International Journal of Economics, Commerce and Management

United Kingdom ISSN 2348 0386 Vol. IX, Issue 4, April 2021



http://ijecm.co.uk/

MORTGAGE FINANCING CONSTRAINTS AND HOUSING SECTOR DEVELOPMENT IN KENYA

Barrack Otieno Ouma



Zetech University, Kenya Tutorial Fellow, School of Business and Economics barrack.ouma@zetech.ac.ke

Moses Odongo

Zetech University, Kenya Tutorial Fellow, School of Business and Economics moses.odongo@zetech.ac.ke

Abstract

The Kenyan mortgage market has experienced slow growth over the last few years despite the upsurge of mortgage payments. CBK, 2020 Banking report shows that Mortgage uptake in Kenya has remained relatively low with the number of mortgage accounts at 26,504 against a total adult population of approximately 23 million people. Affordability is a major constraint to the growth of the housing and mortgage markets, and a key challenge to accessing decent housing in Kenya. According to the 2019/20 Kenya Integrated Household Budget Survey (KIHBS), only 21.3% of Kenyans living in urban areas own the homes they live in. The study adopted descriptive research design. Correlation analysis was used in determining the extent of the relationship between the study variables a multivariate regression analysis was employed to determine the association between the outcome variable the predictor variables. ANOVA was used to test for significant differences between means. From the results of the study Inflation and Housing sector development has a strong positive correlation (r=.868) while Interest rates and Housing sector development has a strong positive correlation (r=.920). The model shows the value of R square is 0.851 which indicates that 85.1% of the changes in Housing sector development are caused by changes in inflation and interest rates. The study therefore

recommends that there is need for policy makers to regulate the inflation level prevailing in the country and the government through the Central Bank of Kenya and mortgage lending institutions should also implement policies that reduce the interest rates that financial institutions charge on mortgage loans.

Keywords: Mortgage constraints, Housing sector Development, Inflation, Interest rates, Central Bank of Kenya

INTRODUCTION

Background of the study

Housing occupies a very important position in the life of man as exemplified by Maslow's hierarchy of needs, because it provides shelter, comfort and protection (Mogaji, 2011). According to Oladapo (2008), housing is a major economic asset which has profound impact on the prosperity of the country and the productivity of individual as decent houses increases workers' health and also affects the well-being of the citizens. It is an index of measuring the standard of living of a country and a very important consumer item. Consequently, programmes of assistance in the area of finance and research have been designed by government to enhance its adequate delivery.

In advanced economies like the United States of America, Britain and Denmark, the common approach of owning a house is through a well-structured mortgage scheme. If the mortgage system is effectively and efficiently managed, invariably the procedure for accessing mortgage loan will be easy and faster (Olotuah, 2006).

Having recorded a 5.7 percent economic growth rate at the start of 2020, Kenya ranks as one of the fastest growing economies in Sub-Saharan Africa. This growth is expected to drop to 1.5 percent as a result of COVID-19. With a housing deficit of two million which is estimated to grow by 200 000 annually, the Kenyan government established an ambitious Affordable Housing Programme (AHP) as part of its Big 4 Agenda. However, the incoming supply of housing units stands at approximately 50 thousand housing units a year with only two percent of this being for the low-income market against an annual demand of 250 000 units (KNBS, 2020).

Financial access (formal and informal) has improved in Kenya having expanded to 89 percent in 2019 from 26.7 percent in 2006, attributed to the introduction of mobile financial services and increased partnerships and innovations such as mobile banking. Despite 83 percent of total employment being in the informal sector, this portion of the population lacks access to mortgage loans due to insufficient credit risk information for meeting the criteria set in the mortgage products.

CBK, 2020 Banking report shows that Mortgage uptake in Kenya has remained relatively low with the number of mortgage accounts at 26,504 against a total adult population of approximately 23 million people, and the mortgage to gross domestic product (GDP) ratio at 3.2 percent in 2017 compared to countries such as Namibia at 20 percent. This is attributed to relatively high interest rates and unavailability of long tenors making the terms unfavorable for the majority of households, amid low-income levels.

The home ownership and rental rate in urban areas stands at 21.3 percent and 78.7 percent, respectively. Low levels of home ownership are attributed to the unaffordability of housing units in the wake of spiking house prices, resulting from the high cost of land, construction costs and other costs such as the professional costs that developers must recover.

The Global Mortgage Market

In comparison to international mortgage markets, Africa's mortgage market is still at infancy. Countries in North America and Europe have mortgage values of 40% of GDP with Ireland, the Netherlands and Switzerland having a ratio of 80% of GDP (McConnell, C. (2009). In the same report, most financial institutions in Africa are limited by high interest rates and mismatch between the short-term nature of deposits and the long-term nature of the mortgage lending.

According to Vuyisani (2003), the mortgage finance system in Africa is faced with major challenges such as default rates, lack of long-term funds required to match high interest rates and the duration of the mortgage. South Africa and Namibia have the highest ratio of mortgage debt to GDP at 30% and 20% respectively. After South Africa and Namibia, North Africa has developed mortgage markets in Africa at 7% in Morocco, 5.9% in Tunisia, and 3% in Egypt (OPIC, 2006). Kenya has a ratio of 2.5% (Walley, 2011). The Kenyan mortgage market is underdeveloped as mortgage financing is unaffordable, inaccessible and unpopular (World Bank, 2019).

There is a similarity in most of the agreements that the property which is purchased through the provision of mortgage financing is kept as a collateral security for the mortgage loans. Till the mortgage loan has been repaid the mortgage owner acts as the mortgage holder of the property. The mortgage lender has the full right to seize the property in case there is any difficulty in the payment of the mortgage financing, thereafter the default in the repayment the mortgage lender can take over the property and thereby become its owner and even offer it for resale to any other party (Aderibigbe, J.O, 2001).

There are cases where you can take a mortgage on the property, which is already a collateral security of another mortgage loan. This is mostly possible based on basing the value of the second mortgage on the equity which is been built by the owner towards the value of the property. This is sometimes known as a mortgage refinance. Further, there are different calculations made on the property of the mortgage for different places. It is usual for the mortgage lenders to agree on the creation of a second mortgage on the property which is already been mortgaged for the first time.

The obvious advantage of the expansion of mortgage credit is the rise in credit opportunities and homeownership. Because of innovations in the prime and subprime mortgage market, nearly 9 million new homeowners are now able to live in their own homes, improve their neighborhoods, and use their homes to build wealth. Studies of neighborhood effects consistently impute a large importance to the rate of homeownership in encouraging a host of positive spillover benefits. In addition, subprime lending has enabled millions of cash-strapped home owners to liquefy the equity in their homes to help reduce the burden of other financial obligations or to improve their homes. Given the greater credit risks of mortgage lending, the obvious disadvantage involves elevated rates of foreclosure and of the incidence of households seriously delinquent on their mortgages. Households in foreclosure lose all the equity they have built up in their homes, typically the largest component of their wealth. There is also evidence of serious neighborhood blight if foreclosure rates, and abandoned properties, proliferate in a given city area (Akanji, 2001).

Housing Sector Development in Kenya

Demand for affordable housing units in Kenya have been on an upward trajectory evidenced by the relatively high number of approximately 300,000 individuals who have registered through the boma yangu portal, coupled by the amount the government has already received from the recent sale (CBK, 2020). However, the implementation of affordable housing projects has been sluggish and the initiative is expected to fall short of its 2022 target of delivering 500,000 housing units having delivered only approximately 650 units through Park Road project and Pangani Estate renewal project so far. The delivery has been crippled by Lack of a supportive capital markets regulatory framework which would enable fundraising for housing development, secondly the bureaucracy and slow project approval processes especially in the case of Public-Private Partnerships, the pending operationalization of the Integrated Project Delivery Unit which was tasked with being a single point of regulatory approval for developments, infrastructure provision and developer incentives, failure to fast track incentives provided in support of the affordable housing initiative, and lastly the current economic slowdown due to the ongoing Covid19 pandemic. Affordable housing programme is expected to continue taking shape with the delivery of ongoing projects thus encouraging more

potential homeowners to join the boma yangu platform, with other projects such as Shauri Moyo, Makongeni and Starehe houses in the pipeline and are set to deliver approximately 30,000 housing units.

Government collection from buyers should therefore be channelled towards implementation of affordable housing projects to help facilitate delivery of the remaining housing units in the ongoing projects, in the wake of reduced budgetary allocation on affordable housing from Kshs 11.4 bn in 2019 to Kshs 6.9 bn in 2020, according to the National Treasury. This coupled with provision of incentives to buyers is expected to result in improved home ownership levels with Kenya currently lagging behind at approximately 21.3%, compared to other developing countries such as South Africa and Ghana at 53.1 and 47.2%, respectively.

Kenya's potential for mortgage financing

Kenya's mortgage market is dominated by the large banks, comprising over 90 percent of the outstanding loan assets portfolio. While Kenya's mortgage market is growing, the industry is dominated by the large banks indicating barriers to entry or high risk for medium and smaller banks. However, the growth rates indicate that the small sized banks have the fastest growth rate of 38% on average, followed by medium banks, which are growing at 25% on average with large banks closely following at 24% on average

Kenya's mortgage market has witnessed an impressive growth in the last decade but the numbers of loans are still very low mainly due to scanty information available to potential buyers. Mortgage finance is the provision of finance or capital for housing. Mortgage finance also means the capital required for construction of housing or the resources required to acquire or access housing project by household or the credit supplied by housing finance institutions against some collateral (Dymski, 2007). In Kenya the institutions that lend money for real estate projects include: banks, mortgage firms, saving and loans firms, insurance companies, government parastatals, pension funds, trusts and other real investment institutions as noted by Lwali (2008). Unlike unsecured loan, mortgage finance is a secured loan whereby the mortgaged property acts as collateral by the customer as a pledge for security of the extended credit. (Biernert, L. & Brauner, E.2007)

Affordability is a major constraint to the growth of the housing and mortgage markets, and a key challenge to accessing decent housing in Kenya. According to the 2019/20 Kenya Integrated Household Budget Survey (KIHBS), only 21.3% of Kenyans living in urban areas own the homes they live in, with the main factor causing this being the unaffordability of housing units in the market. Those who own homes rely mainly on savings and other sources of financing including mortgage loans, commercial bank loans, local investment groups commonly referred to as chamas, and Savings & Credit Co-operative Societies (SACCOs). Out of an adult population of about 23 million, there were only 26,187 mortgage loans as at December 2020.

According to Kenya National Bureau of Statistics (KNBS), approximately 74.5% of the formal working population in Kenya earns Kshs 50,000, and below, per month. With the average mortgage size in Kenya at Kshs 10.9 million, interest rates at 13.6% and an average tenor of 12-years, therefore, an average Kenyan household earning Kshs 100,000 per month (assuming it has two persons each earning Kshs 50,000) is required monthly repayments of Kshs 153,905, which is unaffordable to this income class. However, using 40% of their gross income on monthly mortgage payments under similar market conditions, the household can afford a Kshs 2.8 million home. As a result, the Kenyan mortgage market still lags behind, with a mortgage to GDP ratio of 3.1% in 2020, significantly lower than more mature markets like South Africa, and the United States of America (CBK, 2020)

Uptake of mortgage in Kenya as a means of owning homes remains low due to high interest rates and costs of financing the loans, as well as difficulty in accessing security especially land title deeds. Financial institutions are angling for a piece of the low-end mortgage market as record breaking interest rates and skyrocketing property prices slow business in the high end. Trends in the last few years show that at least three firms have launched low-cost mortgage products targeted at the lower middle class and those in the informal sector.

Real estate experts say the emerging inclination was bound to happen due to the ongoing market correction for residential property in the high-end market due to an oversupply a few years ago, the recent spike in interest rates and the stagnating pricing trends in market categories previously seen as sources of income. "The property market goes through cycles and adjusts itself accordingly depending on the economic scenarios at hand," said Andy Colette, the managing director of Pam Golding-Kenya, property firm headquartered in South Africa. "It happens all over the world. For Kenya, next you will see is players coming together to drive a common agenda that comes with challenges of funding low-cost housing and the need to proper data to inform investment decisions."

Concept of mortgage financing

A mortgage is based on the concept that people need to have places to live, but they cannot afford to pay the high cost of that home up front. Mortgages were born to allow people to finance the purchase of their homes. Without having a mortgage, the majority of people would be unable to buy a home and would be unable to own their own home. Many people are handed down their homes and many people do not have mortgages on their home; however, the majority of these people received their homes in an inheritance. The percentage of people who can afford to buy a home outright is very small. The vast majority of "homeowners" today, have a mortgage on their home.

The concept of a mortgage loan was conceived many years ago because banks saw an opportunity to make a great deal of money off people who wanted to buy homes. The bank has the resources to lend to the money so people could buy their homes, and they charge interest to the borrowers as their price to borrow the money. When a person pays back their loan over the full course of their mortgage term, they will have paid back many times over what their original loan amount was. This concept is very grating to some people, but in reality, it is the only way that most people are able to buy a home (Aboagye et al. 2008).

Mortgages are very diverse in that they can come in many forms. You can take out a mortgage for a single person home, or a multiple family home. Many people also are charged different interest rates and have different loan repayment terms. Many people are also able to pay varied fees and charges that are associated with their loan. All of these details may change dramatically from one loan to another, but the basic concept of having a mortgage on a home, does not change at all.

Mortgages are one of the most basic financial instruments because they are so prevalent. Mortgage lenders have sprung up around the world because in today's market, people are simply unable to buy a home without having a mortgage to do so. This means that people are prevented from ever owning a home if they do not qualify for a mortgage. This also means that people will not be able to fulfill their goals of owning a home if it were not for a mortgage. A mortgage is a very freeing concept because it allows people to get the home that they want and to reach their goals through the help of a bank and the mortgage that they offer.

Research Hypotheses

The study sought to test the following null hypothesis-

- 1. There is no significant relationship between Inflation and mortgage financing
- 2. There is no significant relationship between Interest rates and mortgage financing

Problem Statement

A mortgage market is an important medium for financing housing around the globe (Boamah, 2010). However, affordability is a major constraint to the growth of the housing and mortgage markets, and a key challenge to accessing decent housing in Kenya. According to the 2019/20 Kenya Integrated Household Budget Survey (KIHBS), only 21.3% of Kenyans living in urban areas own the homes they live in, with the main factor causing this being the unaffordability of housing units in the market.

According to Kenya National Bureau of Statistics (KNBS), approximately 74.5% of the formal working population in Kenya earns Kshs 50,000, and below, per month. With the average mortgage size in Kenya at Kshs 10.9 million, interest rates at 13.6% and an average tenor of 12-years, therefore, an average Kenyan household earning Kshs 100,000 per month (assuming it has two persons each earning Kshs 50,000) is required monthly repayments of Kshs 153,905, which is unaffordable to this income class. However, using 40% of their gross income on monthly mortgage payments under similar market conditions, the household can afford a Kshs 2.8 million home.

Vast studies have also been carried out locally and internationally on mortgage and mortgage financing. Rodenholm and Dominique (2013) studied on macroeconomic effects on securitized real estate markets which was comparative study of Sweden and Switzerland. Apergis (2011) analyzed the dynamic effects of specific macroeconomic variables (i.e. housing loan rates, inflation and employment) on the price of new houses sold in Greece.

Local studies include Njongoro (2013) who studied the effect of mortgage interest rates on the growth of mortgage financing in Kenya; Ngumo (2012) studied the effect of interest rates on the financial performance of firms offering mortgages and Muguchia (2012) investigated the effect of flexible interest rates on the growth of mortgage finance in Kenya during the financial period 2007 to 2011. Much of these empirical evidences relied on mortgage interest rate as an indicator of mortgage financing in Kenya. Agao (2014) conducted a study on the effect of macroeconomic variables on mortgage uptake in Kenya. Her study was however limited to residential house prices, GDP and Central Bank Rate as the macroeconomic variables under study.

None of the above studies examined the how the mortgage financing constraints hinders housing sector developments in Kenya. It is from this background that the researchers sought to fill the gap by conducting the study.

LITERATURE REVIEW

Structural Inflation Theory

About 40 years ago, the concept of structural inflation entered in economic discussion and research. It is related to the effect of structural factors on inflation. Structural analysis attempts to recognize how economic phenomena and finding the root of the permanent disease and destruction such as inflation that evaluates lawful relationship between the phenomena. In the economic structural factor causes, supply increase related to demand-push, even if abundant unemployment production factor is impossible or slow. Koetter, M. & Poghosyan, T. (2008) reasoning of less developed countries, till the time not successful to change in the form

of lagging behind structure or not to make attempt for immediate self-economic growth or should compromise with the inflation that is very severe sometimes. This inflation giving the structural improvement, results as a cost in fact that is given for immediate economic growth. Structuralism, even the group that does not fine necessary for changing the present policy foundation for eradicating inflation, with the control of inflation through government intervention in the market structure and also, by adopting decisive plans for justly division of inflation pressure there is no opposition and in fact stress is done on these arrangement (Milani C, 2010).

Classical Theory of interest rate

This theory was propounded by classical economists like A. Marshall, N.W. Senior and I. Fisher who viewed the interest from the supply side while J.B. Clark explained the interest from the viewpoints of demand.

This theory is based on the fact the demand for capital and supply of capital determines the rate of interest. At the point where the demand for capital is equal to supply of capital, the rate of interest is established. The demand for capital arises from investment and savings from the supply of capital. The lower the rate of interest, the greater shall be the demand for capital (Drumond & Jorge, 2013). The classical theory is also called 'Real theory' of interest because it is based on the real forces of demand and supply.

In Kenya, interest rates are determined by the Central bank through the Monetary Policy Committee. This is usually through the Central Bank Rate (CBR) which is the price at which the CBK lends money overnight to commercial banks (Wanja, 2015). It also serves as a signaling instrument for monetary policy. This rate determines the rates at which commercial banks lend to their customers since their interest rates are based on this CBR. Further, the mortgage industry is also affected by The Kenya Banks' Reference Rate (KBRR) which is the base rate for lending by commercial banks and microfinance banks as well as for pricing mortgage products (CBK, 2020).

This theory can be related to the Kenyan mortgage market and more specifically to the rate of interest presented to the market by commercial banks and mortgage finance institutions. It can be argued that in order to enable growth of the mortgage industry in Kenya, the Central Bank should compel commercial banks and mortgage institutions to lower the interest rates on the mortgage products and services (Njongoro, 2013). High interest rates would raise repayments on mortgage loans and thus increase the number of households struggling to repay their mortgage loans whereas low interest rates encourage mortgage uptake

Neoclassical theory of capital flow

The standard neoclassical theory predicts that capital should flow from rich to poor countries. Under the usual assumptions of countries producing the same goods with the same constant returns to scale production technology using capital and labor as factors of production, differences in income per capita reflect differences in capital per capita (Carlin and Mayer, 2003). Thus, if capital were allowed to flow freely, new investments would occur only in the poorer economy, and this would continue to be true until the return to investments were equalized in all the countries. However, in his now classic example, Calvo and Reinhart (2002) compares the U.S. and India in 1988 and demonstrates that, if the neoclassical model were true, the marginal product of capital in India should be about 58 times that of the U.S. In face of such return differentials, all capital should flow from the U.S. to India. In practice, we do not observe such flows.

EMPIRICAL REVIEW

Vast studies have also been carried out locally and internationally on mortgage and mortgage financing. Rodenholm and Dominique (2013) studied on macroeconomic effects on securitized real estate markets which was comparative study of Sweden and Switzerland. Apergis (2011) analyzed the dynamic effects of specific macroeconomic variables (i.e. housing loan rates, inflation and employment) on the price of new houses sold in Greece. Among numerous studies not mentioned, these two studies are in the context of a foreign nation and the results cannot be generalized to the Kenyan environment.

Local studies include Njongoro (2013) who studied the effect of mortgage interest rates on the growth of mortgage financing in Kenya; Ngumo (2012) studied the effect of interest rates on the financial performance of firms offering mortgages and Muguchia (2012) investigated the effect of flexible interest rates on the growth of mortgage finance in Kenya during the financial period 2007 to 2011. Much of these empirical evidences relied on mortgage interest rate as an indicator of mortgage financing in Kenya. Agao (2012) conducted a study on the effect of macroeconomic variables on mortgage uptake in Kenya.

RESEARCH METHODOLOGY

Research Design

The researchers used descriptive research design. According to Mugenda and Mugenda (2003), descriptive research seeks to establish factors associated with certain occurrences, outcomes, conditions or types of behavior. Descriptive research was used to describe the state of affairs as it exists at present to describe variables and situations and to give insight to the relationship between mortgage financing constraints and housing sector development in Kenya (Khan, 2008). Descriptive research design will provide opportunity for considering many different aspects of the study. This design minimizes bias and maximizes the reliability of the data collected and analyzed. Descriptive designs are not only restricted to fact-findings but also may often result in the formulation of important principles of knowledge and solutions to significant problems.

Data Collection

The study used both primary and secondary data. Structured guestionnaires and interview guides were used as instruments of data collection to gather primary data from respondents. Secondary data was used that entailed the property journals, mortgage institutions surveys and CBK documentations on mortgage loans.

Data Analysis

The techniques of data analysis adopted for this research include the Correlation and Regression analysis to test the relationship between the variables under the study. Correlation analysis involved determining the extent of the relationship between the study variables while Regression analysis involved establishing the cause-and-effect outcome between independent and dependent variables. A multivariate regression analysis was employed to determine the association between housing sector development which is the outcome variable and inflation and interest rates which are the predictor variables. ANOVA was used to test for significant differences between means.

ANALYSIS AND FINDINGS

Correlation and Regression analysis are quantitative measures used to determine the extent of relationships between two or more variables. These tests are always testing the null hypothesis, which states that there is no significant difference between the expected and observed result. Testing of the null hypotheses is based on the fact that if the p value is greater than 0.01, then the null hypothesis is accepted

Inflation and Housing sector Development

The results in table 1 shows that Inflation and Housing sector development has a strong positive correlation (r=.868) which is significant at P<.001. This means that an increase in inflationary rates will affect the housing sector development in Kenya.

Table 1: Correlation between inflation rate and housing sector development

		Inflation	Housing Development
			in Kenya
Inflation	Pearson	1	.868**
	Correlation		
	Sig. (2-tailed)		.000
	N	33	33
Housing Development in Kenya	Pearson	.868	1
	Correlation		
	Sig. (2-tailed)	.000	
	N	33	33
**. Correlation is significant at the	e 0.01 level (2-tailed).	

Interest rates and Housing sector Development

The results shows that Interest rates and Housing sector development has a strong positive correlation (r=.920) which is significant at P<.001. This means that an increase in interest rates will affect the housing sector development in Kenya.

Table 2: Correlation between interest rates and housing sector development

		Interest	Housing Development
		rates	in Kenya
Interest rates	Pearson	1	.920
	Correlation		
	Sig. (2-tailed)		.000
	N	33	33
Housing Development in Kenya	Pearson	.920**	1
	Correlation		
	Sig. (2-tailed)	.000	
	N	33	33
**. Correlation is significant at the	e 0.01 level (2-tailed).		

Regression Analysis

Housing sector Development were Regressed against two predictor variables; inflation and interest rates. The study obtained the model summary statistics as shown in Table 3.

Table 3: Model summary

Model	R	R Square	Adjusted R	Std. Error of	
			Square	the Estimate	
1	.922 ^a	.851	.841	.344	
a. Predictors: (Constant), Interest rates, Inflation					

The outcome shows the value of R square is 0.851 which indicates that 85.1% of the changes in Housing sector development are caused by changes in inflation and interest rates, the other variables omitted justify for the 14.9% of the changes. The results also reveal a strong relationship between the independent variables and the housing sector development as shown by R=0.922

Table 4: ANOVA

Mode	l	Sum of	df	Mean	F	Sig.
		Squares		Square		
1	Regression	20.321	2	10.160	85.666	.000 ^b
	Residual	3.558	30	.119		
	Total	23.879	32			
a. Dependent Variable: Housing Development in Kenya						
b. Pre	edictors: (Constar	nt), Interest rate	s, Inflation			

From the ANOVA table the significance value is 0.000 which is less than P=0.001, which implies that the model was statistically significance in predicting how inflation and interest rates have an effect on the housing sector development. Given the level of significance, the computed F-value is 85.666 which is a confirmation that the overall regression model is statistically significance.

CONCLUDING REMARKS

Conclusion

From the results of the study, Inflation and Housing sector development has a strong positive correlation (r=.868) which is significant at P<.001. This means that an increase in inflationary rates will affect the housing sector development in Kenya. This result shows that and increase will inflation rate will affect the price of land and price of other materials utilized in development of housing sector which is in line with the findings from the study carried by Agao (2014) on the effect of macroeconomic variables on mortgage uptake in Kenya which showed and effect of the variables on prices of the residential house prices

Interest rates and Housing sector development has a strong positive correlation (r=.920) which is significant at P<.001 which indicates that an increase in interest rates will affect the housing sector development in Kenya. These results are in agreement of the findings of Njongoro (2013) who had conducted a study on the effect of mortgage interest rates on the growth of mortgage financing in Kenya. The results showed that the rates had a very big impact on the number of mortgage loans which had remained lower due to higher rates of interest charged by mortgage lending institutions.

The model shows the value of R square is 0.851 which indicates that 85.1% of the changes in Housing sector development are caused by changes in inflation and interest rates, the other variables omitted justify for the 14.9% of the changes. The results also reveal a strong relationship between the independent variables and the housing sector development as shown by R=0. 922. This therefore shows that the housing sector development are affected by the inflation which has increased to 5.9 percent in March 2021 compared to 5.84 percent in March 2020 and interest rates and therefore an indication of slow-paced development of housing sector in Kenya

Recommendations

The study established a significant relationship between inflation rate and housing sector development in Kenya. The Researchers therefore recommends that there is need for policy makers to regulate the inflation level prevailing in the country in order to reduce the cost of expenditure of the required raw materials for housing development

The government through the Central Bank of Kenya and mortgage lending institutions should also implement policies that reduce the interest rates that financial institutions charge on mortgage loans. Currently, Kenya has one of the highest interest rates for borrowing especially on mortgages compared to the other developed countries like the USA which charges 5% on their mortgages and this discourages the uptake of the loans, therefore a reduction on the rates will encourage more borrowers to take loans and this will stimulate the growth of the housing sector.

Suggestions for further Studies

The study considered mortgage financial institutions only. Further research should be carried out to cover other financial institutions in the country that are also advancing loans for Housing sector Development. Secondly, attitude of potential homeowners towards mortgage financing affects the uptake of mortgage loans. Further research is recommended to establish this relationship and how it could be improved.

REFERENCES

Aboagye, Q., Akoena, T., Antwi, A. & Gockel, A. (2008). Explaining Interest Rate Spreads in Ghana, African Development Review, 20(3), 378-399.

Aderibigbe, J.O. (2001). The Role of the Financial Sector in Poverty Reduction: Abuja, Central Bank of Nigeria, Economic and Financial Review 39 (4):135-158.

Agao, E. (2014). The Effect of Macroeconomic Variables on Mortgage Uptake for the Mortgage Industry in Kenya. Unpublished MBA Project, University of Nairobi.

Akanji, O.O. (2001). Microfinance as a Strategy for Poverty Reduction. Economic and Financial Review Vol. 39(4): 111-134. Abuja: Central Bank of Nigeria

Biernert, L. & Brauner, E. (2007). The Mortgage Lending Value: Prospect for Development within Europe. Journal of Property Investment & Finance, 25(6).

Boamah, N.A. (2010). Mortgage market in Ghana: The Past and the Future. Housing Finance International Journal, 25(3), pp. 10-14.

Central Bank of Kenya (2020). Bank Supervision Annual Report. Nairobi: Central Bank.

Dymski, G.A. (2007). From financial exploitation to global banking instability- two overlooked roots of the subprime crisis, University of California Center Sacramento, Sacramento, CA, working paper.

Drumond, I. & Jorge, J. (2013). Loan interest rates under risk-based capital requirements:

The impact of banking market structure. Economic Modelling, 32, pp.602-607.

Kenya National Bureau of Statistics (KNBS), (2020). Economic Survey. Nairobi

Koetter, M. & Poghosyan, T. (2008) Real Estate Markets and Bank Distress, Journal of Banking and Finance, 3, 1 -34

Lwali, K. (2008). Challenges of International Housing Finance Institutions; A case of Shelter Afrique. Unpublished MBA Project. University of Nairobi.

McConnell, C. (2009). Macroeconomics, Principles, Problems and Policies (4 th Edition). New Jersey: Prentice Hall Publishers.

Messah, O.B. (2011). Factors influencing real estate property prices; A survey of real estates in Meru municipality, Kenya. Journal of economics and sustainable development. Vol. 2, No. 4

Milani, C. (2010). The Determinants of Mortgage Rates: An Empirical Analysis of the Euro Area Countries. Temi di Economia e Finanza. Working Paper No.2. Available at SSRN: https://ssrn.com/abstract=1687653

Mogaji, P. (2011). "THE NIGERIAN MORTGAGE BANKING SUB-SECTOR REFORM THE EXPECTATION". A paper presented at the 3rd National Conference of the School of Business Studies, federal Polytechnic, Ado-Ekiti

Mugenda, O. and Mugenda, A. (2003). Research Methods-Quantitative and Qualitative Research. (2nd Ed.). Nairobi: Acts Press.

Muguchia, L. (2012). The Effect of Flexible Interest Rates on the Growth of Mortgage Financing in Kenya, Unpublished MBA Project. University of Nairobi.

Njongoro, J. N. (2013). The effect of mortgage interest rate on the growth of mortgage financing in Kenya. Unpublished MBA Project. University of Nairobi

Ngumo, W. (2012). The effect of interest rates on the financial performance of firms offering mortgages in Kenya, Unpublished MBA Project, University of Nairobi.

Oladapo. S. (2008). "challenges of housing finance by the primary mortgage institutions". LAGOS. Journal Of Environmental Studies 2(1), 168-174.

Olutuah, A. O. (2006). "sustainable low-cost housing provision in nigeria: a bottom-up participatory approach" in Boyd, D. (ed) proceeds of 22nd Annual ARCOM Conference, 4-6.



International Journal of Economics, Commerce and Management, United Kingdom

Vuyisani, M. (2003). Preview of Housing Finance Systems in Four Different African Countries: South Africa, Ghana, Tanzania and Nigeria. Washington D.C: International Finance Corporation

Wanja, K. L. (2015). Determinants of mortgage uptake. Unpublished MBA Project. University of Nairobi.

Walley, S. (2011). Developing Kenya's mortgage market. Report No. 63391-KE. The World Bank

World Bank (2019) Kenya economic update. Kenya at work: Energizing the economy and creating jobs