

**INFLUENCE OF INTEREST RATES ON PRICING OF RESIDENTIAL HOUSES
INNAKURU TOWN, KENYA.**

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ABSTRACT

Kenyan real estate market has been experiencing growth in the past ten years and the latest findings have shown that the trend will continue into the foreseeable future. More specifically the study was examining the interest rates on pricing of residential houses in Nakuru town, Kenya. Theory that was used in the study was Classic theory of Interest Rate. The study employed explanatory research design. The researcher adopted a census where all the managers in the real estate agencies and companies were taken as the study's respondents. Data collection was done through use of questionnaires constructed on five point likert scale. Statistical package for social sciences was used to analyze the collected data. The questionnaire was tested for validity and reliability where Cronbach's coefficient. The study examined that interest rates did not have a significant relationship with pricing of residential houses in Nakuru. Regression analysis showed that interest rates significantly 19.9% of the variation in house pricing in Nakuru. The study recommended the banks should take advantage of the increasing demand for home ownership by bringing down the interest rates on loans thus attracting more people to take up loans thus creating more profits for the bank.

Keyword: Interest rates, pricing, residential houses, real estates, loans

INTRODUCTION

Real estate industry is the leading indicator of development in any economy and is used to measure the economic growth and health of a country. It entails creation of permanent immovable assets, involves capital and labour intensive activities thus used as a vehicle for economic development since there is job creation. Demand for real estate is triggered by economic and population growth thus real estate participants construct houses to meet the demand and on return get cash flow from these investments. As the cycle continues, there is oversupply thus creation of trade off between supply and demand (Carey, 2001). Studies have shown that half of the world's population live in urban centres and one third of them in slums. This figure is expected to increase by one billion in a decade and slums will grow at an accelerated pace unless 35million housing units are made available annually (UN-Habitat, 2002). Virtually all this growth takes place in developing countries.

A report by Goldman Sachs (2007) analyzed factors that led to the global housing boom. The report cited several facts to support the importance of fundamentals. First, the report found a strong positive correlation between income growth and house price appreciation across countries. Second, house price appreciation was also strongly correlated with population growth. Finally,

countries with the biggest reduction in real interest rates also had the highest rates of house price appreciation.

Globally real estate prices have been on an upward trend; like in the UK prices have been rising, but buying property remains 13 per cent more cost-effective than renting (Zoopla, 2012;KFPGRI, 2012). In the UK, the market for property derivatives did not begin until 2004. However, since the market's inception, the growth has been significant. Through the third quarter of 2007, trades with an outstanding notional value of 7.9 billion pounds have been executed. Renting in the UK was previously £993 per year on average more expensive than servicing a mortgage, but this gap has now come down by 3.2 per cent to £961 today. As a result, the proportion of towns and cities across the UK where it is cheaper to buy than rent has fallen from 90per cent to 86per cent over the past few years (Zoopla, 2012).

According to World Bank report (2010) Kenya is one of the most rapidly urbanizing nations among the developing countries. It is estimates that about 200,000 Kenyans move to cities every year and that formerly rural areas are increasingly becoming urban. Despite this, the national and local governments have failed to provide basic urban services like infrastructure and affordable housing, thus allowing the private sector to take over (Kenya's vision 2030). Unfortunately, the profit-motivated sector largely provides housing for the upper-middle and upper-income households, thus leading to proliferation of slums and other informal settlements that cater for poor dwellers (UN-Habitat report, 2011).

Nakuru is Kenya's third largest residential town after Nairobi and Mombasa and was rated the fastest developing town in sub-Saharan Africa in 2011 by the UN habitat. Prices for commercial space have more than doubled in the last four years with office space costing up to Sh90 per square foot from about Sh30 in 2008. The high demand has been triggered by large corporate institutions such as banks, supermarkets, universities and colleges in town which normally require huge space.

According to first county integrated plan (2013-2017) the total population of Nakuru County stood at 1,867,461 in year 2014, comprising of 937,131 males and 930,330 Females as per the projections of Kenya National Population and Housing Census of 2009. The population is projected to increase to 1,925,296, comprising of 966,154 males and 959,142 Female in 2015 and to 2,046,395 comprising of 1,026,924 males and 1,019,471 females at the end of the plan period. This remarkable growth in the population implies that the county will have to invest in more social and physical infrastructure to match the needs of the growing population. Among physical infrastructure constraining the county is residential houses. The county has a housing demand of 10,000 units per year but only 2,000 units are available annually. The governor of Nakuru County noted that some few years ago (5 years), the price of a three bed roomed house was Kshs3000 while currently the prices have more than tripled (Daily Nation, DN2 Magazine, 2014). This study will be seeking to examine the economic factors influencing the pricing of residential houses in Nakuru East Sub-County.

Murungi (2014) indicates that prices of real estate can be affected by factors such as property location, neighborhood, the level of accessibility and distance or proximity to facilities. Real estate prices can also be determined by the level of technology available, level of demand and supply, the existing economy of a country, employment level and accessibility of finance by both investors and buyers (Chiller, 2005).

Miller (2010) argues that increased property prices reduce the marketability of real estate because few peoples will be willing and able to acquire property. A change in real estate price is also said to have a direct effect on wealth of households because it contributes to increased or reduction in returns on property investment to the investors. Increased prices of residential buildings have contributed to development of new slums and expansion of the existing slums (Mutisya et.al, 2011). Chiller (2005) holds the view that an increase in existing prices of real estate leads to increase in money spent on rents and purchases hence reducing savings by households.

The increasing population and rural to urban migration in Kenya can be termed as the major cause of rise in prices of the residential houses in most urban areas. The Kenyan population is anticipated to increase to about 73 million people by the year 2030 and more than 60% of these peoples are expected to be living in urban areas hence creating a huge demand for residential housing units (GOK, 2007). The quantity of residential 3 houses needed has risen from 150,000 units every year to 200,000 units per year, with only 35,000 units produced, of which only 20 per cent is targeted at the low-income group (GOK, 2007). Kenya's construction sector recorded a growth of 8.3 percent in 2008 compared to 6.9 percent in 2007 (GOK, 2009). This increasing investment in the residential houses is expected to solve the escalating prices of the residential houses as it will increase the supply in the economy hence reducing the prices.

Over the last few years, a large number of Kenyans have been in a rush to own property which has contributed highly to a major boom in the residential property market (Korir, 2009). Majtenyi (2010) argues that increase in demand for residential property in Kenya has resulted to doubling and even to an extent of tripling of residential property prices in the past few years. Zhu (2004) showed the strong and long-lasting link between inflation and housing price. During inflation, most things in the economy will increase their price. However, the cost of the raw material for building a house will increase.

Interest rates acquired through bank lending may affect the housing price through various liquidity effects. The housing price is just like the price of any asset. It can be determined by the discounted expected future stream of cash flows. If the financial banks increase the availability of credit, it means that the bank will provide lower lending rates and encourage current and future economic activity. Basically, the better availability of credit will cause the demand for housing to increase when the households are borrowing (Barakova et.al, 2003). The growth in demand will then be reflected in higher housing prices.

1.1 Real Estates' Markets In Nakuru

Roack consult limited (2013) research for an individual to own a house whether rental or outright ownership he or she should have a stable source of income. The assumption is for one to have a stable income is for one to be a salaried individual. It also noted a finding from the Economic Survey 2012; Nairobi had 538,600 persons in formal wage employment by 2011 up from 479,300 reported in 2007. The wage employment expansion was 12.5% in a period of four years and at an average of 3.4% annually. It is projected that wage employment in Nairobi will grow by 5% in 2013/2014, bringing the total number of wage employment to 565,500 persons. Assuming that most of those in the wage employment were couples, the demand for housing in Nairobi is 282,750 units. Such statistics are quite staggering as from the official government

records released in 2007 it is estimated that 35,000 units are completed annually. Clearly there is a huge gap of over 200,000 units which hence creates an investment opportunity for property developers.

According to Quantity Surveyor's report (2013) Suraya properties has tried to develop different properties which target different people in the market and tried incorporating the need to avail affordable housing. They have built different properties in different locations across Nairobi and its environs targeting different class of people such as gated communities like Rosslyn heights built along red hill road targeting the high end clients while the Lynx projects along Mbagathi road and Mombasa road targeting the middle income earners. According to the Co-founder of Suraya property developers Susan Muraya the houses built vary as they target young upward people from first time home buyers who are looking for homes in already developed areas although their main focus is on salaried individuals. They also have allowed the ability for one to trade the homes that they initially owned as they advance in life.

Hassanali (2013) stated that low-cost housing projects remain to be an eternal gap in the market as the potential demand is huge. However, due to the absence of good infrastructure in many parts, the costs and therefore sale prices of these projects are such that the homes are not really affordable for the target market hence the focus on luxury up market projects which are rising fast in quality as the market is getting more discerning. This is a good trend and bodes well for the future. Kenya is the most developed country in the east Africa region and the middle class is growing fast, creating opportunities for housing. Business tourism has increased significantly in Kenya, creating the need for more accommodation facilities. There is a need for investment in affordable hotel accommodation facilities that are up to par with international standards (Ojijo, 2013).

Statement of the problem

In recent years, the population and the rate of rural to urban migration have been on an upward trend and this has highly increased the population of Nakuru town. It should be noted that all these people need shelter as one of the basic commodities, thus causing the housing sector to boom and contribute to growth of the economy (Nuri & Frank, 2002). Real estate market is one that is characterized by almost predictable cycles of booms and busts (Smith, 2010). The former are the periods when the prices in market soar and almost inevitably, they are followed by other periods when the prices plummet.

There are actually people who make a living out of these cycles. These are people whose study of the real estate property markets has brought them to a point where they can reliably tell when they are seeing a bust (when prices are very low), purchase property at that point and then sell it during the subsequent and virtually inevitable boom, making a big profit (Smith, 2010). The construction sector in Kenya recorded a growth of 8.3 per cent in 2008 compared to 6.9 per cent in 2007 (Republic of Kenya, 2009). The robust growth was supported largely by increased capital investment in roads and housing. Increase in construction activities was reflected in cement consumption which grew by 7.0 per cent from 2,061.4 thousand tonnes in 2007 to 2,205.8 thousand tonnes in 2008 (Republic of Kenya, 2009).

Otieno (2012) explains that despite the high competition in the market, the large economy supports real estate investment. When the yields of residential properties are low, their prices are

high. This means that the cost of buying a house is high compared to the cost of renting a house which force many potential buyers to prefer to be renters instead of being buyers thus reducing sale prices of residential property. The state of increased population from rural to urban migration and also the settlement of Internally Displaced Persons (IDPs) in Nakuru town can lead to the changes in pricing of residential houses in the town. Few studies have been done addressing factors influencing the pricing of residential houses in Kenya and more so in Nakuru county. Therefore, this study sought to seek financial factors influencing the pricing of residential houses in Nakuru town Kenya.

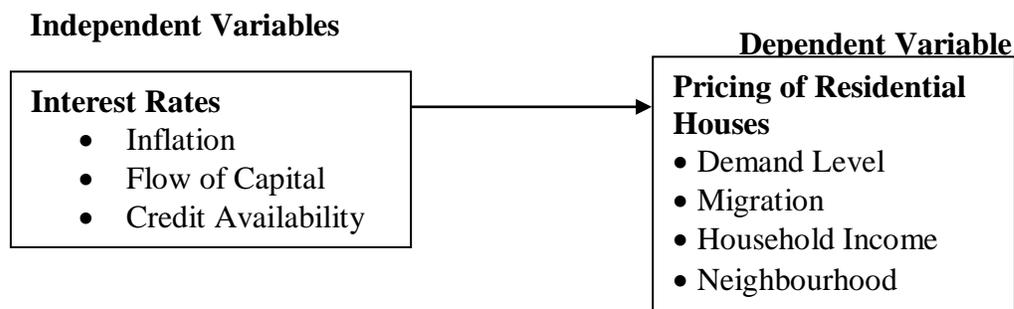
Objectives of the study

The study sought to examine the influence of interest rates on pricing of residential houses in Nakuru town, Kenya.

Hypothesis of the study

H₀₂: Interest rate on loans had no significant influence on pricing of residential houses in Nakuru Town Kenya.

Framework Conceptualization



Theoretical Review

The study was founded on classical theory of interest rates theory.

Classical Theory of Interest Rate

Classical theory was proposed by Irvin Fisher in 1930 and elaborated further by Neely Christopher, 2001. The theory concerns the determinants of the pure or risk-free interest rate. It argues that the rate of interest is determined by two forces; the supply of savings, derived mainly from household. Most savings in industrialized economies is carried out by individuals and families. For these household, savings is simply abstinence from consumption spending. Current savings are equal to the difference between current income and current consumption expenditures for a household to determine how much to save they must consider, the size of the current and long-term income, the desired savings target, and the desired proportion of income to be set aside in the form of savings (propensity to save). Higher-income families and individuals tend to save more and consume less relative to their total income than families with lower incomes (Bullard, 1991).

Interest rate affects an individual's choice between current consumption and saving for the future consumption. Classical theory considers the payment of interest a reward for waiting-the

postponement of current consumption in of greater future consumption. Higher interest increases the attractiveness of saving relative to consumption spending, encouraging more individuals to substitute current saving (and future consumption) for some quality of current consumption. This is called substitution effect calls for a positive relationship between interest rates and the volume of savings (Marquis, 2002). This theory will help the study establish the influence of interest rates on loans in determining the pricing of residential houses

Interest Rates on Loans and Pricing of Residential Houses

Bank lending may affect the housing price through various liquidity effects. The housing price is just like the price of any asset. It can be determined by the discounted expected future stream of cash flows. If the financial banks increase the availability of credit, it means that the bank will provide lower lending rates and encourage current and future economic activity. Basically, the better availability of credit will cause the demand for housing to increase when the households are borrowing (Barakova et.al, 2003). The growth in demand will then be reflected in higher housing prices. The relationship between housing prices and household borrowing is two-sided. That is, housing prices may significantly influence household borrowing through various wealth effects. When the housing finance interest rate is low, citizens will be enabled to make some investments, such as buying more houses. The credit cycles have matched the housing price cycles in a number of countries (International Monetary Fund, 2000; Bank for International Settlements, 2001).

Rita (2013) did a study on determinants of residential real estate prices in Kenya. She found that interest rates have a major impact on the real estate markets. Changes in interest rates can greatly influence a person's ability to purchase a residential property. That is because as the interest rates fall, the cost to obtain a mortgage to buy a home decreases, which creates a higher demand for real estate, which pushes prices up. Conversely, as interest rates rise, the cost to obtain a mortgage increases, thus lowering demand and prices of real estate. When interest rates are low, buyers can afford more homes for their money because less of the mortgage payment goes toward interest charges to the lender. This scenario could draw more buyers into the market, which could lead to multiple bids on houses and an uptick in overall prices. Because the influence of interest rates on an individual's ability to purchase residential properties is so profound, many people incorrectly assume that the only deciding factor in real estate valuation is the mortgage rate.

However, mortgage rates are only one interest-related factor influencing property values. Because interest rates also affect capital flows, the supply and demand for capital and investors' required rates of return on investment, interest rates will drive property prices in a variety of ways (Liow, Ibrahim & Huang, 2005). Econometric study of Yong (2000), Berry noted that, in the Australian economy interest rates fell rapidly from the late 1980s through the general economic recession. There was a moderate rise during 95-96, and after that fell again and remained low thereafter which continued till the end of 2003. The lower interest rates over the years contributed a lot to increased housing price in Australia. Berry and Dalton (2004) also noted that nominal mortgage interest rates had both short and longer-term effects on real house price inflation.

Housing affordability are affected by interest rates and thus demand for new and resale homes. An increase in interest rates increases the cost of borrowing. This results in high mortgage repayments thus reducing the affordability and also the demand for property. A study done by Kkert and Mihaljek (2007) found that real interest rate was an important determinant of house price in Central and Eastern Europe. According to Fisher (1930) there is a positive relationship between future price increases and nominal interest. He argues that when prices are rising, the rate of interest also tends to be high and vice versa. Furthermore, he points out that over long periods, interest rates follow the price movement and not the other way round. This is supported by Larock (2012) who observed that increases in mortgage rates did not trigger a decrease in houses prices but more often than not the reverse was true.

However, Wenzel (2012) seems to contradict this view by stating that there is no direct correlation between interest rate and housing prices. He argues that what is important is the rate of interest relative to price inflation meaning the rate of interest should be looked at in real terms. Another contradictory view is held by Abel, Bernanke, and Croushore (2008) who argue that the price of a nonmonetary asset and its nominal and real interest rate are negatively related.

Pricing of Residential Houses

Property prices depend on market characteristics such as vacancy level, land availability, construction supply elasticity to respond to high or low speed to changes on the demand, as well as potential for economic growth, industrial and services activities located inside urban areas, etc. (Taltavull, 2003). Brueggeman and Fisher (2008) argue that an important concept in real estate analysis is the fact that the house prices are highly dependent on the region or geographic area in which they are located. They further state that demand for properties in local markets is highly influenced by the nature of the industries, businesses, and so on, that are attracted to a region.

Ahuja (2009) identified three factors that influence the general price levels namely the volume of trade or transactions, the quantity of money and the velocity of circulation of money. According to the Fisher's transaction approach, the price levels raise proportionately with a given increase in the quantity of money other things remaining constant. However, the Keynesian theory places emphasis on the aggregate demand or expenditure relative to aggregate supply rather than just the quantity of money (Ahuja, 2009).

Jobber and Lancaster (2006) provided five constraints to a seller's capacity to set prices namely the objectives of the seller such as return, the level of demand, marketing objectives such as market penetration, cost considerations and competitor considerations. Factors affecting property price include population growth, employment, household income, interest rates and cost of renting a house (Brueggeman & Fisher, 2008) while Odame, Key and Stevenson (2010) found out that real estate characteristics such as location, landscaping quality, gross internal areas and plot size predominated in the explanation of transactions price. Other factors would include infrastructure development, the perceived security of the area and availability of amenities.

Murangi (2013) indicates that prices of real estate can be affected by factors such as property location, neighbourhood, the level of accessibility and distance or proximity to facilities. Real estate prices can also be determined by the level of technology available, level of demand and supply, the existing economy of a country, employment level and accessibility of finance by both investors and buyers (Chiller, 2005). Miller (2010) argues that increased property prices reduce the marketability of real estate because few peoples will be willing and able to acquire property. A change in real estate price is also said to have a direct effect on wealth of households because it contributes to increased or reduction in returns on property investment to the investors. Increased prices of residential buildings have contributed to development of new slums and expansion of the existing slums (Mutisya et.al, 2011). Chiller (2005) holds the view that an increase in existing prices of real estate leads to increase in money spent on rents and purchases hence reducing savings by households.

Kariuki (2012) explains that since the year 2002 Kenyan real estate sector has been experiencing a boom, hence confusing many buyers in the region. While other property markets in the world sank, the Kenyan situation remained strong. The latest findings by the research groups such as Knight Frank and Citi Private Wealth seem to anticipate better times ahead. Kenya's high economic growth and a dynamic business regime are some of the reasons being given for this drive (Julie, 2012). As the other top world cities are experiencing low prices on residential property, Kenya seems to be faced by very high prices on residential property thus attracting a lot of international investors (Kariuki, 2012)

RESEARCH METHODOLOGY

The study employed explanatory research design. According to Burns and Grove (2003), the purpose of research design is to achieve greater control of the study and to improve the validity of the study by examining the research problem. The target population of the study was 60 real estate companies and agents in Nakuru. As such, the total target population of the study was 60 real estate companies and agents in Nakuru. The researcher adopted a census where all the 60 managers in the in real estate agencies and companies were taken as the study's respondents. The study used structured questionnaire that was distributed to the managers in the real estate companies and agencies. According to Kothari (2006), a questionnaire is the best tool for the researcher who wishes to acquire the original data for describing a population. The questionnaire was composed of short structured closed ended statements constructed on 5 point Likert scale. Data collected was processed and analyzed based on the objectives and research hypotheses using Statistical Package for Social Sciences (SPSS). This was done using both descriptive and inferential statistics. Descriptive statistics (percentages, frequencies, and means) presented in tables was used to organize and summarize data and to describe the characteristics of the sample while Pearson correlation coefficient was used to check the relationship between variables. ANOVA was used to test the influence of the independent variables on the dependent variable and the study hypothesis at $p < .05$ level of significance.

Findings and Analysis

The researcher distributed 60 questionnaires to be filled by the respondents of which 54 of them were completely filled and returned. This represented a response rate of 90% which was characterized as very good.

Interest Rates

The study sought to establish respondents’ views regarding loan interest loans in property buying and constructions. The findings from the analysis were as presented in table 1 below.

Table 1: Descriptive Statistics on Interest Rates

| | SA (%) | A (%) | U (%) | D (%) | SD (%) | χ^2 | p- value |
|---|--------------|--------------|--------------|------------|------------|---------------------|-------------|
| High mortgage rates discourages home ownership | 51.9 (28) | 44.4 (24) | 3.7 (2) | 0 | 0 | 21.778 ^a | .000 |
| Most people fear tied in a mortgage due to income uncertainty | 37.0 (20) | 61.1 (33) | 1.9 (1) | 0 | 0 | 28.778 ^a | .000 |
| The reduction of the borrowing cost in banks after interest rates caps has seen an increase in the number of people taking up mortgages | 14.8 (8) | 42.6 (23) | 40.7 (22) | 1.9 (1) | 0 | 25.852 ^b | .000 |
| The prolonged maturity period for mortgages makes home ownership costly fair | 22.2 (12) | 64.8 (35) | 7.4 (4) | 3.7 (2) | 1.9 (1) | 74.704 ^c | .000 |
| Interest rates volatility leads to high demand for housing in the long run | 37.0 (20) | 53.7 (29) | 7.4 (4) | 0 | 1.9 (1) | 39.185 ^b | .000 |
| With low interest rates buyer are able to own homes | 35.2 (19) | 44.4 (24) | 20.4 (11) | 0 | 0 | 4.778 ^a | .098 |
| Valid N (listwise) | 54 | | | | | | |

Respondents were in agreement with all the aspects of interest rates on property loans. 96.3% of the respondents strongly and/or agreed that high mortgage rates discourage home ownership and 98.1% of the respondents strongly and/or agreed that people fear being tied up in a mortgage due to income uncertainty. On the other hand 57.4% of the respondents strongly and/or agreed that the reduction of the borrowing cost in banks after interest rates cap has seen an increase in the number of people taking up mortgages. Further, 87% of the respondents strongly and/or agreed that the prolonged maturity period for mortgages makes home ownership a costly affair while 90.7% of the respondents strongly and/or agreed that interest rates volatility leads to high demand for housing in the long run. Finally, 79.6% of the respondents strongly and/or agreed that with low interest rates, buyers are able to own homes. However the chi-square (χ^2) value on this statement was found to be insignificant at $p < .05$ meaning that respondents opinions were not diverse from each other. All the other statements had χ^2 - values that were significant at $p < .05$ indicating that respondents opinions were diverse and were not in agreement with one another.

Pricing of Residential Houses

The findings in relation to the respondents views regarding the pricing of residential houses were

as presented in table 2 below

Table 2: Descriptive Statistics on Pricing of Residential Houses

| | SA | A | U | D | SD | χ^2 | p-value |
|---|--------------|--------------|------------|------------|------------|---------------------|---------|
| Rising demand in housing has led to sky rocketing of house prices | 55.6 (30) | 42.6 (23) | 0 | 1.9 (1) | 0 | 25.444 ^a | .000 |
| Increase in money spent on rent has led to decrease in people savings making it difficult for them to own homes | 55.6 (30) | 38.9 (21) | 1.9 (1) | 3.7 (2) | 0 | 45.704 ^b | .000 |
| The imbalance between the supply and demand has caused an increase in the prices of houses | 51.9 (28) | 44.4 (24) | 3.7 (2) | 0 | 0 | 21.778 ^a | .000 |
| To regulate the problem of over valuation, the government avails information on the pricing of residential houses | 50.0 (27) | 42.6 (23) | 3.7 (2) | 3.7 (2) | 0 | 39.778 ^b | .000 |
| Increased income levels in this locality has led to increased house prices | 33.3 (18) | 63.0 (34) | 0 | 1.9 (1) | 1.9 (1) | 55.778 ^b | .000 |
| The high cost of capital has led to an increase in the housing prices | 50.0 (27) | 44.4 (24) | 1.9 (1) | 3.7 (2) | 0 | 43.037 ^b | .000 |
| Valid N (listwise) | 54 | | | | | | |

The table indicated that 98.2% of the respondents strongly and/or agreed that the rising demand in housing has led to sky rocketing of house prices. Further 94.5% of the respondent strongly and/or agreed that increase in money spent on rent has led to a decrease in peoples savings making it difficult for them to own. On the other hand, 96.3% of the respondents strongly and/or agreed that the imbalance between the supply and demand has caused an increase in the prices of houses. Additionally, 96.3% of the respondents strongly and/or agreed that to regulate the problem of over valuation, the government avails information on the pricing of residential houses. Further 96.3% of the respondents strongly and/or agreed that increased income levels in the locality has led to increased house prices. In addition 94.4% of the respondents strongly and/or agreed that the high cost of capital has led to an increase in the house pricing. The chi-square (χ^2) values were also significant at $p < .05$ level o significance indicating diverse opinions in respondents views.

Influence of Interest Rates on Pricing of Residential Houses

To establish the relationship between interest rates on loans and the pricing of residential houses, the two variables were correlated against each other. The findings from the analysis were as presented in Table 3

Table 3: Relationship between Interest rates and Pricing of residential Houses

| | | Interest Rates | Pricing |
|----------------|---------------------|----------------|---------|
| Interest Rates | Pearson Correlation | 1 | .068 |
| | Sig. (2-tailed) | | .626 |
| | N | 54 | 54 |
| Pricing | Pearson Correlation | .068 | 1 |
| | Sig. (2-tailed) | .626 | |
| | N | 54 | 54 |

It was established that interest rates on loans had a very weak positive ($r=.068$) relationship with the pricing of residential houses. The relationship was found to be insignificant at $p<.05$. As such, though interest may have a role in the pricing of residential houses, the role is negligible and insignificant. From the above findings it has been agreed that interest rates has a great role in determining the pricing of residential houses. Researchers such as Rita (2007), Kgert and Mihaljek (2007) and Berry and Dalton (2004) found that interest rates have a major impact on pricing of residential houses.

CONCLUSIONS OF THE STUDY

It was concluded that interest rates on loans do not influence the pricing of houses in the area. It was indicative that interest rates on loans had no significant relationship with; neither did it influence the pricing of residential houses. As such interest rate do not play a major role in determining the pricing of residential houses in Nakuru town Kenya. However reduced interest rates attract more property developers to take up loans. Therefore the study recommended that the banks should take advantage of the increasing demand for home ownership by bringing down the interest rates on loans thus attracting more people to take up loans thus creating more profits for the bank.

REFERENCES

- Abel, B., Bernanke, S. & Croushore, D. (2008). *Macroeconomics* (6th edition). Pearson Education.
- Ahuja, L. (2009). *Macroeconomics: Theory and Policy* (15th Edition). S. Chand & Company Ltd, New Delhi.
- Barakova, I., Bostic, R., Bostic, W., Calem, S. & Wachter, M. (2003). Does credit quality for homeownership. *Journal of Housing Economics*. 12(4): 318-336.
- Berry, M., & Dalton, T. (2004). 'Housing prices and policy dilemmas: a peculiarly Australian problem?' *Urban Policy and Research*, 22(1), 69-91.
- Brueggeman, W. & Fisher, J. (2008). *Real estate finance and investment* (13th Ed.). McGraw-Hill Irwin

- Bullard, B. (1991). "Learning Rational Expectations, and Policy; A Summary of Recent Research" Review; Federal Reserve Bank of St. Louis, January/February 1991, PP 50-60
- Burns, N. & Grove, K. (2003). *Understanding nursing research. (3rd Ed)*. Philadelphia, PA. W. B. Saunders.
- Carey, M. (2001). *Small Business Lending and the New Basel Capital Accord*, Presented at the Global Conference on Credit Scoring, Washington DC, April 3.
- Chiller, P. (2005). *Theory for Real Estate Valuation: An Alternative Way to Teach Real Estate Price Estimation Methods*. Curtin University Department of Property studies.
- Government of Kenya (2007), *Housing Sector Incentives and Market Re – Engineering*. Government Printer
- Government of Kenya (2009), *Kenya Population and Housing Census 2009*: Kenya National Bureau of Statistics, Government of Kenya (Gok), Nairobi.
- Goldman, S. (2007). *Money and Capital in Economic Development*. Washington, DC: BIS (2001). *Annual report 71st, Basel*: Bank for International Settlements. Brookings Institutions.
- Hassanali, S. (2013). *The Property Market in 2013 Annual Report*. Nairobi, Kenya
- IMF (2000) *World Economic Outlook, May 2000*. Washington D.C.: IMF.
- Irving, F. (1930), *The Theory of Interest: As determined by Impatience to spend and Opportunity to invest it*; accessed on <http://www.unc.edu/~Salerni/Econ006/Irving Fisher Chapter i.pdf> on 12th September 2012.
- Jobber, D., & Lancaster, G. (2006). *Selling and sales management (7th Ed.)*. Prentice Hall
- Kariuki, C. (2012). *The Factors Affecting Residential Property Values in Nairobi*, Kenya. Montevideo, Uruguay, s.n.
- Kgert, B. & Mihaljek, D. (2007): The Determinants of House Prices in Central and Eastern Europe, *Comparative Economic Studies*, 49, 367–388
- Kothari, C. (2006). *Research methodology: methods & techniques. (1st Ed.)*. Nairobi: New Age International Publishers
- Larock, D. (2012). *Do higher interest rates cause lower house prices?* Retrieved from <http://www.integratedmortgageplanners.com>
- Liow, H., Ibrahim, F., & Huang, Q. (2005). Macroeconomic Risk Influences in the Property Stock Market. *Journal of Property Investment and Finance*, 24(4).
- Marquis, M. (2002). "What's Behind the low U.S. Personal Saving Rate?" FRBSE Economic Letter, Federal Reserve Bank of San Francisco, pp. 1-3.
- Miller, M. (2010). "Risk, Uncertainty, and Divergence of Opinion," *Journal of Finance*, 32(4), 1151–1168.
- Murungi, R. (2014). *An Investigative Study on the Factors Causing Price Changes of Residential Houses in Nairobi Over the Period 2008-2012*. A Case Study Of Lavington. Unpublished

- Thesis, University of Nairobi, Kenya.
- Mutisya, E. & Yarime, M. (2011). Understanding the grassroots dynamics of slums in Nairobi. The dilemma of Kibera Informal settlements. *International Transaction Journal of Engineering Management & Applied Sciences and technologies* 2(2), 197-213.
- Neely, D. & Christopher J. (2001). "International Interest Rate Linkages" International Economic Conditions, Federal Reserve Bank of St. Louis,
- Nuri, S., & Frank, N. (2002). The Role of Affordable Mortgages in Improving, Living Standards and Stimulating Growth, *IMF Working Paper*, 5
- Odame W., Key T., & Stevenson S. (2010) Residential market development in sub-Saharan Africa. *International Journal of Housing Markets and analysis*, 3(4), 308-326
- Ojijo, D. (2013). *Factors affecting Real Estate in Kenya*. Standard Newspaper, pp. 42.
- Republic of Kenya. (2009). *Types of buildings*: Central bureau of statistics: Government printers: Nairobi
- Rita, W. (2013). *Determinants of Residential Real Estate Prices in Kenya*, Unpublished Thesis, University of Nairobi, Kenya
- Roack Consult Limited. (2013). *Residential Real Estate Investment Performance in Kenya: A Review of the Kenyan Middle-Income Residential Sub-Sector*. Nairobi, Kenya.
- Smith, T. (2010). *Pricing Strategy: Setting Price Levels, Managing Price Discounts and Establishing Price Structures*. Cengage Learning
- Taltavull, P. (2003). Determinants of housing prices in Spanish cities. *Journal of property Investment & Finance*, 21(2), 109-135
- UN- Habitat Report, (2011). "Housing Challenges in Upcoming Countries"
- UN-Habitat, (2002), *Sustainable Urbanization: Achieving Agenda 21*, Nairobi.
- Wenzel, R. (2012). *Why House Prices Will Climb Despite Climbing Interest Rate*. Retrieved from <http://www.economicpolicyjournal.com>
- World Bank Report (2010). "Kenya's Informal Settlement"
- Zhu, H. (2004). *The importance of property markets for monetary policy and financial stability*. Basel, Switzerland, Bank for International Settlements.