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Determinants of Demand for Mortgage Financing for Residential Properties in Nairobi County, Kenya

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Abstract

This paper highlights the influence of factors such as property prices, interest rates, demographic trends and availability of credit on demand for mortgage financing for acquisition and development of residential housing (especially high income) in Nairobi. The study employed the use of descriptive survey approach. Primary data was collected from a sample of 46 respondents from a target population of 115 firms. Secondary data was obtained through review of journals, reports and government documents. The analysis was undertaken using Statistical Package for Social Scientists (SPSS). The relationships between demand for loans and four factors have been examined and established. The results of the study established that demand for mortgage for purchase of residential properties in upmarket Nairobi is positively correlated to property prices, interest rates, demographic trends and availability of credit and influence on demand for mortgage. In the end, it is recommended that the government through the central bank continuously provides updates on prevailing interest rates and other macro-economic changes to enable informed decisions by consumers.

Keywords: mortgages, interest rates, property prices, financial institutions, credit availability

Introduction

Kenya's mortgage market is constrained by lack of innovative financial products thus its inability to reach the lower income segment of the population. The lower income group further faces challenges related to high interest rates thus contributing to low demand and uptake of mortgage loans. The issue is further complicated by the lack of graduated payments making access to mortgage a challenge to even to the middle income group. In the end, access to formal mortgage lending only benefits the high-income households and individuals. Even then, existing inappropriate fiscal policies further enhance inequitable access to financial resources for housing development thus contributing to the over concentration by developers in the development of high income residential housing.

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A joint report by the Central Bank of Kenya and the World Bank (2011) highlighted the issue of low loan uptake, it pointed out that mortgages stood at a mere 15 per cent of the total credit in the country. At the same time, the report highlighted the fact that there is limited growth in the mortgage finance market. As a result, housing finance is largely obtained through household savings and micro credit organizations that have limited capacity. This problem is further compounded with the strict qualifying conditions set by mortgage firms. These ensure that a larger proportion of the population is inaccessible to credit. There is however, a belief that availability of credit is the main factor influencing demand for loans. Wesusta, (2014) observed that despite a huge housing shortage especially for low income groups, support for housing acquisition and development is concentrated in high income residential housing.

The mortgage market continues to play a central role in the development of a country (Nyang'eye, et al; 2022; Kigomo, 2016; and Mutero, 2007). This is because it is linked to housing sector that has strong backward and forward linkages (Ibarinda and Obala, 2022). Furthermore as Nyang'eye et al (2022) and Renaud (2004) assert a well-functioning mortgage market is likely to act as a stimulant for economic growth; positively impacting on the economy through various key sectors such as the construction industry and real estate thereby enhancing labour mobility and resource utilization. This paper highlights the influence of factors such as property prices, interest rates, demographic trends and availability of credit on demand for mortgage financing for acquisition and development of residential housing especially in high income locations in Nairobi.

Literature Review

Mortgage is variously defined; for instance Siedel and Aalberts (2006) see it as; an interest in land created by a written instrument providing security for the performance of a duty or the payment of a debt. Nyang'eye, et al (2022) refer to mortgage as a loan allowing a borrower to make payments over a period. In the end, mortgages constitute a significant portfolio for most banks. State of West Virginia (1982) provide a definition for mortgage interest that provides for the borrower to make periodic payments on a monthly basis thus provides the lender with both a return on the investment in the form of interest and a return of the investment through the recovery of the principal over the term of the loan. In addition, State of West Virginia (1982) posit that mortgages can be of varied nature that is; the loan repayment could be at a variable or a fixed rate. And that mortgages can be conventional, guaranteed or insured. However, a central issue on the type of mortgages is that they have to conform to prevailing policies, regulations and

laws. Karanja, (2013) however; sees a mortgage as the transfer of an interest in property to a lender as security for a debt usually a loan of money.

On the other hand, as Wheaton, (1987) and Rosen, (1984) argue, demand for mortgage finance is derived demand that is to say that there must be demand for real estate in the first place and that it is subject to the general macroeconomic forces that influence demand and supply for property. Thus demand for mortgage finance is linked to prevailing interest rates (Anyanwu, 1997; Pandey, 1999 and Ivashina and Scharfstein, 2009). Kissinger, (2012) and Kieti, (2015) further reinforce the argument that interest rates influences decisions by individual purchasers on borrowing. Indeed Kissinger (2012) adds that changes in interest rates can greatly influence a person's ability to purchase a residential property. This is because as the interest rates fall, the cost of obtaining a mortgage loan to buy a home decreases, creating a higher demand for real estate but ends up pushing the property prices up. Conversely, as interest rates rise, the cost of obtaining mortgage finance increases, thus lowering demand and prices of real estate. This supports the argument by Harvey, D. (2011) and Stiglitz, J. (2003) that a stable and robust mortgage market is an indicator of a healthy economy.

Evidence from literature suggests that despite serious shortage of housing only a small proportion of the population is able to access mortgage finance to purchase and/or develop housing (Kieti, 2015; and Kigomo, 2016). This situation is attributed to the lack of affordability by prospective borrowers; which is attributed largely to low incomes and high interest rates (AfDB, 2011 and Kieti, 2015). The World Bank, (2011) highlighted constraints to accessing mortgage finance asserting that they are of different dimensions – social, economic, legal and administrative among others. It is also evident that housing supply side is often ignored yet it is critical to reduction in property prices and therefore addressing affordability problems.

Indeed Kigomo (2016) further asserts that lack of affordability is a major contributor to low uptake of mortgages. Affordability is affected by among others prevailing interest rates, income levels and prices of housing. Thus demand for mortgage is an important financial choice of households. As the decision is dependent on availability of disposable income that can be used in paying the monthly instalments. The monthly payments are among others influenced by interest rates and loan repayment period. Thus the interest rate regime is critical in influencing mortgage decisions and uptake (Bruckner, 1994).

Bajari, Chan, Krueger and Miller, (2008) demonstrated that demand for mortgages is negatively correlated with the mortgage interest rates, in that when mortgage interest rates rises, demand for mortgage financing falls. This position is further supported by Follain and Dunsky, (1997), Alm and Follain, (1987) and Jones (1993). They further support the argument that when demand for mortgages is high, banks raise interest rates to maximize profits, but if demand falls, banks lower interest rates to entice home buyers to apply for mortgage financing.

Himmelberg et al., (2005) and Mayer and Sinai, (2005) support the view that mortgage interest rates are negatively correlated with demand for mortgage financing. As they contend that mortgage rates comprise of cost of funds and the lenders profit, which are factors in the cost of originating the loan, cost of borrowing and cost of servicing. In a sense, profit is thus understood to comprise reward for risk taking by the lender, liquidity, default and interest rates risks. Of great interest in this paper is how the four factors that is property prices, interest rates, demographic trends and availability of credit influence demand for mortgage or otherwise.

Methodology

The study adopted a correlational descriptive approach for data collection and analysis. Data was collected from a total of 61 respondent institutions comprising of banks (30), real estate firms (30) and 1 (One) specialized mortgage firm. In terms of geographical location, the study was restricted to up-market Nairobi, because it has the highest concentration of mortgage financing and houses the greatest mortgage portfolio in the country.

Primary data was largely obtained using a structured questionnaire, while key informants were interviewed using a checklist guide. Secondary data was obtained through a review of existing literature and reports. The study employed descriptive statistics to quantitatively analyze the data collected. The analysis used appropriate measures of central tendency and was carried out by use of statistical package for social scientists (SPSS). The relationship between the variables was based on the scores. The relationship was tested, and then used to evaluate the correlation between the variables.

In addition, a model was therefore developed using the ordinary least square regression technique and used to determine, with statistical significance, the influence that each of the independent variables: i) interest rates, ii) property prices; iii) credit availability; and iv) demographic trends had on the dependent variable, demand for loans in the up-market Nairobi. The equation of the model was represented as:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$$

Where:

Y is the dependent variable demand for loans

X_i are the independent variables; $i = [1,4]$

β_i are the coefficients of the independent variables X_i and $i = [1,4]$

β_0 is the constant term which is the demand when all the X_i take on the value 0.

β_0 will eventually be suppressed to zero since its presence implies that there is possibility of demand when all the variables are zero which is not the case as there can be no demand when the property prices equal zero, no credit availability and no interest rate.

ε is the error term whose mean equals zero and has a constant variance according to assumptions of the regression model used.

The study instruments were tested for reliability and consistency using Cronbach alpha to establish the level of reliability between various variables – interest rates, property prices, availability of credit and demographic trends. The results of the test are as depicted in table 1 below.

Table 1: Test of reliability and consistency by Cronbach’s alpha coefficient

Item	Cronbach’s Alpha	Number of items
Interest rate	0.99	2
Property prices	0.89	2
Availability of credit	0.96	2
Demographic trends	0.92	2

Data Analysis

Emerging from the study is that the mortgage market in Kenya is fairly well developed with all the existing financial institutions offering mortgage facilities (See Central Bank of Kenya/World Bank report, 2011). It further reveals that the number of loans remained low, making the mortgage loan portfolio lower in

comparison to international standards and low debt to GDP ratios. On a positive note, the study revealed that the number of new loans were on the increase at about 14 per cent annually (CBK, 2011). In addition, it was evident that mortgage market was dominated by the large banks that had about 90 per cent of all the existing mortgages (mortgage loan portfolio) at the time.

Factors influencing demand for mortgage financing

The study results revealed that four factors namely: interest rates, property prices, credit availability and demographic trends had influence on demand for mortgage financing although in various degrees. Using a 4 – Likert scale, the perceptions of the respondents were obtained based on a scale of: most important, important, less important; and not important. Tables 2 to 5 below presents the results of the Likert Scale tests.

Table 2: Influence of Interest rates

	Frequency	Percent	Factor weight	Total Weighted Score
Important	4	16	3	12
Most important	21	84	4	84
Total	25	100		96

Table 3: Influence of property prices

	Frequency	Percent	Factor weight	Total Weighted Score
Less important	4	16	2	8
Important	11	44	3	33
Most important	10	40	4	40
Total	25	100		81

Table 4: Influence of credit availability

	Frequency	Percent	Factor weight	Total Weighted Score
Less important	13	52	2	26
Important	12	48	3	36
Total	25	100		62

Table 5: Influence of demographic trends

	Frequency	Percent	Factor weight	Total Weighted Score
Not Important	23	92	1	23
Less Important	2	8	2	4
Total	25	100		27

As depicted in table 2 the respondents saw interest rates as both important (16%) and most important (84%) factor influencing demand for mortgage finance. None of the respondents considered it a less important or not important. As depicted in table 3, the respondents further saw property prices as less important (4%), important (44%) and most important (40%) factor influencing demand for mortgage finance. However, none of the respondents considered it not important factor.

In the case of credit availability, the respondents considered credit availability; 48% of the respondents saw it as important. While 52% of the respondents saw it as important in influencing demand for mortgage finance. None of the respondents considered it most important or not important factor.

The study results further revealed that demographic trends was perceived as either less important or not important factor influencing demand mortgage finance. None of the respondents considered it a most important or just an important factor. Thus Twenty three of the respondents responded that demographic trend was not an important factor affecting loan demand in the up-market accounting for 92 % of the respondents and two of the respondents saw demographic trends as less important factor influencing demand for mortgage loans in the up-market accounting for 8% of the respondents.

The findings support the arguments by among others Kieti (2015), Bajari et al (2008) as well as Mayer and Sinai (2005) especially on the influence of interest rates on demand for mortgage financing. Similarly, the results on property prices, credit availability and demographic are also in consonance with arguments by Stiglitz (2003) and Harvey (2011).

Weighted Scores

The influence of the four factors including interest rates, property prices, credit availability and demographic trends on demand for mortgage finance was tested using weighted scores between respondents from real estate firms and banks. The results as illustrated in table 6 below, revealed that the respondents from both sectors considered interest rates and property prices as the most important factors in influencing demand for mortgage loans.

The results further revealed that respondents from the banking sector saw interest rates as the most factor with a total weighted score of 96. On the other hand, respondents from real estate firms saw property prices as the most important factor influencing demand for mortgage finance with a total weighted score of 83. Overall property prices emerged as the second most important factor influencing demand for mortgage finance according to respondents from the banking sector with a total weighted score of 81. On the other hand, real estate firms saw interest rates as the second most important factor influencing demand for mortgage loans with a total weight of 82. The results indicated that credit availability and demographic trends are the least important factors influencing demand for mortgage finance with credit availability being considered more important than demographic trends in both sectors.

Table 6: Weighted scores

Variable	Total Weighted Score Banking Sector	Total Weighted Score Real estate firms
Interest rates	96	82
Property prices	81	83
Credit availability	62	57
Demographic trends	27	31

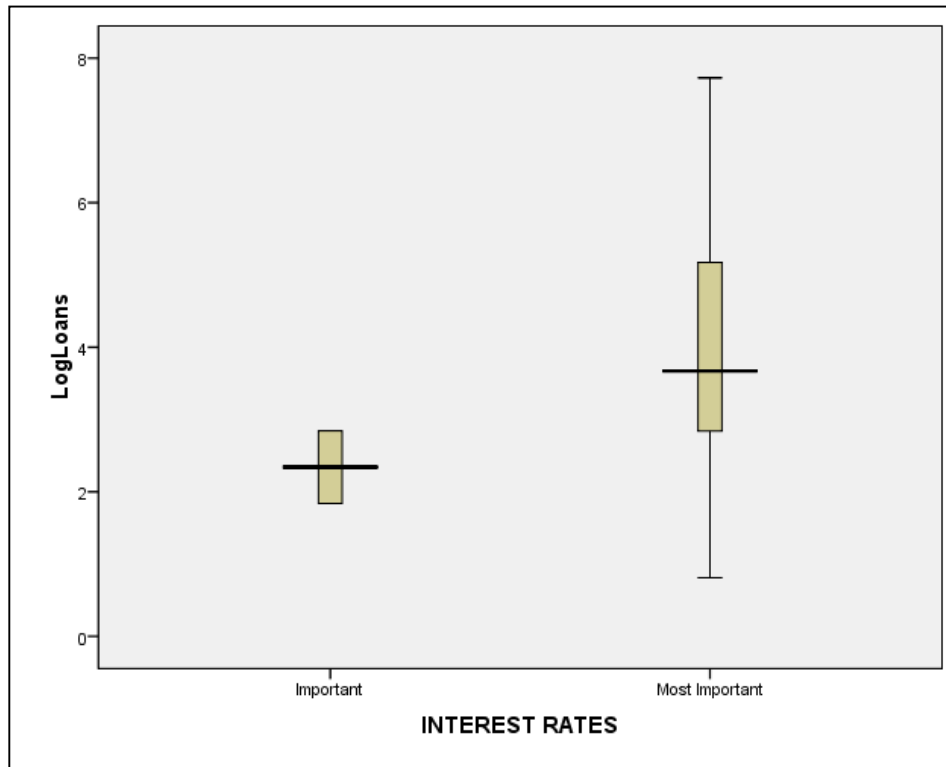
Bivariate Analysis

The bivariate analysis was undertaken to further explore the relationship between the dependent variable (demand for loans) and the independent variables (interest rates, credit availability, property prices and demographic transitions). In the case of interest rates, it emerged that those who consider interest rate as the most important factor took more loans as compared to those who considered it as just an important factor. This is depicted by the means of the loans issued, thus those who considered interest rates as the most important factor had a mean of 3.999 while those who considered interest rate as factor which is important had a mean of 2.34 (see table 7). This implies that those institutions that considered interest rates as most important had more demand for their loans as compared to those who responded to it as important. This could be attributed to market information that one receives regarding interest rate in the overall market.

Table 7: Demand for loans across groups of interest rate

	Interest Rates		Statistic
Log High Income residential areas loans	Important	Mean	2.34
		Median	2.34
		Variance	0.50
		Std. Deviation	0.71
		Skewness	.
	Most Important	Mean	4.00
		Median	3.67
		Variance	3.43
		Std. Deviation	1.85
		Skewness	0.56

Figure 1: Box plot of Log of loans against interest rates



As demonstrated in in figure 1 above, most individuals who go for loans perceived interest rates as most important factor influencing demand for mortgage loans. The results further demonstrates that demand for mortgage loans is positively skewed for both groups that is those who considered interest rates as most important and those that saw it as important. However, the demand for loans for those who considered interest rates as important is more positively skewed than for those who considered it as most important. In addition, those who perceived interest rates as most important have a higher mean with a higher standard deviation.

Further tests were undertaken to explore the relationship between interest rates and log on up-market loans, a test on equality of the means between the two groups was undertaken. The results are as illustrated in table 8 below. The table depicts the results of the test for the comparison of the means of log demand for loans in respect of interest rates between the two groups that is those who consider interest rates as important and most important.

The Levene’s test for equal variances revealed that the variance are not equal between the two groups. This is because the F statistic is 1.423 with a significance of 0.248 which is greater than 0.05 and thus insignificant. The means between the groups are therefore compared without assuming equal variances. The T statistic value is 2.511 with a significance of 0.009 which is less than 0.05. This shows that the mean up-market mortgage loans are different between the two groups which implies that there is a significant relationship between demand for loans and interest rates. This further confirms that interest rates has an effect on the log demand for loans which confirms its influence on demand for loans.

Table 8: Independent samples test groups of Interest rates

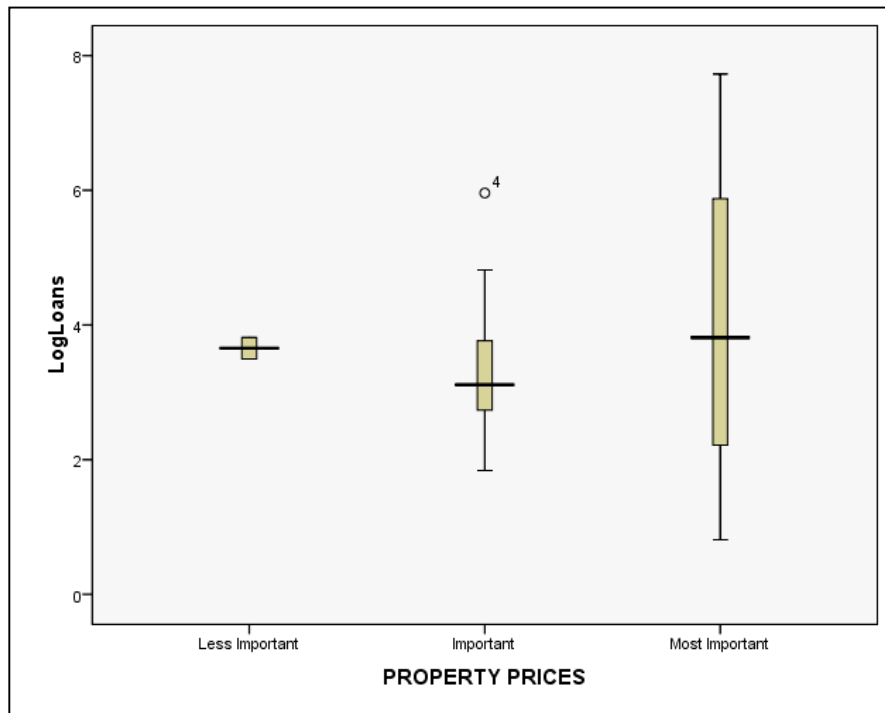
	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	t	Df	Sig. (2-tailed)
Equal variances assumed	1.42	0.25	1.23	19	0.23
Equal variances not assumed			2.51	2.87	0.01

On the interactions between demand for loans and property prices – and the responses by banks and property firms, it emerged that those who perceived property prices as the most important in influencing demand for mortgage loans had a mean of 4.2; while those who considered property prices as important and less important had a mean of 3.47 and 3.65 of the loans issued respectively (see table 9 below). This shows that those individuals who consider property prices as most important had more demand for loans as compared to those who perceived it as important and less important.

Table 9: Demand for loans with Property prices consideration

	Property Prices		Statistic
Log Up-market loans	Less Important	Mean	3.65
		Median	3.65
		Variance	0.05
		Std. Deviation	0.22
		Skewness	.
	Important	Mean	3.47
		Median	3.11
		Variance	1.61
		Std. Deviation	1.27
		Skewness	0.94
	Most Important	Mean	4.20
		Median	3.81
		Variance	5.74
		Std. Deviation	2.40
		Skewness	0.24

Figure 2: Box plot of log loans against property prices



It is evident that those who viewed property prices as the most important factor than those who saw it as important and less important – for all the three groups, demand for loans are positively skewed but the demand for loans for by those who consider it as important is more positively skewed than those who consider it most important Those who saw it as most important have a higher mean with a higher standard deviation.

Table 10: Analysis of variance groups of property prices

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	1.90	2	0.95	3.79	0.04
Within Groups	64.61	18	3.59		
Total	66.50	20			

The analysis of variance on the means across the groups (those who perceived property prices as less important, important and most important) as illustrated in table 10, the F statistic is 3.789 with a significance of 0.04233 which is less than 0.05, implying that at 95% confidence level, it can be concluded that at least one of the means of log loans across the groups (those who perceived property prices as less important, important and most important) is different from each other. This implies that not all the means are equal to each other and thus a change from one group to another in property prices would consequently cause a change in the log of loans thus there is a significant relationship between property prices and log loans.

The study further explored the relationship between demand for loans and credit availability. It emerged that those who consider credit availability as important factor had more demand for loans in comparison to those who considered it important or less important factor. This is demonstrated by the means of the loans issued. In addition, the study results revealed that those who considered credit availability as important had a mean of 4.8499 while those who considered credit availability as less important had a mean of 2.912. In essence, the results demonstrated that those who considered credit availability as important had more demand for loans as compared to those who saw it as less important.

Table11: Demand for loans across groups of Credit availability

Credit availability		Statistic	
Log Up-market loans	Less Important	Mean	2.91
		Median	2.94
		Variance	1.40
		Std. Deviation	1.18
		Skewness	-0.15
		Important	Mean
	Median	4.67	
	Variance	3.73	
	Std. Deviation	1.93	
	Skewness	0.29	

It further emerged from the study that most of those who go for loans are those who perceived credit availability as an important factor as opposed to those who perceive credit availability as less important. The demand for loans is positively skewed for the group that responded to credit availability as an important factor while the demand for loans for those who considered it as less important is negatively skewed. Thus the results show that those who perceived credit availability as important had a higher mean with a higher standard deviation (See Figure 3 below).

Figure 3: Box plot of log loans against credit availability

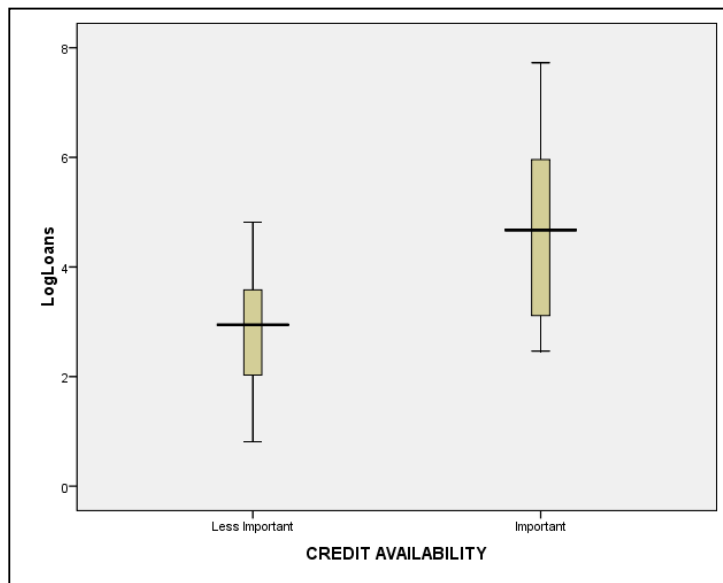


Table 12: Independent sample test across groups of credit availability

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	T	Df	Sig. (2-tailed)
Equal variances assumed	5.446232	0.030747	2.803313	19	0.011342
Equal variances not assumed			2.740166	14.65725	0.015433

Further analysis was undertaken and the results are as illustrated in table 12 above, it emerged that the variance of up-market loans are equal between the two groups. This is because the F statistic is 5.446232 with a significance of 0.0307 which is less than 0.05 and thus significant. When the means between the groups are compared assuming equal variances, the T statistic value is 2.803313 with a significance of 0.011342, which is less than 0.05. This shows that the mean for up-market loans are different between the two groups which implies that there is a significant relationship between demand for loans and credit availability. In addition, it implies the consideration that a mortgage lending institution gives to availability of credit would have an effect on the log demand for loans and on the demand for loans.

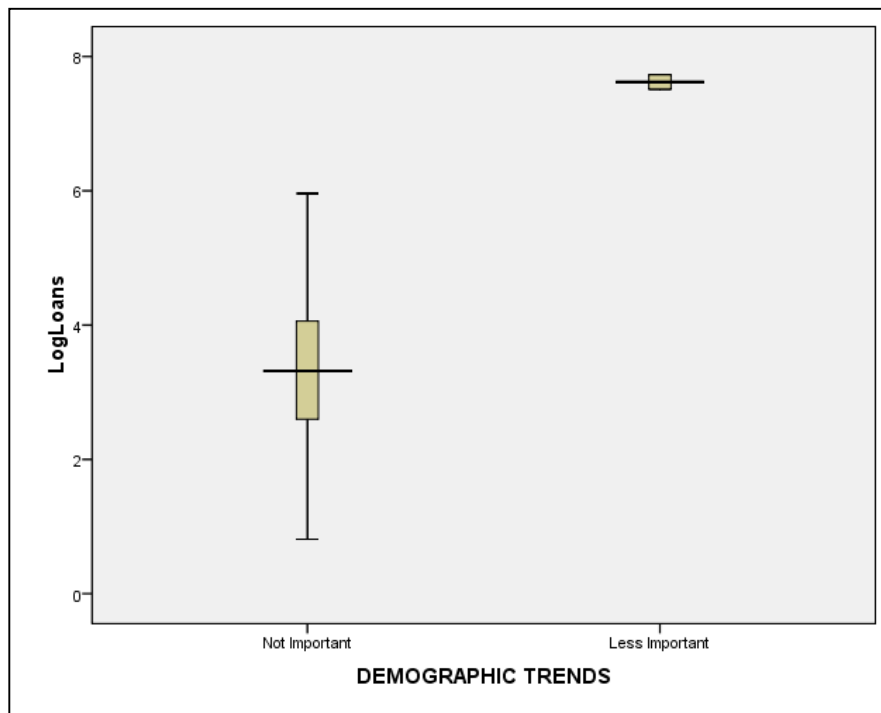
Table 13: Demand for loans across groups of demographic trends

Demographic trends		Statistic	
Log Up-market loans	Not Important	Mean	3.44
		Median	3.32
		Variance	1.97
		Std. Deviation	1.40
		Skewness	0.29
	Less Important	Mean	7.62
		Median	7.62
		Variance	0.02
		Std. Deviation	0.15
		Skewness	.

Further analysis of the relationship between demand for loans and demographic trends revealed that those who consider credit availability as less important had more demand for their loans in comparison to those who considered it as not important. The means of loans issued where those who considered demographic trends as less important factor had a mean of 7.6204 while those who considered demographic trends as not

important had a mean of 3.4363. This shows that those institutions who consider credit availability as less important had more demand for their loans as compared to those who responded to it as not important.

Figure 4: Box plot of log Loans against demographic trends



Further tests as depicted in figure 4 above revealed that those who borrowed were largely those who perceived demographic trends as a less important factor than those who perceived it as not important. The demand for loans is positively skewed for both groups (those who perceived demographic trends as important, less important, not important and most important) but is more positively skewed for the group that perceived demographic trends as less important than it is for those that considered it as not important is negatively skewed. Those who saw demographic trends as less important have a higher mean with a lower standard deviation.

Table 14: Independent samples test across groups of demographic trends

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	t	Df	Sig. (2-tailed)
Equal variances assumed	2.50	0.13	4.11	19	0.00
Equal variances not assumed			12.33	18.25	0.00

Further analysis of variances demonstrated that the variances of upmarket loans are not equal between the two groups. This is because the F statistic is 2.502612 with a significance of 0.130162 which is less than 0.05 and thus insignificant. The means between the groups are therefore compared without assuming equal variances. The T statistic value is 4.11454 with a significance of 0.0005 which is less than 0.05. This shows that the mean for up-market loans are different between the two groups which implies that there is a significant relationship between demand for loans and demographic trends. This points to the fact that if a mortgage lending institution gives due consideration to demographic trends then it would have an effect on the log demand for loans which would consequently have an influence on the demand for loans.

Multivariate Analysis

The analyses were undertaken to determine the kinds of relationships that demand for loans has with all the variables and the combined effect of the independent variables on demand for loans. The analysis included correlation and regression analysis as follows:

i) Correlations

This analysis was to determine with statistical significance, the relationship between demand for loans and each of the independent variables. A correlation table was produced as in the table 15 below.

Table 15: Correlation between loan demand and the independent variables

		Log Loans	Interest Rates	Property Prices	Credit Availability	Demographic Trends
Log Loans	Pearson Correlation	1				
	Sig. (2- tailed)					
	N	21				
Interest Rates	Pearson Correlation	0.27	1			
	Sig. (2- tailed)	0.02				
	N	21	25			
Property Prices	Pearson Correlation	0.16	0.30	1		
	Sig. (2- tailed)	0.05	0.01			
	N	21	25	25		
Credit Availability	Pearson Correlation	0.54	0.20	0.01	1	
	Sig. (2- tailed)	0.01	0.03	0.06		
	N	21	25	25	25	
Demographic Trends	Pearson Correlation	0.69	0.13	0.32	0.31	1
	Sig. (2- tailed)	0.00	0.05	0.01	0.02	
	N	21	25	25	25	25

Table 15 above shows that demand for loans is positively correlated with all the independent variables; interest rates, property prices, availability of credit and demographic trends. Demographic trends is strongly correlated to loan demand with a correlation of 0.6864, availability of credit moderately correlated with 0.5409 to demand of loans, interest rates and property prices have slight positive correlations of 0.2709 and 0.1642 respectively to demand of loans. All these correlation coefficients are significant with p values less than 0.005.

In summary, the statistics have proven that all the independent variables (interest rates, property prices, availability of credit and demographic trends) are positively correlated to the dependent variable (Demand for loans).

ii) Regression Model

The test was undertaken to determine with statistical significance the extent of influence each of the independent variables on the dependent variable. The coefficients of the variables in the model would signify the extent of influence the variable has on demand.

Table 16: Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.95	0.90	0.88	1.46

The correlation coefficient R squared as shown in table 16 above shows that 90% of the variations in loan demand are explained by independent variables in the model.

Table 17: ANOVA for the estimated model

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	340.05	4	85.01	40.14	0.00
Residual	36.00	17	2.12		
Total	376.06	21			

Table 17 shows that at least one of the β_i has a value which is greater than zero because of the significant p value (0.00) as shown in the table. Therefore independent variables in the model were found to affect loan demand in real estate development in the up-market. This therefore shows that the model can adequately be adopted for further analysis of each coefficient.

Table 18: Coefficients of the estimated model

	Coefficients		t	Sig.
	B	Std. Error		
Interest Rates	2.22	0.89	2.48	0.02
Property Prices	0.53	0.24	2.17	0.04
Credit Availability	1.35	0.45	3.00	0.01
Demographic Trends	3.01	1.23	2.45	0.03

a. Dependent Variable: Log Loans

b. Linear Regression through the Origin

A further analysis of the beta coefficients in Table 18 of the regression model showed that all the three independent variables have significant positive influence on the dependent variable (Demand for loans). The coefficients of the independent variables in the model are 2.2190, 0.5271, 1.3453 and 3.0019 for interest rates, property prices, credit availability and demographic trends with p values 0.0238, 0.0449, 0.0081 and 0.0254, respectively. Which are all less than 0.05. Thus it can be concluded that with 95% degree of confidence that demand for loans in up-market Nairobi is influenced by all these factors.

Interest rates has been seen by mortgage lending institutions as most important or not important influencing demand for mortgage loans. The study results show that banks that perceived interest rates as most important in influencing demand for their loans had a mean 2.2190 more demand for loans than those who viewed it as important. Property prices were considered as either a most important, important or less important factor influencing demand for loans. Here too those who perceived property prices as most factor influencing demand for loans had increased demand for loans by a mean of up to 0.5271.

In the case of availability of credit, those that viewed credit as most important had a mean demand of 1.3453 loans more than others. Demographic trends were considered as either less important or not important factor influencing loan lending. The financial institutions that at least considered demographic trends as important had a mean of 3.0019 more demand for their loans than those that considered demographic factor as not important.

It was further observed that the model estimated passes through the origin. This implies that if all the independent variables are considered to be not important, that is, take a value of zero, then the log demand for loans would also eventually be zero and there will be no demand for loans should the financial institutions consider all the independent variables as not important. There can be no demand for loans with no property prices, no credit availability, no consideration of interest rates and no consideration of demographic trends as important.

Conclusions and Recommendations

The aim of this paper is to highlight the influence of four factors including interest rates, property prices; availability of credit; and demographic trends on demand for mortgage loans in up market Nairobi. The results established that the demand for loans is positively correlated to the four factors thus they influenced demand for mortgages. The findings corroborate the works of Himmelberg et al; (2005), Mayer and Sinai (2005), Kieti (2015), Harvey (2011) and Stiglitz (2003) especially with respect to interest rates, property prices and credit availability.

In addition, the study established that demographic trends was strongly correlated to demand for mortgage loans as compared to all the other independent variables. While availability of credit was moderately correlated to demand for loans. On the other hand, interest rates and property prices had slight positive correlations with interest rate having a higher correlation than property prices.

Further it is clear that banking institutions and real estate firms did not have convergence on importance of the four factors. For instance; most banking institutions considered interest rates as the most important factor followed by property prices, availability of credit and lastly demographic trends in influencing demand for loans in up-market of Nairobi. However, real estate firms, considered property prices as the most important factor followed by interest rates, then credit availability and demographic trends respectively.

Given the correlations and varying influence of the four factors, it is thus incumbent upon lenders to examine all the four factors in their attempts to increase mortgage uptake. On the other hand, the government through Central Bank needs to continuously update and provide information on prevailing interest rates, other charges and general trends in the market to enable purchasers make informed decisions when it comes to borrowing.

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