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The Strategic JOURNAL of Business & Change MANAGEMENT
ISSN: 2312-9492 www.strategicjournals.com
Vol. 6, Iss. 3, pp 160 - 175 July 18, 2019. www.strategicjournals.com, ©Strategic Journals

DETERMINANTS OF MORTGAGE GROWTH IN SELECTED MORTGAGE INSTITUTIONS IN KENYA

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Accepted: July 17, 2019

ABSTRACT

The main objective of this study was to investigate the determinants of mortgage growth in selected mortgage institution in Kenya. The specific objectives of the study were: To determine the influence of interest rates, regulations, income level and employment status on mortgage growth. The study used descriptive design. The target population was 18 mortgage lending institutions in Kenya. Census approach was used. A sample of 54 respondents from operation managers, credit managers and customer relation officers was selected. Questionnaires were used for collecting data. The data collected was then coded and analyzed using inferential statistics. Finally, the collected and analyzed data was presented in tables. The findings indicated that there was a significantly positive relationship between interest rate and mortgage growth (r=0.294, p=0.000). The results further showed that there was a significantly positive relationship between regulation and mortgage growth (r=0.449, p=0.000). The results in regression coefficients established that that income level and mortgage growth were positive but insignificantly related (r=0.133, p=0.093). Further the results findings indicated that employment status and mortgage growth was positively and significantly related (r=0.253, p=0.003). The study recommended that proper policies should be put in place to ensure the stability of interest rates. The study also recommended that the government should put in place sufficient regulations and incentives to promote the mortgage industry. The study further recommended that there is need for real estate developers to ensure development of strategies to target low income level and finally the study recommended the stakeholders to create more employment as this will increase the mortgage uptake in Kenya.

Key Words: *Interest Rates, Regulations, Income Level, Employment Status, Mortgage Market*

CITATION: Kabwithia, E. M., Were, E., & Kiama, M. (2019). Determinants of mortgage growth in selected mortgage institutions in Kenya. *The Strategic Journal of Business & Change Management,* 6 (3), 160 – 175.

INTRODUCTION

The mortgage market mainly focuses on financing real estate assets (Femi, 2013). The provision of housing in general cannot be successful if a country does not have a well-developed mortgage market. Lwali, (2008) argues that in Kenya, the institutions involved in the provision of mortgages include commercial banks, specialized mortgage firms, saving and loans firms, insurance companies, government parastatals, pension funds, trusts and other real investment. Central Bank of Kenya (2013) indicates that commercial banks dominate mortgage lending in Kenya, with 43 banks and one Mortgage Finance Company, 36 of them having mortgage portfolios of differing sizes. Central Bank of Kenya authorizes two types of lenders, the ordinary banks and the mortgage companies. Growth in the mortgage market can occur when the types of mortgage loans increase, when the rates of these mortgages are affordable, when mortgage financing is the preferred mode for acquiring housing for companies and individual, when the housing supply meets the demand in the market, when the competition in this market is strong enough to moderate rates through several competitive commercial mortgage providers (World Bank, 2011).

Mortgages have a big role to play in filling this gap; mortgages have great potential to reach levels such as the average mortgage debt to GDP level in European countries is in the region of 50 percent, whilst in the US it reaches 72 percent. According to World Bank the potential size of the mortgage market is currently around Ksh 800 billion or $9.9 billion around 13 times the current level (World Bank, 2011). Mortgage financing is a loan whose collateral is real estate property requiring the borrower to repay over a specific period in form of installments (Bienert & Brunauer, 2006). Mortgage financing plays an important role in enabling people to be real estate property owners and or homeowners. Globally, urban populations are growing at a rate much faster than can be absorbed and managed, placing a high demand on services and infrastructure. Developed countries have advanced housing finance systems in which funds flow from savers to home-buyers by the mortgage markets.

In Africa, the mortgage markets are low. The number of mortgage is rarely more than a few thousand and loans are often limited to the wealthiest segment of the population (Walley, 2013). While there is room for growth in Africa's tiny mortgage markets, the reality is that the vast majority of households are unable to access a mortgage. Walley (2010) argues that about 3% of households in Africa have an income viable for a mortgage. While this number is higher in urban areas and significantly so in some cities, most households will need to access other forms of finance to meet their housing needs. In Kenya the mortgage market has witnessed an impressive growth in the 21st century, however the number of loans are still very low. This has often been associated with scanty information available to potential buyers on mortgages, the prevailing high interest rates as a result of a stringent monetary policy being pursued by the Central Bank of Kenya in an effort to fight high inflation. A greater proportion of the new housing stock that came to market in 2011 was reachable by mortgaged buyers than in any previous year, at 38 per cent of new-builds, compared with 34 per cent in 2010(Kariuki 2010).

Mortgage industry in Kenya dates back in 1965 when housing finance was incorporated and its main aim was to promote a savings culture and home ownership among the citizens of Kenya. As at December 2013 at least 25 banks were offering mortgage loans. The increase of mortgage financing in Kenya may have been influenced by factors such as the changing mortgage climate, sustained economic growth, cross-selling potential, profitability and market penetration and liberalizations of market. Kenya's mortgage market has more than tripled in the past five years. The mortgage market has grown from Kshs.19 billion in 2006 to just over Kshs.61

billion by May-2010 year. This translates to an annual average growth of 34%, indicating an exponential increase in mortgage loans (Government of Kenya, 2007).In Kenya; Housing Finance is the only mortgage finance institution.

Statement of the problem

Even though the mortgage market is a major avenue for home ownership in Kenya majority of the home owners hardly use this market and many have financed their homes through avenues such as SACCOS, microfinance institutions, personal savings and home loans as opposed to mortgage loans (CBK, 2011). The mortgage market in Kenya is therefore underdeveloped with a lot of untapped potential. Despite this the demand for housing in Kenya is immense; hence an efficient housing finance system has significant importance both in meeting the housing needs of individuals and in reinforcing the development of the construction, finance and other related sectors of an economy. Pittman (2008), points out that obtaining a mortgage in today's mortgage market is a complicated process as it involves many procedures like identifying the best service provider with the best interest rates. This in turn hinders accessibility to mortgage funding.

The growth of the mortgage sector has been slow in Kenya. In December 2014, the mortgage holders stood at 22,013, in December 2013 they were 19,879 mortgage holders (CBK, 2011), and while by end of 2012 there were 17,000 holders (Hass Consult, 2013). This shows low uptake of mortgage in the country. The mortgage market is still relatively small by international standards with only 22,013 loans. Only 11 per cent of Kenyans can afford an average mortgage loan. An average mortgage loan in Kenya is Sh6.6 million, and demands a monthly repayment of about Sh90, 000 for a period of 20 years. The local housing market is facing numerous challenge among them wide deficit estimated to stand at an annual demand of 300,000 housing units against supply of paltry 60,000 (Ojijo, 2015).

A number of studies have been done on determinants of mortgage growth in Kenya. Njongoro (2013) analyzed the effect of mortgage interest rates on the growth of mortgage financing in Kenya and found out that a strong negative relationship was realized between mortgage interest rate and growth of mortgage financing. In overall the results indicate that mortgage interest rate and non-performing loans are not adequate predictors of mortgage growth. Okong'a (2015) examined the effect of mortgage interest rates on the growth of mortgage financing amongst financial institutions in Kenya and the results revealed a very weak positive relationship between mortgage interest rates and growth of mortgage financing Tesfaye (2007) found out that the legal framework guiding housing loans markets is unfavorable and this affects their operational environment whereby where there is poor developed regulatory the credit risk is very high. Muturi, Gichira and Ndung'u (2016) conducted a study on influence of Government Regulations on the Relationship between Mortgage Distribution Channels and Performance of Real Estate in Kenya and found that government regulations significantly moderated the relationship between mortgage distribution channels and performance of real estate sector in Kenya. However, of all these studies, there has not been one that focused on establishing the four determinants in the study that influence mortgage growth in selected mortgage institution in Kenya and thus the research gap that the study attempted to bridge.

Objectives of the Study

The general objective of this study was to assess the determinants of mortgage growth in selected mortgage institution in Kenya. The specific objectives were:-

- To determine the effect of interest rate on mortgage growth in selected mortgage institution in Kenya

- To establish the effects of government regulations on mortgage growth in selected mortgage institution in Kenya
- To assess to what extent income level of the borrowers influence mortgage growth in selected mortgage institution in Kenya
- To examine how employment status influence mortgage growth in selected mortgage institution in Kenya

LITERATURE REVIEW

Theoretical Review

Title theory

The Title theory was introduced by Gilbert (1968) and states that after making the mortgage, the mortgager passes title of the property, the subject of the mortgage, to the mortgagee, subject to a condition subsequent (Nwankwo, 2014). Some banks retain and treat the mortgage as a title theory. Since the mortgage is said to hold a title interest, it has the right to possession under this theory. In a title theory bank, the mortgage is treated as having transferred title to the mortgage, subject to the mortgagee's duty to recovery if payment is made. The title is said to remain in the mortgagee until the mortgage has been satisfied and foreclosed. Under the title theory title to the security interest rests with the mortgagee although the mortgagee has the right of possession to the property, there is generally an express agreement giving the right of possession to the mortgagor. The mortgagee is said to hold the title for security purposes only. The mortgagor is given the right of possession (Buckley and Kalarickal, 2004). The principle in the title theory bank is that the mortgagee is given the right to possession before the foreclosure is complete. The language of the mortgage provides for possession rights being in the mortgagor up to the time of the foreclosure.

Lien theory of mortgages

The lien theory was developed by Hester (1975). This theory only gives the mortgagee a lien interest in the property. In a lien theory bank or the mortgagor retains legal and equitable title to the property, but conveys an interest that the mortgagee can only foreclose upon to satisfy the obligation of the mortgagor. This is equivalent to a future interest in the property which allows the mortgagee to use the process of foreclosure. The interest is a security interest or mortgage, which forms a lien on the property. In this theory the right to possession arises upon a default. The mortgagor has a right to sue the mortgagee for any interference with his right of possession (Buckley and Kalarickal, 2004).

Classical Theory of Demand

This theory was developed by Blang, (1992). This theory is derived from the roles played by money (Blang, 1992). The prime factor is that money performs as a medium of exchange and as a store for value. Money is demanded by the people not for its own sake, but as a medium of exchange. Thus, the demand for money is essentially to spend or for carrying on transactions and thus is determined by the total quantity of goods and services to be transacted during a given period. Therefore, individuals and businesses wish to keep money a portion in cash and in the form of assets. Demand for money is affected by several factors including level of income, inflation, and interest rate. There are two approaches of this concept: the scale approach where demand for money is directly related to the income level. The higher the income level the greater the demand for money. The other approach is the substitution view which is related to relative attraction of assets that can be substituted for money.

Empirical Review

Interest rate and mortgage growth

Interest rate is a price that relates to present claims on resources relative to future claims on such resources. It is the price a borrower pays to be able to consume resources (Kwak, 2010). Correspondingly

interest rate is the price that a lender receives to forgo current consumption to take advantage of consumption of resources at some point in future. Price changes are anticipated and this anticipation is part of the process that determines interest rates (Gardener, 2009). According to Dennis & Pennington (2011) interest rates represent the cost of borrowing capital for a given period. Since borrowing is a significant source of finance for many firms, prevailing interest rates are of much concern to many firms because of indexing of interest rates in some borrowing arrangement; interest rates continue to affect a firm for the whole period that the borrowing arrangement is outstanding. The major factor driving interest rates is inflation (Dennis & Pennington, 2011). Higher inflation is associated with a growing economy. When the economy grows too strongly, Central Bank increases interest rates to slow the economy down and reduce inflation. A strong economy therefore results in higher real-estate prices, higher rents on apartments and higher mortgage rates. There are various factors that affect mortgage growth in Kenya and they include interest rate on mortgage, mortgage valuation cost, low level income of borrowers and government regulations and incentive. According to Merriam (2002), Interest-rate movements are based on the simple concept of supply and demand. A major factor driving interest rates is inflation (Dennis & Pennington Cross, 2008).

Government Regulations and mortgage growth

Regulatory features generally influence real estate and credit market incentives through: housing demand incentives related to tax, treatment, such as recurrent taxes on dwellings, VAT, transaction costs, capital gains tax among others; housing supply factors including land-use and planning regulation, regulation of the rental market and the overall business environment; mortgage demand incentives comprising mortgage characteristics (such as loan-to-value ratios, typical maturity or currency denomination) and tax incentives on mortgages; and credit supply factors such as restrictions imposed by bank prudential regulation and supervision (Beck *et al.,* 2011).

Income level and mortgage growth

Mokua (2008) asserts that mortgage finance remains unaffordable to potential home owners and that all the mortgage products target high and middle-income earners who constitute a partly percentage of the salaried people within the private sector. He emphasized that it is just below 5% of Kenyans who can access conventional housing finance. The scenario resonates throughout sub-Saharan Africa where the mortgage market remains undeveloped against the background of a growing middle class in need of affordable homes.

Employment status and mortgage growth

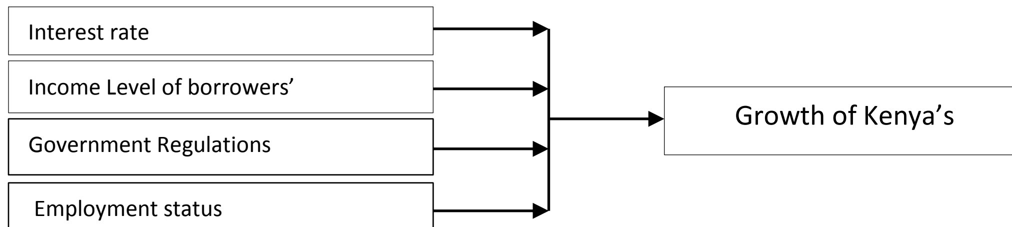
Employment is a factor influencing demand for housing loans. If the unemployment level in an economy is low, the potential house buyers' ability to engage with housing finance market increase (Demir et al., 2003). Lack of job security and existence of informal employment determines the ability to access the housing loans. (Hardt, 2000) Type of employment indicates if the borrower is employed, self-employed, retired or other. Borrower type provides information on whether the borrower is a first-time buyer, a person moving home, a social tenant or remortgaging their existing home. Borrowers are typically required to be employed for a certain period of time before they can qualify for a mortgage (Hardt, 2000). The employment history requirement is generally the same across all lenders and mortgage programs, although there are some variations to the guidelines. The employment history guidelines also vary depending on the type of work, with self-employed and part-time or seasonal work typically requiring longer work histories and allowing less flexibility or exceptions. In general, borrowers are required to have a two-year employment history to qualify for a mortgage although there are certainly cases when

borrowers with shorter work histories are able to qualify.

Mortgage Growth

According to Green and Wachter (2015), mortgage growth can be conceptualized in the context of the mortgage debt relative to the household income, the mortgage loan features and the ability of the debtors to pay off their mortgage loans. The rising mortgage debt per household income indicates an increase in the mortgage growth of a country. However, this growth can be constrained by the home prices collapse leading to devaluation of housing-related securities, foreclosures, and mortgage delinquencies.

Conceptual Framework



Independent Variables **Dependent Variable**

Figure 1: Conceptual framework

(Source: Author, 2019)

METHODOLOGY

The study used a descriptive design. Descriptive design shows an accurate profile of persons, events, or account of the characteristics, for example behavior, opinions, abilities, beliefs, and knowledge of a particular individual, situation or group (Cooper & Schindler, 2011). The target population consisted of 18 large banks offering mortgage finance CBK statistics (2017). Since the population was small, the study used census approach and thus the total population was 54 employees of mortgage lending institutions in Kenya. The researcher collected data from primary sources. The primary data was used due to its nearness to the truth and ease for control over errors (Copper & Schindler, 2011). The study utilized questionnaires to collect data. The selection of this tool was guided by the nature of data to be collected, time available and the objectives of the study. The data gathered was analyzed by use of descriptive and quantitative statistics. This was done with the aid of the SPSS software. The model was as follows:

$$Y=\beta_0 + B_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$$

Where, Y represent the dependent variable (mortgage Growth),

β_0 is a constant term,

X_1-interest rate,

X_2-income level,

X_3-Government regulations

X_4- employment status

ε is the error term.

Information was presented in the form of detailed descriptions with the use of tables and figures.

RESULTS

Effect of Interest Rate on Mortgage Growth

The study aimed to determine the effect of interest rates on mortgage growth. Respondents using a likert scale of 1 – 5 ranging from; 1 = Strongly Disagree (SD) to 5 = Strongly Agree (SA) were requested to indicate their level of agreement or disagreement with the statements. The results were summarized in Table 1.

Table 1: Interest Rate and the of Mortgage Growth

Statement	Mean	Std dev
High interest rates in the mortgage market has strongly discouraged investment	4.40	0.50
The borrowing arrangement made in the mortgage markets are affected by high interest rates	3.95	0.60
Interest rates fluctuations have a positive impact on the mortgage uptake	4.00	0.80
Interest rates chargeable on mortgages influence the mortgage quality	3.90	0.90
Level of mortgage financing by financial institutions in Kenya is inversely related to the existing level of interest rates.	4.02	0.45
Average Mean	**4.05**	

The respondents were asked to indicate the effect of interest rate on mortgage growth. Results indicated that majority of the respondents agreed that high interest rates in the mortgage market has strongly discouraged investment and this was supported by a mean score of 4.40. The results also showed that majority of the respondents agreed that the borrowing arrangement made in the mortgage markets were affected by high interest rates by a mean score of 3.95. The respondents also agreed that the interest rates fluctuations had a positive impact on the mortgage uptake as supported by a mean score of 4.00. The results further revealed that majority of the respondents agreed to the statement that interest rates chargeable on mortgages influenced the mortgage quality with a man score of 3.90. Finally majority of respondents agreed that the level of mortgage financing by financial institutions in Kenya was inversely related to the existing level of interest rates with a mean score of 4.02.

The overall mean of 4.05 therefore indicated that most of the respondents were in agreement that interest rates affect the Mortgage growth in Kenya.

Regulations by the Government

The study aimed to determine the effect of government regulations on mortgage growth. Respondents using a likert scale of 1 – 5 ranging from; 1 = Strongly Disagree (SD) to 5 = Strongly Agree (SA) were requested to indicate their level of agreement or disagreement with the statements. The results were summarized in Table 2.

Table 2: Government Regulations

Statement	Mean	Std dev
Strict reinforcement of regulation framework by the government has affected the number of acceptable applicants in the mortgage sector	3.70	0.60
Government recurrent tax on dwellings has greatly contributed to poor mortgage uptake	4.00	0.50
Lack of strict legal framework has increased risk of mortgage lending and lending rates.	3.90	1.20
Lack of government harmonization of the Banking Act. Building Societies Act. and Insurance Act has affected Mortgages uptake	4.40	0.60
Inappropriate building regulations negatively impact the development of mortgage markets in Kenya	4.10	0.60
Average	**4.02**	**0.70**

The respondents were asked to indicate the effect of government regulations on mortgage growth. Results in table 2 revealed that majority of the respondents agreed to the statement that strict reinforcement of regulation framework by the government had affected the number of acceptable applicants in the mortgage sector. This was supported by a mean score of 3.70. The results further revealed majority of the respondents agreed to the statement that Government recurrent tax on dwellings had greatly contributed to poor mortgage uptake by a mean of 4.00. Respondents further agreed that the lack of strict legal framework has increased risk of mortgage lending and lending rates as indicated by a mean score of 3.90. The results also showed a majority of the respondents agreed to the statement that lack of

government harmonization of the Banking Act, Building Societies Act and Insurance Act had affected Mortgages uptake as indicated by a mean of 4.40. The results further revealed that majority of the respondents agreed that inappropriate building regulations had negatively impacted the development of mortgage markets in Kenya.

The overall mean score of 4.02 indicates that majority of respondents felt government regulations affected the growth of the mortgage sector in Kenya. This supported the views of Otiso, (2003) that indicated that, the attempt to achieve decent housing for Kenyans, has been slowed down as the Government expenditure for housing has been on a consistent decline, stemming from activities on price controls, inappropriate building regulations and codes as well as lack of basic planning and provision of services. This in turn frustrates mortgage dealers eventually hampering the goal of decent house provision. The government has also not put in place sufficient regulations and incentives to promote the mortgage industry.

The findings agreed with those in Muturi, Gichira and Ndung'u (2016) who found out that government regulations significantly moderated the relationship between mortgage distribution channels and performance of real estate sector in Kenya. It also revealed that depository system, specialized mortgage lending and the secondary mortgage market have a significant and positive effect on real estate in Kenya. This study recommended that mortgage finance providers should embrace government regulations positively for the growth of the real estate sector.

The findings were also consistent with those of Tesfaye (2007) who noted that the legal framework guiding housing loans markets is unfavorable and this affects their operational environment. Were there poor developed regulatory the credit risk is very. A good legal framework will promote mortgage lending processes in a given country. This will enhance access to housing funds within the middle and lower income individuals. This will also grant benefits to the mortgagors due to low monthly installments hence leading to high quality housing to the low earners. On the other hand poor regulatory framework compromises the adequacy of mortgage securities. Enough collateral must be a requirement if lenders are to issue property finances to borrowers.

Income Level of the Borrowers on Mortgage Growth

The study aimed to determine the effect of income levels of borrowers on mortgage growth in Kenya. Respondents using a likert scale of 1 – 5 ranging from; 1 = Strongly Disagree (SD) to 5 = Strongly Agree (SA) were requested to indicate their level of agreement or disagreement with the statements. The results were summarized in Table 3.

Table 3: Income Level of the Borrowers

Statement	Mean	Std dev
Majority of interested borrowers have low level incomes thus they are unable to meet the threshold to access mortgages	4.02	0.50
The potential of house buyers' ability to engage with housing finance market is low	3.90	0.60
The mortgage products target high and middle-income earners who constitute a partly percentage	4.20	0.80
Low income earners avoid taking mortgages due to anticipated future loss to their assets.	3.70	0.90
Many financial institutions are not willing to give mortgage to low income people in Kenya	4.10	1.00
Average	**3.98**	

The respondents were asked to indicate the influence of income level of the borrowers on mortgage growth. The responses were rated on a five Likert scale. Results in table 3 revealed that majority of the respondents agreed to the statement that mmajority of interested borrowers had low-level incomes thus

they were unable to meet the threshold to access mortgages as supported by a mean score of 4.02. The results further revealed that majority of the respondents indicated that the potential of house buyers' ability to engage with housing finance market was low as indicated by a mean score of 3.90. Further majority of respondents agreed to the statement that the mortgage products target high and middle-income earners who constitute a partly percentage and this was supported by a mean score of 4.20. The results further revealed that majority of the respondents agreed to the statement that low income earners avoided taking mortgages due to anticipated future loss to their assets. This was supported by a mean score of 3.70. The results further revealed that majority of the respondents agreed to the statement that many financial institutions were not willing to give mortgage to low income people in Kenya and this was supported by a mean score of 4.10.

The average mean of the responses was 3.98 which means that majority of the respondents were in agreement that the influence of income level of the borrowers had an effect on the mortgage growth in Kenya. The findings agreed with Mokua (2008) who asserted that mortgage finance remains unaffordable to potential home owners and that all the mortgage products target high and middle-income earners who constitute a partly percentage of the salaried people within the private sector. He emphasized that it is just below 5% of Kenyans who can access conventional housing finance.

The findings also agree with those of Quercia and Tian (2010) who analyzed that to assess the sustainability of affordable housing credit, a unique sample of community reinvestment loans is analyzed. Conditional probability (hazard) of default tends to be higher and prepayment, lower for lower income groups. However, after controlling for observed mortgage and borrower characteristics, the hazards converge and even reverse in order of magnitude. Furthermore, very low, low, and moderate-income groups react with distinct patterns to changes in the loan-to-value ratio and the local unemployment rate. Finally, more financially stretched borrowers (those with high debt-to income ratios) seem to initiate the default option more aggressively as home equity declines.

Employment Status on Mortgage Growth

The study aimed to determine the effect of employment status on mortgage growth in Kenya. Respondents using a likert scale of 1 – 5 ranging from; 1 = Strongly Disagree (SD) to 5 = Strongly Agree (SA) were requested to indicate their level of agreement or disagreement with the statements. The results are summarized in Table 4.

Table 4: Employment Status on Mortgage Growth

Statement	Mean	Std dev
Mortgage loans are inaccessible to majority of employees in Kenya	3.90	0.50
Lack of employment has contributed to low mortgage uptake in Kenya.	4.01	0.50
The prices of property are prohibitive to the young and unemployed workers	4.10	0.90
Uptake of mortgage loans in Kenya is low because mortgage markets hardly address the non-formal sector	4.00	0.60
The standard requirement for mortgage such as proof of regular income eliminates many whose income may be irregular.	4.07	0.90
Average	**4.01**	

The respondents were asked to indicate the influence of employment status on the development of Kenyan mortgage market. The results in table 4 revealed that majority of the respondents agreed to the statement that mortgage loans were inaccessible to majority of employees in Kenya and this was supported by a

mean score of 3.90. The results further revealed that majority of respondents indicated that lack of employment had contributed to low mortgage uptake in Kenya and this was supported by a mean score of 4.01. The results also revealed that majority of the respondents agreed to the statement that the prices of property were prohibitive to the young and unemployed workers and this was supported by a mean score of 4.9. Respondent's revealed uptake of mortgage loans in Kenya was low because mortgage markets hardly addressed the non-formal sector and this was supported by mean score of 4.00. The results further revealed that majority of the respondents agreed to the statement that the standard requirement for mortgage such as proof of regular income eliminates many whose income may be irregular. This was supported by a mean score of 4.07.

The average mean of 4.01 indicated that majority of the respondents felt that t employment status affected the development of Kenyan mortgage market. The findings agreed with those of Vusumuzi (2009) who indicated that housing challenges are not due to lack of demand but due to lack of access to finances to buy homes. It has also been established that prices of property are prohibitive to the young and unemployed workers (McCann, 2009). Uptake of mortgage loans in Kenya is low because of neglecting non-formal workers who could potentially boost the aggregate loan portfolio.

The findings also agreed with those of Demir et al., (2003) who noted that employment is a factor influencing demand for housing loans. If the unemployment level in an economy is low, the potential house buyers' ability to engage with housing finance market increase Lack of job security and existence of informal employment determines the ability to access the housing loans. (Hardt, 2000). Type of employment indicates if the borrower is employed, self-employed, retired or other. Borrower type provides information on whether the borrower is a first-time buyer, a person moving home, a social tenant or remortgaging their existing home. Borrowers are typically required to be employed for a certain period of time before they can qualify for a mortgage

Mortgage market remains undeveloped in the sub-Saharan Africa due to the growing middle class need of affordable homes (Njiru 2013). Vusumuzi (2009) argues that housing challenges are not due to lack of demand but due to lack of access to finances to buy homes. It has also been established that prices of property are prohibitive to the young and low-income workers (McCann, 2009). Uptake of mortgage loans in Kenya is low because of neglecting non-formal workers who could potentially boost the aggregate loan portfolio. Large numbers of Kenyans are in the self-employed category as opposed to the small number in formal employment. The standard requirement for proof of regular income eliminates most whose income may be irregular.

Mortgage lenders are also concerned with the ability to pay by a prospective borrower. One should have not only sufficient but also consistent income. Mortgage lenders determine a borrower's ability to repay by comparing monthly payments to income and by assessing the presence of liquid reserves, investments and savings (Chiquier& Lea, 2009). Mortgage lenders will prefer borrowers with stable incomes. This is the very first criterion and others like collateral become irrelevant if this is not met. Lenders further assess borrowers' willingness to pay by collecting information on his historical record of payments of other debts. A strong employment history shows stability and proves the borrower has the means to repay the loan. Most lenders want to see that the borrower has been with the same employer for two years or longer. It is also important to have been in the same field of work for two years.

Mortgage Growth

The study aimed to determine the influence of mortgage growth in Kenya. Respondents using a

likert scale of 1 – 5 ranging from; 1 = Strongly Disagree (SD) to 5 = Strongly Agree (SA) were requested to indicate their level of agreement or disagreement with the statements. The results are summarized in Table 5.

Table 5: Mortgage Growth

Statement	Mean	Std dev
Applications for Mortgage funding has increased across lending institutions	4.40	0.50
Mortgage approvals has increased across lending institutions	3.00	0.60
Mortgage lending has increased in the last five years	3.10	0.50
The bad debt/defaults for Mortgage loans has increased	4.40	0.60
The number of refinancing for Mortgage lending has increased across lending institutions	4.40	0.50
Average	**3.78**	**0.54**

The respondents were asked to indicate mortgage growth. The responses were rated on a five Likert scale. Results in table revealed that majority of the respondents agreed to the statement that applications for Mortgage funding had increased across lending institutions; this was supported by a mean score of 4.40. Majority of the respondents were neutral to the statement that Mortgage approvals had increased across lending institutions and this was indicated by a mean score of 3.00. Majority of respondents were neutral to the statement that mortgage lending had increased in the last five years and this was supported by a mean score of 3.10. Majority of the respondents also agreed to the statement that the bad debt/defaults for Mortgage loans had increased and this was supported by a mean score of 4.40. Majority of respondents agreed to the statement that the number of refinancing for Mortgage lending had increased across lending institutions and this was supported by a mean score of 4.00. The average mean of 3.78 indicates that most respondents were neutral on whether or not the mortgage Markets was growing in Kenya.

The findings agreed with those of Green and Wachter (2015) who asserted that mortgage growth can be conceptualized in the context of the mortgage debt relative to the household income, the mortgage loan features and the ability of the debtors to pay off their mortgage loans. The rising mortgage debt per household income indicates an increase in the mortgage growth of a country. However, this growth can be constrained by the home prices collapse leading to devaluation of housing-related securities, foreclosures, and mortgage delinquencies.

Scanlon & Whitehead (2011) who noted that home ownership levels through use of mortgage facilities are a major indicator of mortgage market growth in any jurisdiction. The rising numbers of homeownership levels have been seen as a measure of mortgage industry growth. Diverse government initiatives which have contributed to this growth over the years include exemption from capital gains tax, mortgage-interest tax relief at the high marginal rate of tax, and no imputed income tax. The number of mortgage facilities service providers is key in the determination of the mortgage market growth. Amongst the critical service providers of the mortgage services are the building societies. The building societies are key to the issuance of mortgage loans and facilities in the country. They often hold the largest market share in the mortgage market in diverse countries around the world (Scanlon & Whitehead, 2011). In the building society method, the building societies mobilize funds from their members for the purposes of mortgage lending.

Inferential analysis

Inferential statistics was used to make inferences and predictions regarding the population of this study. Pearson correlation and regression model was used.

Table 6: Correlation matrix of variables

Variable		Growth of mortgage	Interest rates	Regulation and incentives	Income level	Employment status
Growth of mortgage	Pearson Correlation	1				
	Sig. (2-tailed)					
Interest rates	Pearson Correlation	.575**	1			
	Sig. (2-tailed)	0.000				
Regulation	Pearson Correlation	.685**	0.201	1		
	Sig. (2-tailed)	0.000	0.163			
Income level	Pearson Correlation	.581**	.367**	.494**	1	
	Sig. (2-tailed)	0.000	0.009	0.000		
Employment status	Pearson Correlation	.636**	.326*	.465**	.345*	1
	Sig. (2-tailed)	0.000	0.021	0.001	0.014	

The results in Table 6 indicated interest rate, government regulations, income level and employment status were positively related to mortgage growth. Bivariate correlation indicates the association between two variables. It ranges from 1 to -1 where 1 indicates a strong positive correlation and a -1 indicates a strong negative correlation and a zero indicates lack of association between the two variables. The closer the correlation tends to zero the weaker it becomes. The correlation between mortgage growth and interest rate was strong and positive (0.575) and significant (0.000). This shows that a change in interest rates and mortgage growth changed in the same direction though the association was strong (0.575). However, the relationship is statistically significant at a p value of 0.000. The correlation between mortgage growth and regulations, income level and employment status was 0.685, 0.581 and 0.636 respectively and all had statistically significant association.

Multivariate Regression Analysis

Multivariate regression analysis was used to determine the significance of the relationship between the dependent variable and all the independent variables pooled together.

Table 7: Multiple Linear Regression Analysis Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.0.864[a]	.0.747	.735	2.705

a. Predictors: (Constant), Interest rates, government regulations, income level and employment status

Table 7 showed that the coefficient of determination that is the percentage variation determination in the dependent variable is supported by the variation in independent variables. R square was 0.747 which implied that 74.7% of variance in the mortgage growth can be explained by; Interest rates, government regulations, and income level and employment status. Adjusted R squared is coefficient

of determination which tells us the variation in the dependent variable due to changes in the independent variable. From the findings in the above table the value of adjusted R squared was 0.735, an indication that there was variation of 73.5 percent on the mortgage growth. This showed that 73.5 percent changes in the growth of mortgage industry could be accounted to Interest rates, government regulations, and income level and employment status. R is the correlation coefficient which shows the relationship between the study variables, from the findings shown in the table 7 is was notable that there exists a strong positive relationship between the study variables as shown by 0.864.

Table 8: Analysis of Variance

Indicator	Sum of Squares	df	Mean Square	F	Sig.
Regression	2.598	4	0.65	33.17	0.000
Residual	0.881	45	0.02		
Total	3.479	49			

The results indicated that the overall model was statistically significant. Further, the results implied that the independent variables were predictors of mortgage growth. This was supported by an F statistic of 33.17 and the reported p value (0.000) which was less than the conventional 0.05 significance level.

Table 9: Regressions of coefficients

Variable	B	Std. Error	t	Sig.
(Constant)	0.494	0.428	-1.155	0.254
Interest Rates	0.294	0.071	4.151	0.000
Regulation	0.449	0.102	4.407	0.000
Income level	0.133	0.077	1.719	0.093
Employment Status	0.253	0.08	3.169	0.003

From the analyzed data in table 9 the established regression equation was:

$Y = 0.494 + 0.294X_1 + 0.449X_2 + 0.133X_3 + 0.253X_4$

The results indicated that; an increase in standardized interest rate influences mortgage growth by 0.294 units; an increase in effective Regulation and Incentives leads to an increase in mortgage growth by 0.449 units; an increase in regular income level leads to an increase in mortgage growth by 0.133 units; an increase in permanent employment status leads to an increase in mortgage growth by 0.253 units.

Regression of coefficients results in table 9 showed that interest rate and mortgage growth were positively and significantly related (beta =0.294, p=0.000). The table further indicated that Regulation and Incentives and mortgage growth were positive and significantly related (beta =0.449, p=0.000). It was further established that that income level and mortgage growth were positive but insignificantly related (beta=0.133, p=0.093) It was also established that that employment status and mortgage growth was also positively and significantly related (beta =0.253, p=0.003).

CONCLUSIONS

The study concluded that interest rates positively and significantly affects mortgage growth. It was also concluded that high interest rates in Kenya's Finance sector have strongly discouraged long-term investment, interest rates continued to affect a firm for the whole period that the borrowing arrangement was outstanding, the interest rates fluctuations had a positive impact on the mortgage uptake and that the level of mortgage financing by financial institutions in

Kenya was inversely related to the existing level of interest rates.

The study also concluded that regulation and inceptives is a high factor determining the mortgage growth. It was also possible to conclude that the government had not put in place sufficient regulations and incentives to promote the mortgage industry, that lack of proper government regulation had greatly contributed to poor mortgage uptake, that there was need for a legal framework to enhance secure and transparent lands titles to lower risk of mortgage lending and lending rates, that Banking Act. Building Societies Act and the Insurance Act were not harmonized and this influenced Mortgages uptake and that there are inappropriate building regulations and this influences the development of mortgage markets in Kenya.

The study concluded that income level positively but insignificantly affects mortgage growth. The study also concluded that with high income level it is easier to get mortgage than if low income earner in Kenya, It was cheaper to get a mortgage if you have a stable income, unexpected changes in mortgage price has made it difficult for low income earners to afford houses, Many financial institutions are not willing to give mortgage to low income people in Kenya,

The study concluded that that there was a positive significant relationship between mortgage growth and the employment status. This was a clear indication that employment status matters and influences mortgage uptake in Kenya. These factors included: Employment Status, lack of employment, nature of employment i.e Permanent or casual, income from employment and volatile income.

RECOMMENDATIONS

The study recommended that proper policies should be put in place to ensure the stability of interest rates. Also the financial institutions should intermediate in the financial market by making mortgage financing available for housing provision among Kenyans and also the relevant government authorities should ensure that the monetary policy in the country achieves the goal of predictable interest rates that are consistent with greater mortgage financing.

The study also recommended that the government should put in place sufficient regulations to promote the mortgage industry. The government should also provide incentives to investors such as tax holidays and provision of land to reduce the cost of construction.

The study recommended that there is need for real estate developers to ensure development of strategies to target low income households. The government should also focus on providing alternative housing solutions to low income earners. Some potential strategies include: firms to also provide low cost solutions to housing to ensure affordable houses to the majority poor in poor neighborhoods.

The study recommended the stakeholders to create more employment as this would increase the mortgage uptake in Kenya. Provision of equal employment opportunities will also increase the level of mortgage uptake. Reduction of gender based discrimination will also contribute positively towards mortgage uptake. The stakeholders should come up with better structured facilities that will address the needs of people with fluctuating income. The business community should be encouraged to take mortgages and use such facilities as collateral to access business loans.

Areas for Further Research

This study was not exhaustive by any means and therefore it is recommended that another study be conducted in other counties and include other factors like cost of financing and inflation rates. The same study can be conducted in another sector to test whether the findings of this study will hold true in a different context. Further research should focus on

the negative implications of social media on employee performance.

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