



EFFECT OF LOAN FINANCING ON PERFORMANCE OF THE REAL ESTATE SECTOR IN KISUMU CITY, KENYA

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Abstract

Housing forms one of the sustainable development goals. In Kenya, it is part of the big four agenda of the Jubilee government. Real estate sector performance financially is important and critical to the overall thriving of the firms in the sector. Failure to meet the required level of performance by real estate firms in terms of revenue earned, profitability and returns on investment may jeopardize the running of activities. The purpose of the study was to establish the effect of loan financing on performance of real estate sector in Kisumu City, Kenya. The study was anchored on lien theory. An exploratory research design was adopted. The respondents were one manager and one accountant in real estate firms. The sample size was 97, where respondents were purposively selected. A pilot study was conducted to measure the validity and reliability of the research tools. Descriptive and inferential statistics were employed to analyze the data. The study results revealed that there was a significant effect of loans financing ($\beta = 0.170$; $p < 0.05$) on performance of real estate sector. The study concluded that there is a significantly positive relationship between loans financing and real estate sector performance. The study recommended that there is need to increase use of loans and savings as sources of financing. The result of the study will benefit several stakeholders among them the real estate firms, investors, the government of Kenya, the financial institutions and researchers.

Keywords: loan financing, performance, real estates, financial institution, revenue

INTRODUCTION

Real estate sector is the main pointer of improvement in a nation's economy and is utilized to quantify financial development and strength of a nation. It involves production of lasting steady resources, includes capital and work concentrated exercises along these lines utilized as a driver for financial improvement because there is work created (Aalbers, 2016). Interest in real estate is activated by financial and populace development in this manner real estate member builds residential buildings to fulfill the need and on income from execution from these ventures (Carey, 2016). Due to its cyclical nature, real estate sector is prone to changes both in the national and local economic conditions.

Despite the fact that the macroeconomic conditions affect the entire sector, how these factors affect the micro-economic variables is equally important (Lwali, 2012). Financing options contribute to the development and growth of the real estate sector. Financing options are practices on ventures which significantly affect the long term financial and operational performance of real estate (Mkok, 2014). Financing options for the most part have impact on the product or services sets of real estate developers, and geological degree and distribution of their operations (Kegode, 2010). Real estate developers ought to attempt investment projects that will create positive value (Barako, 2010).

Financing of real estate has one of a kind quality of month to month reimbursement, long development and steady expanding in costs of properties (Dirnhofer, 2012). Because of these attributes, the costs of houses continue expanding which in the end prompts exorbitance by potential mortgage holders. Real Estate financing is concerned with the production of money for constructing structures. It is a fact that without a well operationalized and efficient housing finance system, the "real" housing market would be sub-optimal. Additionally, a proper housing finance system impacts positively on the entire financial system with far-reaching consequences for enhanced economic growth (Zhu, 2013).

Loan financing is borrowed money that a company must priorities during payment in the case of liquidation. Here, assets are used as collateral for loan that has a specified payment period. Given that it requires collateral, senior debt is less risky (Sharpe, 2012). These days, essential choices of business land financing are credits from bank and own-financing only consume a little offer conversely. In any case, in light of hazard thought, land firms stipulate severe standards of credits both in sum and time to business land developers (Reilly & Brown, 2017).

Statement of the Problem

Housing forms one of the sustainable development goals. In Kenya, it is part of the big four agenda of the Jubilee government. Real estate performance therefore provides an opportunity

to achieve these goals. It is a dream of every one to own a home and that is why most people living in urban areas are working hard to own homes in big towns, either individually or as a group (Mwangi, 2012). Kisumu city being the third largest city and central to the Lake Region Economic Block, it is expected to have adequate, modern and decent housing units that yield high returns on investment to cater for its growth rate of 2.8% per annum (p.a) (Cytonn, 2018). Housing demand in Kisumu city far outweighs supply. The demand is so high that about 50% or more than 434,661 inhabitants live in slums (Cytonn 2016). The present shortfall translates to a standard of 550 residential units/day in urban areas, with Kisumu only facing a less of 410 residential units/day. Over 80% of the residents of Kisumu live in dilapidated residence and mostly in slums as compared to only 20% living in high income estates such as Milimani. Those residents living in slums and lowly developed estates such as Kondele, Manyatta, Nyalenda and Obunga are overcrowded and the houses they live also fetch very low returns for owners (Cytonn, 2018). Persistence of such problems therefore means that the government will not be able to achieve one of its pillars of sustainable development goals of building 500,000 housing units by the year 2022. The resultant of this is that the residents of Kisumu city will continue to live in a dilapidated and inhabitable housing condition which is a security threat and a health hazard to the city and the country at large. Therefore, the study seeks to examine the effect of loan financing on performance of real estate in Kisumu City, Kenya.

Research Objective

To determine the effect of loan financing on performance of real estate sector in Kisumu City.

Research Hypothesis

H01: Loan financing has no significant effect on performance of real estate sector in Kisumu City.

LITERATURE REVIEW

Theoretical Review

Lien theory was advanced by Mahoney, Olson, Redmond, Thomson and Ticktin in 2011 and states that the bank achieves lien while the borrower accomplishes both lawful and evenhanded title of the mortgage asset. There exist rebuilding of deeds and mortgages in which a lien which is not possessory is forced on the sold title of the asset though proprietor still have lawful and fair title. This ensures loan specialist so as on the off chance that the borrower defaults in installment, the bank will almost certainly recover the property. The moneylender's lien is pulled endless supply of installment of mortgage. This is in opposition to the present circumstance for

which the purchaser possesses the title to the property other than the bank. Lien theory is supported by presentation of Real estate Act Number 6 of 2012; section 95 to 104 (Omollo 2013).

The Act provides that a charge will act just as collateral and not exchange of proprietorship. Inside the new real estate term law on contract has felt in the meaning of interest thus the theory gives a larger number of favorable circumstances to the borrower than the moneylender. The theory assumes that the buyer possesses the deed to the property in the midst of the home advance term. The buyer assurances to make all portions to the credit pro and the home advance transforms into a lien on real estate, the title still remains with the real estate purchaser. Lien is detached immediately the portions of entire credit portions have been done.

Dispossession techniques on a lien speculation state could be more troublesome for the advance master than in a title theory state, as a result of how the purchaser holds the title to asset and not the lien provider. In states that pursue lien hypothesis, the property deed remains with the borrower. The bank documents a lien against the property with the area representative or recorder to ensure his security enthusiasm for the home. Documenting puts the world on notice that the property is liable to a mortgage, which guarantees that the mortgage holder can't sell the property until he satisfies the credit. When the property holder satisfies the credit, the loan specialist evacuates the lien. This hypothesis is exceptionally pertinent to this investigation since some mortgage lenders have received it by and by. From this hypothesis, a mortgage can be given lien in the property which can just dispossess upon fulfillment of the commitment of the mortgage.

Loan Financing and Performance of Real Estate Sector

Lin and Lixin (2012) in China analyzed the relationship amid loan financing and market estimation of organizations. The study inspected 272 firms dealing with real estate cited at Shen Zhen and Shanghai security trade somewhere from 2002 to 2014. The study noticed that there was a direct relationship amid long haul obligation business loan financing and companies' fairly estimated valuations. These firms lessen the quantity of momentary borrowings and focus on long haul getting to fund their tasks. Their examination was conducted in China and took a gander at the impact of obligation financing. The present investigation was led in Kenya and will concentrate on loan financing.

Jumbale (2012) examined the connection between loan financing real estate and house costs in Kenya and discovered that there was a relationship between adjustments in costs of residential costs extended haul advancement of financing real estate. The investigation

embraced the fundamental examination configuration in acquiring the investigation's destinations. The study adopted purposive sampling method making an aggregate of 20 respondents. Jumbale's examination centered on housing costs and real estate financing but the present investigation will concentrate on loan financing.

Julius (2012) explored the determinants of loan financing for housing units in Nairobi. His study assessed the different components which have been influencing the market for real estate with an emphasis on the impacts dimension of cash supply, financing costs, and expansion, business and populace development rates. The investigation uncovered that work development charge and the dimension of cash delivery data gives money related examiners and financial experts better comprehension of the market for real estate. These elements additionally impact the costs of real estate in Nairobi. His study focused on elements affecting the market for real estate in Nairobi while the current study will focus on loan funding and performance of real estate sector.

Kakumu (2016) evaluated some of the relevant challenges that are contributing to unaffordable housing in Nairobi County. The findings established that real estate developers prefer working with large real estate firms for individuals willing to take up loans, buyer would prefer buying it on cash rather than taking up mortgages and high income earners are able to afford to take up loan, government policies have contributed to rise in lack of affordable housing. The results also established that factor affecting affordability of housing in regarding geographical region of properties was that rental houses are more near learning institutions and work places as opposed to guarded estate communities, residential developments being constructed currently are far from the CBD, and lack of available real estate near the CBD has led to real estate developers developing in remote areas. Kakumu evaluated challenges that are contributing to unaffordable housing but this study will focus on loan financing and real estate performance.

Gathuru (2014) focused on impact of real estate economic variables, value and supply in Kenya. The study used a data covering five years (2009 to 2013) from government documents and real-estate industry. The study found that there were positive relationships with loan financing and value of real estates, followed by inflation, percentage of loan funding and cost of construction. However, the relationship between population rate of growth and employment rates and value of real estate could not be established.

Mahalik and Mallick (2011) examined the impact of selected economic variables on performance of residential unit properties in Kenya using quarterly data from 2000Q1 to 2010Q4. The study tested three main issues to determine any linkages between the selected variables and housing property markets in Kenya. The findings revealed that housing sector

performance in Kenya is affected significantly by changes in macroeconomic factors used. It also established that changes in GDP, supply of money as well as loan financing positively affect the prices of house returns but the changes in interest rates domestically, Kenya shilling-USdollar inflation, exchange rate as well as rental income negatively affect house price returns.

Conceptual Framework

The conceptual framework illustrates the association between the dependent and the independent variable. The independent variable is loan financing whereas the dependent variable is performance of real estate sector. Loans financing was measured by long term loan, short term loan, unsecured loan and secured loan. The study was illustrated by the conceptual framework as shown in figure 1.

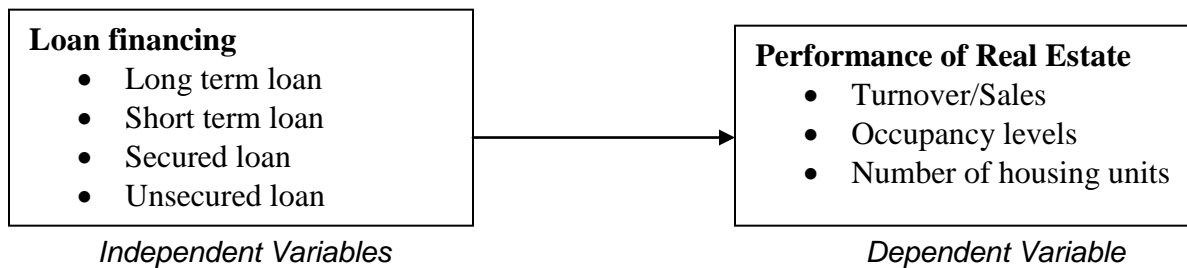


Figure 1: Conceptual Framework

RESEARCH METHODOLOGY

The study adopted an exploratory research design and was also guided by census survey since the target population was small. In this study the population of interest was registered real estate firms, financial institutions and National Construction Authority (NCA) in Kisumu City. The study targeted one manager and one accountant in real estate firm, one general manager and one mortgage manager in financial institution and one official of NCA; therefore the population targeted by the study was 97 respondents. The study adopted a self-designed questionnaire to solicit required data from the targeted subjects. Descriptive statistics as well as inferential statistics were used in the study. Regression model was used to establish the significance difference between the financing options and real estate sector performance.

Inferential statistics was done through regression model.

$$Y = \alpha + \beta_1 X_1 + \epsilon \dots \dots \dots \text{Equation 1}$$

Y Represents the dependent variable (performance of real estate sector)

α- the constant of equation (represents the changes that cannot be explained by independent variables in the model)

X_1 Represents Loan Financing

β_1 is the coefficients of independent variables

ε - error term

RESULTS AND DISCUSSION

Loans Financing and Performance of Real Estate Sector

The study sought to determine the effect of loan financing on performance of real estate sector in Kisumu City. The study responses were presented in Table 1.

Table 1: Loans Financing and Performance of Real Estate Sector

Statements		SA	A	U	D	SD	Mean	Std Dev
i. Long term loans provide a good indication of the risks that owner-occupiers run in financing their own home	F	60	25	10	0	0	4.52	1.165
	%	62.6	26.6	10.8	0	0		
ii. Short term loans are the primary options of commercial real estate financing	F	60	25	10	0	0	4.51	0.275
	%	62.6	26.6	10.8	0	0		
iii. Unsecured loans suffer considerable losses leading to poor performance in real estate sector	F	57	28	10	0	0	4.48	0.450
	%	59.7	29.5	10.8	0	0		
iv. Secured loans offer a considerable long repayment period	F	40	44	8	3	0	4.28	0.273
	%	42.4	46	8.6	2.9	0		

The study results on the effect of loan financing on performance of real estate sector indicated that majority of the respondents 90.4% were of the opinion that long term loans provide a good indication of the risks that owner-occupiers run in financing their own home and no one disagreed. This was further supported by (mean=4.52; Std Dev 1.165). These findings were supported by Julius (2012) who explored the determinants of loan financing for housing units in Nairobi and the findings uncovered that work development charge and the dimension of cash delivery data gives money related examiners and financial experts better comprehension of the market for real estate. These elements additionally impact the costs of real estate in Nairobi.

With regard to whether short term loans are the primary options of commercial real estate financing, majority of the respondents 89.2% agreed while none disagreed. This was further supported by (mean=4.51; Std Dev 0.275). These findings were supported by Amidu (2017) who examined the relationship between operating assets (fixed assets) and long-term debt in Ghana also agreed that there is a positive relationship between operating assets (fixed assets) and long-term debt in Ghana. Ghanaian banks with a higher proportion of operating assets are financed by long-term debt capital. This could be due to the fact that higher proportions of banks' operating assets denote less operating risk; therefore, the banks may not be exposed to more risk from the use of more long-term debt capital. There is also a negative relationship between size and long-term debt.

In addition, majority of the respondents 90.2% were of the opinion that short term loans are the primary options of commercial real estate financing, while 10.8% disagreed. This was further supported by (mean=4.48; Std Dev 0.450). These findings were supported by Adjonyoh (2017) who did study on the effect of access to long term capital on real estate delivery in Nigeria. The findings disagreed with the current study findings. The researcher argued that lack of access to long term capital is a major barrier to real estate delivery. Even though the government policies recognizes the private sector's dominant role in housing provision, the banks have short term funding and unable to lend on medium or long-term bases, thus crippling the real estate industry. This could be due to the fact that the study was done in Nigeria and the results could not be replicated in the Kenyan setting.

Lastly majority of the respondents 89.6% were of the opinion that unsecured loans suffer considerable losses leading to poor performance in real estate sector. This was further supported by (mean=4.28; Std Dev 0.273). These findings were supported by Kakumu (2016) who evaluated some of the relevant challenges that are contributing to unaffordable housing in Nairobi County who established that real estate developers prefer working with large real estate firms for individuals willing to take up loans, buyer would prefer buying it on cash rather than taking up mortgages and high income earners are able to afford to take up loan, government policies have contributed to rise in lack of affordable housing.

Assumptions of Regression Model

To provide unbiased estimates of the study parameters, various assumptions of regression were tested. These include linearity assumption, normality assumption, Heteroscedasticity and multicollinearity assumption of the independent variables.

Linearity Assumptions

Linearity is the assumption that a straight line relationship exists between two variables (Tabachnick & Fidell, 2013). The bivariate P-P plot was used to assess the degree of linear relationship. This is presented in Figure 2.

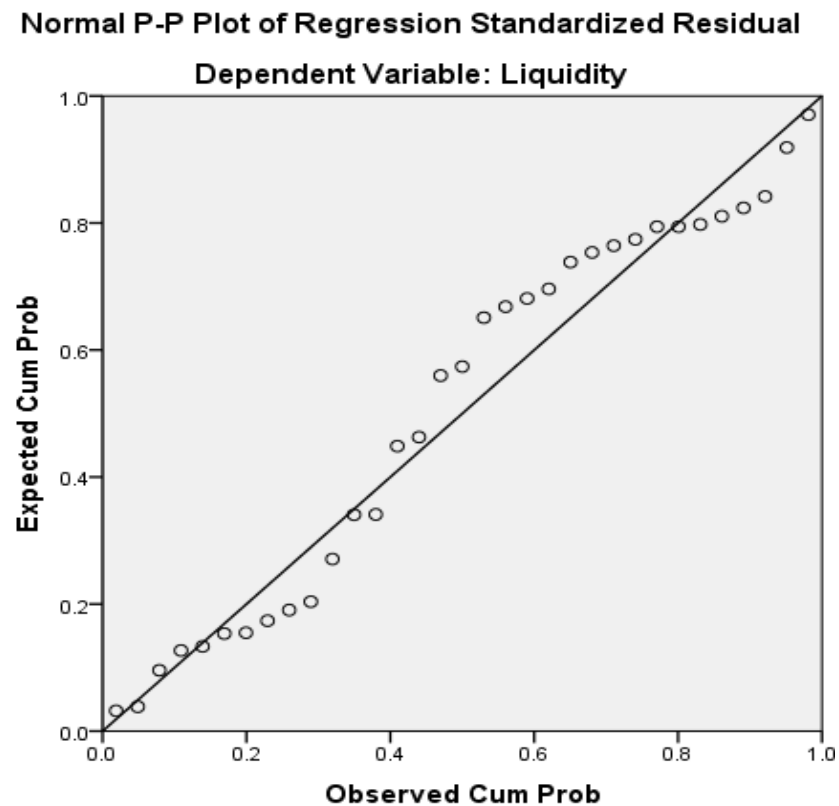


Figure 2 Linearity Assumptions

Findings in Figure 2 showed that the plots in the normal P-P as presented clearly shows a normal distribution along the diagonal line, the distribution is not skewed to either side. Thus the assumption that the data was linear was attained.

Test of Normality Assumption

Regression assumes that variables have normal distributions. Non-normally distributed variables can distort relationships and significance tests. Shapiro –Wilk (W) test was used to test normality. Shapiro –Wilk (W) Test for normality was used because the size of respondents is small (95 respondents). Shapiro – Wilk (W) test is appropriate where the size is between 7 to 2000 respondents (Shapiro & Wilk, 1965). For large samples of between 2000 and 5000 respondents, Kolmogorov – Smirnov (D) test is appropriate (Ghasemi & Zahediasl, 2012). From

the results if the significance value less than 0.05, the data is normal, else if significance value greater than 0.05, the data is not normally distributed (Garson, 2012). The results are presented in Table 2.

Table 2 Test of Normality assumption

	Shapiro-Wilk		
	Statistic	df	Sig.
Loans financing	.908	33	.019

The study tested the normality of the regression model to determine whether the assumption of normality of distribution was attained. From Table 2, Shapiro wilk test significance was less than 0.05 indicating that the distribution of the data was normal.

Test of Homoscedasticity assumption

Homoscedasticity assumes that the dependent variable show an equivalent level of variance across the range of predictor variable. Consequently, as indicated in table 4.9 the durbin statistic was 1.933 which signifies lack of first order linear auto-correlation in the multiple linear regression data. This presented in Table 3.

Table 3 Test of Homoscedasticity assumption

Test	Durbin-Watson
Value	1.933

Test for Multi-Collinearity

The assumption of multicollinearity implies that there is no correlation between independent variables. Test for multicollinearity was conducted using Tolerance and Variance Inflation Factor (VIF). From the results, inspection of the Variance Inflation Factors (VIFs) showed that multicollinearity was not a concern. This hence led to a conclusion that no predictor had a strong linear relationship with any of the predictor(s). This is presented in Table 4.

Table 4 Test of for Multi-collinearity

Model	Collinearity Statistics	
	Tolerance	VIF
Loans financing	.265	3.775

a. Dependent Variable Performance

Correlation Results

The study examined the relationship between loans financing on performance of real estate sector in Kisumu City. The Correlation analysis results are presented in Table 5.

Table 5 Relationship between Loans Financing and Performance

		Performance	Loans financing
Loans financing	Pearson Correlation	.770**	1
	Sig. (2-tailed)	.000	

** . Correlation is significant at the 0.01 level (2-tailed).

These study findings indicated that the relationship between loans financing and performance of real estate sector in Kisumu County was positive and statistically significant ($r = .770$; $p < 0.05$). This implies loans financing positively and significantly influences performance of real estate sector in Kisumu County. These findings concur to those done by Han (2008) who indicated that bank loans are the main source of real estate developers. Amidu (2007) in his study also agreed with these findings.

Multiple Regression Analysis

Multiple regression analysis is a powerful technique used for predicting the unknown value of a variable from the known value of two or more variables. The results of multiple regression analysis shown in Table 6.

Table 6 Multiple Regression Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.860 ^a	.739	.712	.01897

a. Predictor: (Constant) Loan financing

b. Dependent Variable: Performance.

From the results on model summary $R = 0.860$, R -square = 0.739, adjusted R -square = 0.712, and the $SE = 0.01897$. The coefficient of determination also called the R square is 0.739. This implies that the effect of the predictor variable (loan financing) explains 73.9% of the variations in real estate sector performance in Kisumu City. This implies that a 1 unit change in the predictor variable (loan financing) has a strong and a positive effect on in real estate sector

performance in Kisumu City. This study therefore assumes that the difference of 26.1% of the variations is as a result of other factors not included in this study.

Assessing the Fit of the Multiple Regression Model

Multiple regression analysis was conducted to test the influence among predictor variables on real estate sector performance in Kisumu City. All the three null hypotheses were tested using F statics. The test results are shown in Table 7.

Table 7 ANOVA Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.722	3	3.241	92.346	.000 ^p
	Residual	3.437	29	.119		
	Total	13.159	32			

a. Dependent Variable: Performance.

b. Predictors: (Constant), Mortgage financing, Loan financing, Savings financing

The findings of the study in Table 7 showed that there was a statistically significant relationship between the independent variables and the dependent variable ($F= 92.346$; $p=0.000$). This therefore indicates that the multiple regression model was a good fit for the data. It also indicates that mortgage financing, loan financing and savings finances all influence real estate sector performance in Kisumu City.

Individual Regression Coefficients

The study employed multiple regression analysis to test the hypotheses. Multiple regression analysis was conducted to test the influence of loan financing on real estate sector performance in Kisumu City. These results were presented in Table 8.

Table 8 Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
	(Constant)	0.369	0.224		
Loans financing	0.170	0.026	0.319	6.604	0.000

a. Dependent Variable: Performance of real estate sector

The null hypothesis H_{01} stated that; loan financing has no significant effect on performance of real estate sector in Kisumu City. The study findings indicated that there was a statistical significant effect of loan financing on performance of real estate sector ($\beta = 0.170$; $p < 0.05$). This was so because currently in Kenya loan financing attracts relatively low-interest rates of between 10 per cent and 16 per cent but is prone to the volatility of financial policies from the lending institutions. Sharpe, (2012) indicated that these days, the essential choices of business land financing are credits from bank and own-financing only consume a little offer conversely. These findings concur to those found by Han (2008) who indicated that bank loans are the main source of real estate developers. In addition Amidu (2007) stated that there is a positive relationship between operating assets (fixed assets) and long-term debt and Adjonyoh (2007) argued that lack of access to long term capital is a major barrier to real estate delivery.

CONCLUSIONS AND RECOMMENDATIONS

From the findings, mortgage financing enables acquisition of mortgage properties by able potential homeowners through scheduled repayment and to the lender, it is an avenue of revenue generation since there are interest charges. It is also concluded that long term loans provide a good indication of the risks that owner-occupiers run in financing their own home, short term loans are the primary options of commercial real estate financing, unsecured loans suffer considerable losses leading to poor performance in real estate sector and secured loans offer a considerable long repayment period.

This study recommends that for the achievement of the big four agenda on housing, The study recommends that the government through the Central Bank and mortgage lending firms should implement policies that reduce on the interest rates that financial institutions charge on mortgages. Secondly, the government through the ministry of housing should institute laws that guide registration of real estate agents in order to reduce the level of information asymmetry thus lowering the risk of moral hazards and adverse selection. The laws will curb cases of brokerage that are present in the market to make abnormal profits

Suggestions for Further Research

From the regression output, it was revealed that the study variables explain 73.9% of the variations in real estate sector performance in Kisumu County. This study therefore assumes that the difference of 26.1% of the variations is as a result of other factors not included in this study. Further research is therefore advocated for to focus on other factors that affect performance of real estate in Kenya. These factors include political, legal, social, economic and geographical factors. Secondly, some research needs to be carried out to establish how location

of mortgage property affects performance of real estate market. From empirical review, mortgage property was documented that significantly affect performance of real estate market.

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