's Bank and Standard Chartered. This has led to the expansion of mortgage lending in a number of African countries.

Since the interest rates remain relatively high although they have fallen in many countries over the past year, increases in other cost factors, such as building materials, construction finance, the need to provide basic infrastructure and the price of suitable land, most of the mortgage financing in Africa goes to the middle and upper income classes, while low and moderate income families, that represent the bulk of the potential market. This has led to them been unable to qualify for conventional mortgage financing.

Growth of mortgage Finance

The objective of the study done by Kibor et al was to find out the factors contributing to the slow development of residential houses in Kenya, to determine the regulatory and legislative policies facing residential housing development, to find out the challenges affecting the capacity and technical capabilities of the mortgage lending companies in Kenya in granting loans to the investors, to determine the causes of shortfall in supply as compared to demand of houses and to find out if weaknesses arising from the current institutional frameworks have an impact on the slow development of the residential houses.

This study was based on Dow Theory. A descriptive research design and judgmental sampling technique was used in this study. The data was collected from the field by the use of structured questionnaires and analyzed using descriptive statistics including frequency distribution tables and percentages. The study established that the major factors contributing to the slow development of residential housing in Kenya include; Finance, Infrastructure, Cost, Legislation and inadequacy of national data on housing.

The analysis by the central bank and World Bank on Kenya's mortgage finance market presented the findings on the overall mortgage finance market, mortgage loan characteristics, and the main constraints to the primary mortgage market in Kenya. The analysis was based on survey of all the 44 banks in Kenya. All banks responded to the request in writing, 9 banks indicated that they did not provide mortgage financing. It had a three-part questionnaire which requested the banks to answer questions related to the size of mortgage portfolio, loan characteristics and mortgage market obstacles. The survey focused exclusively on the primary residential mortgage market is mainly concentrated around the Nairobi region.

Two key caveats regarding the survey results were the data on total loans may be overstated due to the reporting of developer financing loans by some institutions and the data on interest rates may be understated due to the inclusion of employee mortgage loans which are typically provided at subsidized rates. It had three sections covering overall market characteristics - profile of the Kenyan mortgage market, with a focus on the growth, segmentation and portfolio quality, mortgage loan characteristics – profile of the typical Kenyan mortgage loan, and mortgage market constraints – summary of the main constraints in the primary mortgage market identified by the commercial banks.

In the Rural areas the main challenges included water, Finance and Building Materials. The Developer, the Champion, the Design and procurement process conceptualization, manufacturing and construction cannot be ignored – the design team, the contractor and his sub-contractors all seek to be paid, over and above their costs.

From the researcher report by UN, the expected outcome was new national vision on housing, and Government enablement, new national housing policy, for both urban and rural areas settings, new approach strategies based on facilitating the ownership of homegrown solutions, fresh look at current legislation concerning housing, more community based and community driven strategies. The researcher used the approach that he would liaise with the director of housing in the ministry, conduct several field studies in the major urban centers, liaise with the UN center for human settlement and liaise with the major Non-Governmental Organizations like habitat for Humanity International and others of like objectives.

Empirical Literature

Akbar et al (2014), The research was conducted in trying to bridge the gap between popular concern and academic inquiry by addressing the question: How are mortgage lending institutions affected by the risk emanating from residential real estate markets in Scandinavia between 2000 and 2013? In attempting to answer this question we developed a two tiered approach by addressing two questions: What is the effect of selected factors on the delinquency rate of mortgagors in Scandinavia during the period 2000 to 2013? And does the change in institutional business models and mortgage lending businesses affect their distance to default?. It formulated a quantitative explanatory research employing the panel regression analysis tools in order to address the central question. The results of the research re-affirmed our earlier intuition as we discovered that interest rates, unemployment, outstanding mortgages and mortgage growth were significant predictors of the delinquency rates, additionally the results of its two-tiered analysis confirmed that mortgage lending institutions have been affected by the risks emanating from the residential real estate markets between 2000 and 2013 and this effect has been characterized by changing models and rising influence of the real estate market in institutional portfolios.

Atati, (2014) conducted An Investigation research into the factors that influence housing finance in developing countries: a case study of Kenya. The aim of this study was to examine the factors that influence housing finance; its supply and access and its impact to the provision of housing. The factors investigated in this study include; socio-economic factors, financial factors and government factors. The research adopted a survey design and was achieved through a questionnaire survey and interviews. The study also sought to identify direct and indirect sources of housing finance and the avenues that can avail funds for the low income earner. Various recommendations which are aimed at improving the availability of housing finance have been given as well as measures which would ensure equity and sustainability of housing finance institutions.

Merrill and Tomlinson (2006) in the USAID report and the African Union for Housing Finance (AUHF), notes that in the past high and volatile interest rates, high inflation rates, the crowding out effect of government debt issuance, and limited the ability of banks to engage in mortgage finance delivery. However, the mortgage lending rate has begun falling and as it falls further, housing finance will become more affordable. Merrill and Tomlinson (2006) also observed that Tanzania has made significant progress in the past decade in terms of economic and financial sector reforms, which can in part be put down to it participating in a Financial Sector Adjustment Programmer to restructure and deregulate the sector. Tanzania has reduced its high inflation rate and interest rates have stabilized, however, they are still somewhat volatile and quite high relative to inflation. The real estate mortgage lending rate is still fairly high which signifies very high spreads, again due to risk management problems.

Muigai M. Julius, (2016), conducted a research on development of an appropriate funding strategy for low and middle income housing markets in Kenya. The aim of this study was therefore to evaluate various funding strategies with a view develop an appropriate funding strategy for low and middle housing markets in Kenya. The research adopted a survey design and was achieved through a questionnaire survey and interviews. Data was collected from documented information from central bank on funding institutions in Kenya. The target population in this study was organizations registered for mortgage lending country wide as of 31st December 2012, commercial banks, MFIs and Sacco's. There were 46 registered mortgage providers licensed under the Banking Act of Kenya and five active MFIs offering housing finance to middle and low income groups. Therefore, the total population for the study consisted of 51 financing institutions. Random sampling was used to pick the respondents and data analysis was carried out using descriptive, Content and thematic analysis. This study established that the current housing financing options are not appropriate to low and middle income earners owing to high interest rates and collateral requirements.

Nkyi A. Benjamin, (2012) conducted research on strategies for financing real estate development in Ghana. The research extends current knowledge and understanding of financial practices of real estate firms in Ghana and draws theoretical explanations from real estate and finance literature to identify the gaps in knowledge. In an attempt to investigate the financial constraints confronting the developers, the research adopted a questionnaire survey approach as its methodology. A total of 48 real estate firms were involved in the study. The data collected were then analyzed using both descriptive statistics and multivariate analyses which reduce the number of variables and detected the structure of relationships between them. The empirical evidence of the research revealed that the number of constructed residential properties for outright sale by real estate firms have a positive relation with the age of firm, mean annual expenditure and firm size (number of employees). The study established the major financial sources of real estate finance in Ghana to be retained profits and advance deposits with former as the main finance acquisition pattern.

Critique of the Existing Literature

In critique, the above empirical literature shows that most of the studies undertaken to determine of financial factors is limited considering the sample population, choice of town and duration of the study considering the global real estate development indicators and financial downfall/ turmoil in 2010. It is clear that Kenya is unique and a study of all financial factors need to be incorporated to understand the growth of mortgage and solution to real estate problem which resulted to the need for this research.

Research Gap

Merrill and Tomlinson (2006) and other researchers above have not focused on Kenya but rather on countries such as Tanzania, Ghana which are also developing countries but having different housing problems since Kenya hosts one of the largest slums in Africa and world as a result of expanding population and income inequality resulting to increase of citizens seeking mortgage financing, this research focuses on Kenya and mainly the mortgage providing financial institutions. It narrows down to Kitengela town which is a fast growing town in Kenya. This research therefore focuses on assessment of financial constraints and the growth of mortgage financing in Kenya and puts forward various suggestions that could be applied to enhance growth of mortgage financing in Kenya hence closing of the existing knowledge gap.

Summary

It is clear that various studies have dealt on the influence of demographic factors, i.e. gender and age on eligibility and willingness by respondents to participate in mortgage financing, influence of socio- economic factors i.e. education and

income, and to determine whether willingness and eligibility decisions to mortgage financing by respondent are joint decisions.

The Central Bank of Kenya and the World Bank past study on the general mortgage market in Kenya shows that deficit exists to be bridged considering population and economic growth and mainly limiting the studies to residential housing therefore excluding other sectors real estate. This therefore necessitates more researchers to undertake research at the entire mortgage sector and seek solutions to rate of development problem.

3. RESEARCH METHODOLOGY

Research Design

This research is based on the Descriptive research design. It usually includes surveys and fact-finding enquiries of different size.

It includes two methods which are Comparative method and the correlation method. The descriptive method is also usually referred to Ex post facto research. In this method the researcher has no control over the variables; he can only report what has happened or what is happening. This research intends to discover the causes of financial constraints even though we have no control over them.

The research data collection methods mainly include two methods. This includes intensive interviews and questionnaires to gather information from the respondents.

The main advantage of this method is that the researcher will be able to use various forms of data. The researcher will also be able to incorporate human experience and give researchers the ability to look into what they are studying in various aspects.

Study Population

Study population refers to the population which the researcher will generalize their results. The study population consists of staff and customers of Housing Finance Company of Kenya, Standard Chartered bank, Co-operative bank, Eco bank, Equity Bank, Barclays bank, KCB Savings and Loans and Diamond Trust Bank (DTB).

Sample and Sampling Procedures

This research study involves non-probability sampling technique. This method is also known as the purposive method. It usually involves deliberate selection of particular units of the population for constituting a sample which represent the population.

Non-probability sampling technique is chosen because it has the advantage of being more accurate because the researcher will be targeting a specific group of the population. This means that the elements selected are a representation of the population the researcher is studying.

Samples from the chosen mortgage lending institutions will be taken because it has various sections that have different roles in the development of the housing sectors whose work performance is directly or indirectly related to this research.

The sample size includes 5 respondents; 6 staff members from kitengela town bank branches: KCB mortgages, National Bank, Housing Finance, Equity Bank, DTB Bank, and CFC Stanbic Bank; each will have 1 questionnaire. The research focused on 6 banks: the 6 banks were chosen because they are involved in financing of mortgage. The sample is six in number because they are neither too small nor too large to study.

Data collection

Data collection permission to conduct research will be obtained from the selected commercial banks management team. I will travel to various commercial banks and administer the questionnaires. This is done to ensure high return rate. Secondary data will also be used to collect data mainly from published journals, books, and newspapers.

Data Analysis

In order to analyze collected data Kothari (2003) observed that, a researcher needs to have the following information about the statistical data analysis tools namely: descriptive, inferential and test statistics.

The relationship between the dependent variable and the independent variables are determined by the below presented regression model. Variables data was analyzed using Statistical Package for Social Sciences (SPSS) The Regression model was of the form below:

$$MG = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where:

Y - Mortgage growth for year 1...n

X1 - Interest rates for year 1...n

X2 - national income for year 1...n

X3 - Bank regulations for year 1...n

ε = Error or random term a, β_1 , β_2 - constants

Significance of financial factors variables as predictors of mortgage growth was tested using the t-test. The significance of the overall model in explaining growth of mortgage financing.

4. FINDINGS AND DISCUSSIONS

Response Rate

This refers to the response rate for all the six banks. Each mortgage lending commercial bank had 1 questionnaire and the number of respondents was six representing each of the six commercial banks.

Questionnaire Response

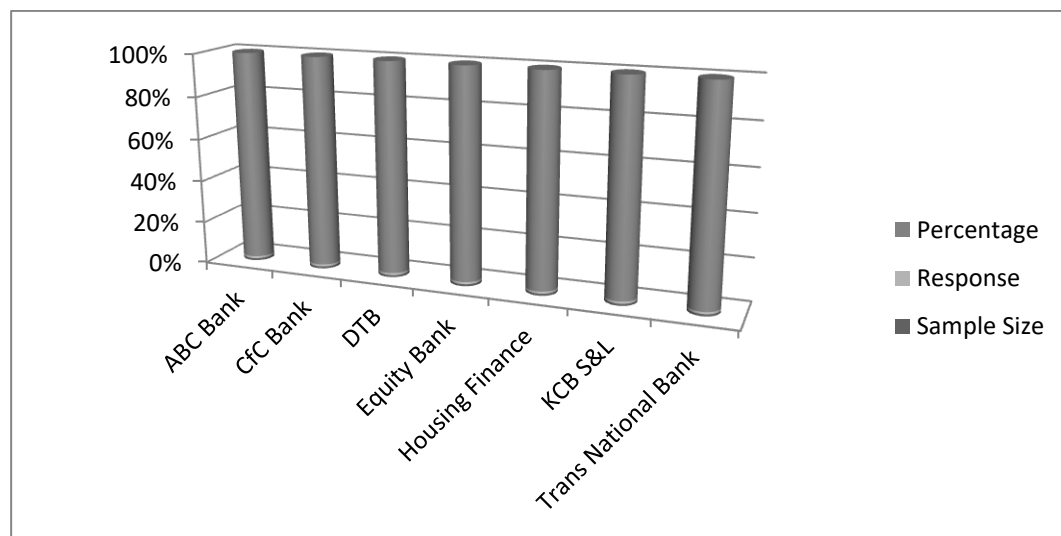


Figure 1: Questionnaire Response

Constraints Faced By Banks When Issuing Mortgage Loans

The problems faced when issuing mortgage loans by banks include:

Minimum Amount of Mortgage

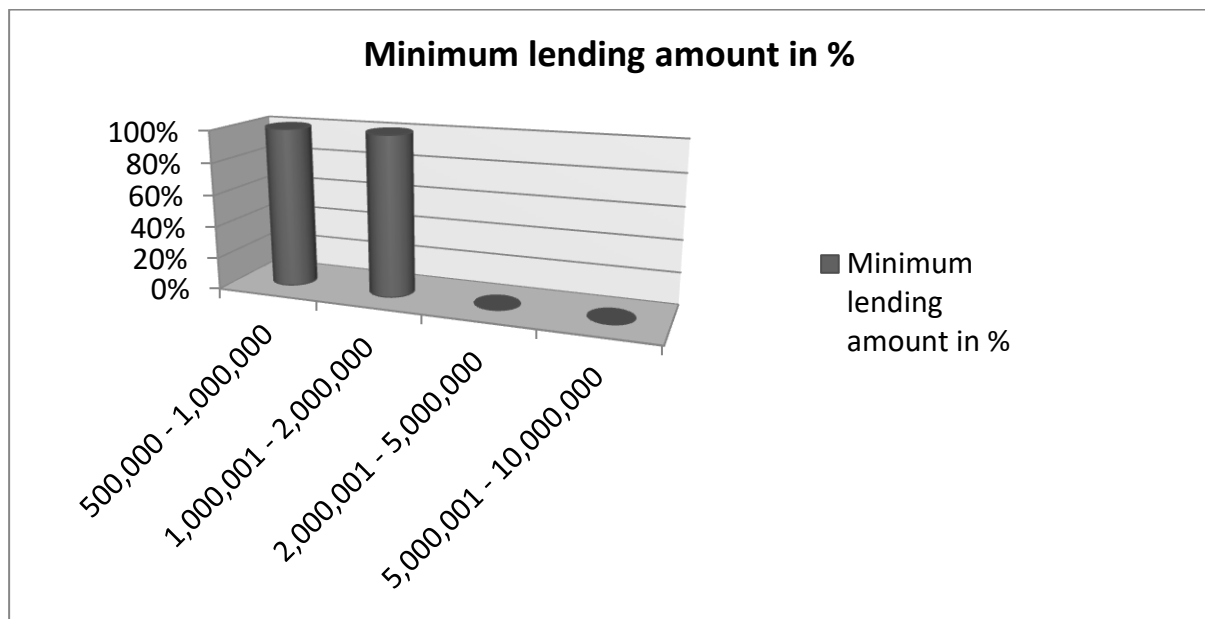
The main question for the respondents was to indicate the minimum amount of mortgage that can be borrowed. The results show that 56.5% of the respondents lend a minimum of between 500,000-1,000,000 while 43.5% of the respondents lend a minimum of 1,000,001 – 2,000,000.

The study indicated that majority of the institution lend a minimum of 500,000 because mortgage loans are usually long-term. Also the main problem is that construction projects require huge amount of funds.

Table 1: Minimum lending amount

Category	Frequency	Percentage
500,000-1,000,000	4	56.5
1,000,001-2,000,000	3	43.5
2,000,001-5,000,000	0	0
5,000,001-10,000,000	0	0
Total	7	100

Source: Field Data 2016ss



Effect of financial constraint facing mortgage issuance in the past five years:

Increase in CBK interest rates

The question to the respondents was how increase in CBK interest rates affects the ability to finance mortgage loans. The respondents indicated that 56.5 % were affected by interest rates on a large extent while 43.5% were affected on a very high extent.

Increase in CBK rates also led to the reduction in the number of mortgage taken, increase in interest rates leads to low borrowing of funds, and few people do take mortgage and thus lowers

Effect of collateral requirements

The question to the respondent was how the collateral requirement affects issuance of mortgage over the past 5 years. 27.5% indicated that collateral requirements affected issuance of mortgage in a large extent while 56.5% indicated that it was affected to a small extent and 16.0% indicated that it did not affect at all.

Effect of Inflation

The question to the respondents was how inflation affects the issuance of mortgage over the past 5 years. 27.5% of the respondents said that inflation affected the issuance of mortgage in a large extent while 72.5% said that inflation affected issuance of mortgage loan in a very high extent.

Effect of level of income

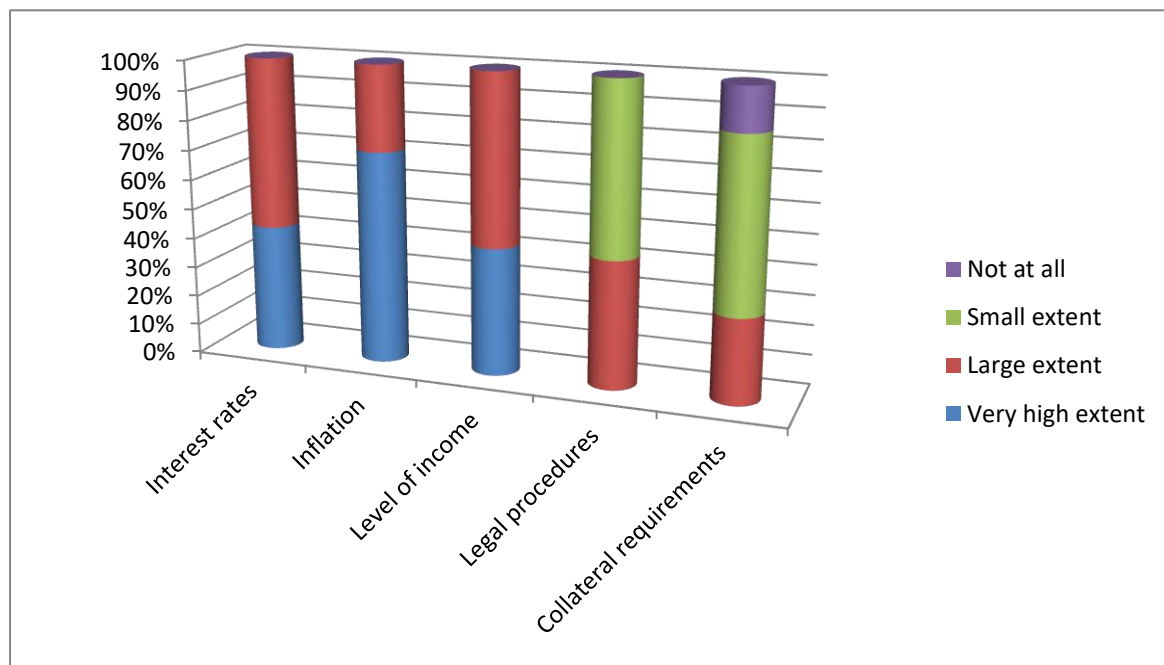
The question to the respondents was how the level of income affects issuance of mortgage over the past 5 years. 56.5% of the respondents indicated that level of income affected issuance of mortgage in a large extent while 43.5% indicated that it was affected to a very high extent.

Effect of legal procedures

The respondents were also asked to indicate how the legal procedures affected issuance of mortgage over the past 5 years 56.5% of the respondents indicated that legal procedures affected issuance of mortgage in a large extent while 43.5% indicated that it was affected to a very high extent.

Challenges			V.high extent	Large extent	Small extent	Not at all	Comment
Income level			43.5%	56.5%	0	0	Large extent
Inflation			72.5%	27.5%	0	0	High extent
Fluctuation in rates			43.5%	56.5%	0	0	Large extent
Legal procedures			0	43.5%	56.5%	0	Small extent.
Collateral requirements	0	27.5%	56.5%	16.0%			Small extent

Source : Data Analysis



Problems to Loan Granting

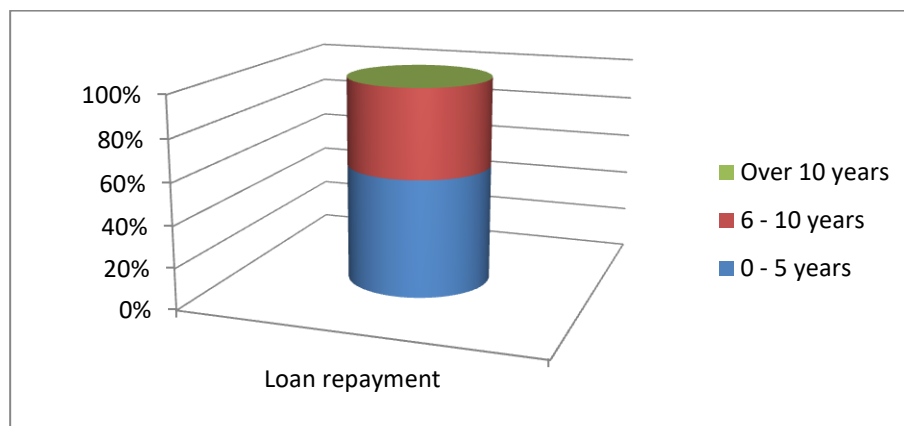
The respondents were also asked to indicate to what extent are financial challenges facing their capabilities as a financial institution a constraint to granting mortgage loans to client.

They stated that the main constraints included limited knowledge on financial products, volatility of interest rates regime, high cost of accessing loans on the part of financial institutions, lack of deeds for lands and fluctuation of interest rates once mortgage loans have been granted an interest rates falls with time, it does not take into consideration the previous interest rate hence affect the profitability of the institutions.

Growth of mortgage

Loan repayment difficult

The respondents were asked at what point do customers experience difficulty in repaying back the loan. 56.5% of the respondents indicated that customers experienced difficulty in repaying back the mortgage loan for the period below 5 years after being issued the mortgage loan while 43.5% experienced difficulty between 6 – 10 years.



Growth Attribution in the Past 5 Years

The growth of housing units was attributed to 42% personal loans and 58% mortgage loans.

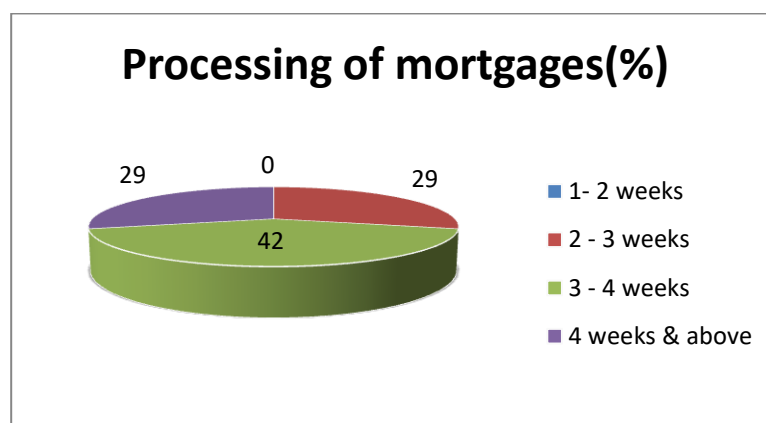
Mortgage Issuance to Customers

The study found out that 70% of mortgage customers were in the range of 0 – 500 while 30% were between 500 – 1000.

Period of Mortgage loan processing

The respondents were asked to indicate how long it takes them to process mortgage loans. Most of the institutions take a period of 3-4 weeks to process mortgage loans, this represents 42% of the respondents followed by 2-3 Weeks and 4 weeks and above with each represent 29% and of the respondents' population with no institution indicating a period of 1-2 weeks.

Because of the complexity in mortgage loan processing procedure for instance security valuation as collaterals and customer financial base it took processing mortgage loans about 3-4 weeks.



Relationship between Financial Constraints and the Growth Rate of Mortgage

The effects of access to finance to growth of mortgage financing discussed two major factors:

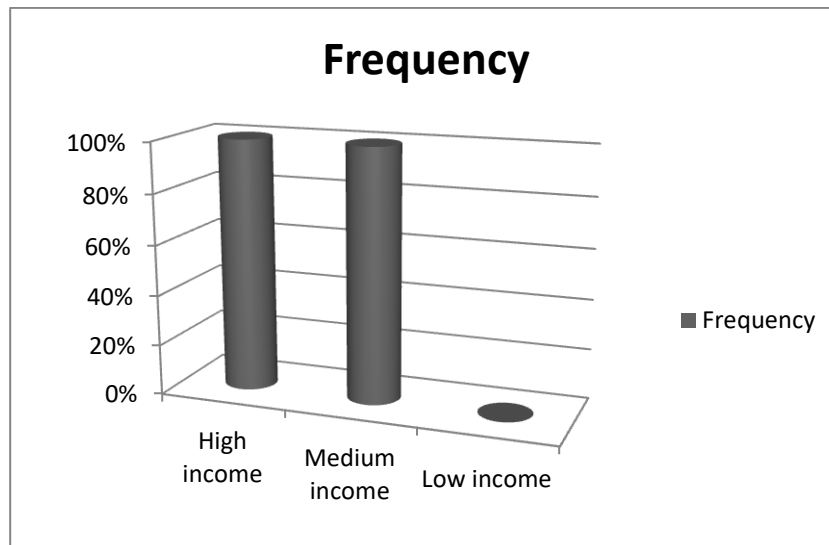
Income Levels of the majority loan borrowers.

The respondents were asked to indicate the Income Levels of the majority loan borrowers. The conclusion was of the total respondents, 85% indicated that medium income earners are the majority loan borrowers while 15% indicated that high income earners are the majority.

Finance access.

The respondents were asked to indicate the effects of access to finance to growth of mortgage financing The conclusion was of the total respondents, 70% indicated that access to finance affect the growth of mortgage finance with 30% indicating that access to finance does not affect the growth of mortgage finance.

Figure 4: Income Levels



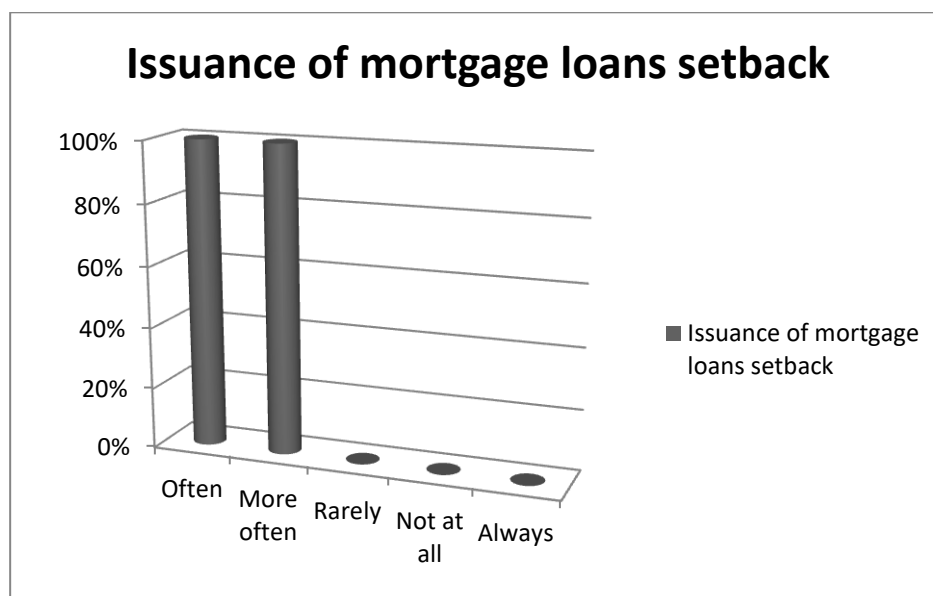
Source: Field Data 2012

Impact of financial constraints on the growth of mortgage financing

The respondents of the study found out that there are various constraints facing the growth of mortgage finance which includes; repayment of mortgages, unavailability of deeds for land, high interest rates from CBK, income levels of various borrowers’ unavailability of cheaper funds, unavailability of security and difficulties in processing of securities, and the high prices of fixed assets.

The respondents were also asked about the measures taken to overcome the constraints and the responds were as follows; looking for cheaper sources of funds, extending the tenure of financing, tight recovery measures, carrying out market research on expectation of rate changes at CBK and signing terms and conditions which allow flexibility in interest changes that do not affect both

Frequency of setbacks of mortgage industry affecting issuance of mortgage loans The question to respondents was how often do these setbacks affect the mortgage industry.42% of the respondents said that setbacks affect issuance of mortgage often and also more often while 14% said that it always affected issuance of mortgage.



Source: Field Data

The Regression Analysis

The regression analysis refers to a statically technique for estimating the relationship among variables. It includes many techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables.

Regression analysis helps one understand how the value of the dependent variable changes, when one of the independent variables is varied, while the other independent variable are held fixed.

Regression analysis is widely used for prediction, forecasting and also to understand which among the independent variables are related to the dependent variable and to explore the forms of these relationship.

This research project studies the correlation between the independent variable with the dependent variable. The result of study shows that the housing growth rate which is the dependent variable depends on mortgage growth rate which is the independent variable.

The variables under the study are:

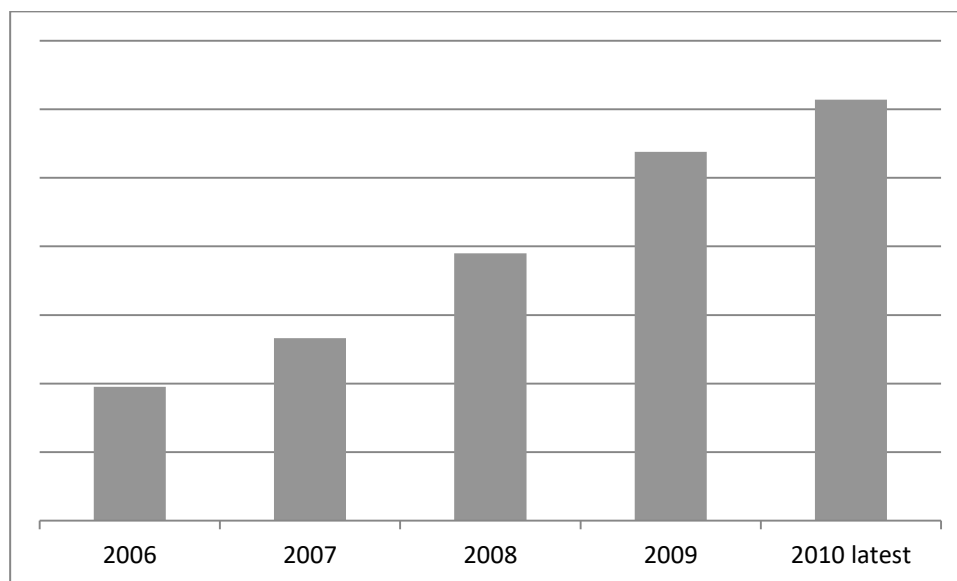
$$Y = a + bx$$

Where;

Y – Dependent variable (Housing Units)

X – Independent variable (Mortgage Rate)

Figure 5: Mortgage Growth rate (%)



Source: CBK Survey

Table 2: Housing Units Constructed in Kenya

Year	Number of Housing Units
2006	23,000
2007	22,000
2008	33,000
2009	35,000
2010	33,000

Source: Housing Finance

33

$$Y = a + bx$$

Where;

Y – Dependent variable representing Housing Units

X – Independent variable representing Mortgage Rate

Table 3: Correlation analysis calculations

Year	X	Y	X ²	XY
2012	19.5	23,000	380.25	448,500
2013	26.6	22,000	707.56	585,200
2014	39.0	33,000	1,521.00	1,287,000
2015	53.8	35,000	2,894.44	1,883,000
2010	61.4	33,000	3,769.96	2,026,200
	$\sum x = 200.3$	$\sum y = 146,000$	$\sum x^2 = 9,273.21$	$\sum xy = 6,229,900$

Source: Own compilation

$$\sum x \cdot \sum y / n - (\sum x)^2$$

$$a = \sum y / n - b \sum x / n$$

$$b = 5 * 6,229,900 - (200.3 * 146,000) / (5 * 9273.21) - (200.3)^2$$

$$= 1,905,700 / 6,245.96$$

$$b = 305.1$$

$$a = 146,000 / 5 - (309.2 * 200.3) / 5$$

$$= 84,067.245$$

$$a = 16,813.44$$

$$Y = 16,813.44 + 305.1x$$

The regression analysis as stated before refers to a statically technique for estimating the relationship among variables where the focus is on the relationship between a dependent variable and one or more independent variables. In this study the dependent variable represents the housing units while the independent variable represents the real estate mortgage rate. The result of study shows that the housing growth rate depends on mortgage growth rate and that an increase in the rate at which mortgage loans are offered by financial institutions such as commercial banks leads to the number of housing units or the real estate industry to also grow at a high rate. For example, When the rate at which mortgage loans was offered in the year 2006 was 19.5 the housing units was 23,000, but when the rate of offering mortgage loans was increased year by year the number of housing units increased such as in the year 2010 the number of housing unit s increased to 33,000 which was due to the main reason that the rate of offering mortgage loans to real estate customers had being increased. From the regression equation which is $Y = 16,813.44 + 305.1x$ if the rate at which mortgage loans are offered to customers is 19.5 then the number of housing units will be 22,763 i.e.

$$16,813.44 + 305.1(20.0) = 22,915 \text{ housing units}$$

But if there is an increase in the rate at which mortgage loans are offered let's say the rate increases from 19.5 to 61.4 the number of housing units will increase to 35,547 i.e.

$$16,813.44 + 305.1(60.0) = 35,120 \text{ housing units}$$

The conclusion here is that the growth rate of housing units depends on the rate at which mortgage services will be offered to the real estate customers, if the rate of mortgage services by financial institutions is increased then the real estate industry in Kenya will have a high growth rate.

5. DISCUSSION AND CONCLUSION

Summary of the Findings

Three main objectives were included in this study which are as follows:

The first objective aimed to assess the growth of real estate mortgage overtime. The conclusion of the study was that majority of real estate mortgage customers were medium income earners, and the frequency of mortgage takers has increased over the past five years.

The second objective of this study sought to find out the factors and the financial constraints facing mortgage growth in Kenya. The conclusion of the study was that real estate Mortgage lending institutions face financial constraints like interest rates, inflation, legal procedures and lack of collateral when lending mortgage loans to their customers.

The final objective and the third was to find out the relationship between the growth of real estate mortgage finance and the financial constraints faced by mortgage lending institutions. The conclusion of the study was that an increase in financial constraints leads to reduced real estate mortgage growth.

Conclusion

The main factors facing the growth of real estate mortgage financing in Kenya included high interest rates, national income, lack of financial literacy, legal procedures, and collateral and long mortgage processing period.

Other factors facing growth of mortgage finance was high interest rates, collateral and low income level significantly affects growth of real estate mortgage financing. Also housing growth rate directly depends on real estate mortgage finance growth rate.

The study established that financial institutions do usually incorporate reference to financial statements, the character, capacity of the customer and reference to credit bureaus in their credit standards as requirements to be evaluated before mortgage loan allocation is granted. This ensures a solid foundation of the requisite credit standards.

Another establishment is that financial institutions rarely prefer to take their clients to court on loan repayment default. They prefer to re-negotiate with the customer to enable repayment according to the client's prevailing repayment ability. Financial institutions should therefore have systematic documented procedures to address the collections from defaulting customers and minimize taking them to court

Access to finance affects growth of real estate mortgage financing. This is because of the various reasons which include, low income level of customers, long real estate mortgage processing periods caused by difficulties in valuation of collateral.

Financial constraints impact negatively to the growth of real estate mortgage financing.

This problem is corrected by real estate mortgage lending institutions formulating their mortgage lending policies bearing in mind the need to increase the number of mortgage loan borrowers.

If mortgage lending institutions and clients can be made aware of these constraints that affect real estate mortgage financing growth then they would work towards minimizing these constraints. They can also improve real estate mortgage growth rate.

Recommendation for Further Research

Factors such as high interest rates, low income level of customers, lack of financial literacy, collateral and long mortgage processing period are a hindrance to growth of mortgage financing.

The first recommendation of this study is that mortgage lending institution need to be flexible in their loan amounts. This will ensure it caters for low and medium income earners; flexibility should entail banks restructure and rescheduling the repayment periods to reduce the risk of default.

The second recommendation of the study is that financial institutions educate their customers about their credit policies and mortgage products. This will ensure that both the existing and potential clients wishing to apply for a loan would conform to certain requirements.

The study also recommends that financial institutions should have an education day with their clients on their mortgage loans policies and even the prevailing mortgage loan terms. This is done to encourage clients to apply or renegotiate the terms of their previous loans as the case may be. Such action will improve the financial institution's lending base.

The study also recommends that credit information about clients from credit reference reporting should be gotten by financial institutions such as banks and bureaus for easy and speedy processing of mortgage loans, credit reference reporting bureaus should also share positive information not only negative information with clients to encourage more borrowing of mortgage loans.

Finally, the research recommendation of this study is that financial institutions such as commercial banks should have systematic documented procedures to address the collections from defaulting customers and minimize taking them to court.

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