International Journal of Research in Economics and Social Sciences (IJRESS)
Available online at: http://euroasiapub.org
Vol. 8 Issue 4, April - 2018
ISSN(o): 2249-7382 | Impact Factor: 6.939 |

THE EFFECTS OF ECONOMIC FACTORS ON THE PERFORMANCE OF REAL ESTATE DEVELOPERS IN NAKURU CENTRAL BUSINESS DISTRICT

SHADRACK KOECH[1]
MASTERS STUDENT
KABARAK UNIVERSITY
P.O BOX 20157
KABARAK, KENYA

SUPERVISORS: **MR.STEPHENE MAGADI OLOO[2]**
KABARAK UNIVERSITY
P.O BOX 20157,KABARAK, KENYA

MRS. STELLA KORIR[3]
KABARAK UNIVERSITY
P.O BOX 20157,KABARAK, KENYA

School of Business and Economics, Kabarak University,

ABSTRACT
The importance of secure property markets is fundamental to Kenya's economy particularly in light of the goals of Kenya Vision 2030, which with real estate as one of the foundation pillars and a resource for the socio-economic development of Kenya or any economy .The real estate industry has in past the years attracted many investors who contribute largely on its growth. This research project was meant to identify the effects of economic factors that affect the performance of Real Estate developers in Nakuru Central Business District. The objectives of the study are to assess the performance as well as identify services the Estate developers offer to the public. The study was also centered on the effect of competition among developers, influence of interest rate, demand and supply of houses and the influence of inflation on the performance of Estate developers thus giving a clear picture on their interdependence in regard to access to the Real Estate Market. Theories that were used in the study included Porters five forces model, Classical theory of interest rate, Theory of Demand and Supply Monetarism Theory of Inflation**.** The study targeted 62 registered developers of which descriptive research design was adopted to investigate on the economic factors affecting performance of the developers. Census approach was used in the study because of the target population was manageable. The correlation of inflation rate was. (β_4=0.470; p value=.000).. The findings concluded that inflation rate had a positive influence on performance than other variables. The researcher recommends further investigation should be conducted to collect data from other real estate developers such to see whether other economics factors have any effect on the performance of real estate
Keywords: *Real Estate developers, competition between developers, interest rate, inflation rate, demand and supply of houses, Performance*.

1. INTRODUCTION

Real estate can be defined as the land and its permanent improvements. According to Ling & Archer (2008), real estate refers to a particular type of good, land or resources that is not physically movable. Although real estate is a tangible asset, it can also be viewed as a bundle of intangible rights or privileges associated with the ownership and use of the site and improvements. Wisniewski (2011) indicates that the processes occurring in real estate are subject to different impulses, and these impulses are different depending on the financial and economic situation of a given country.

According to Kenya Vision 2030 which is a long-term development blueprint for the country, it is motivated by collective aspiration for a much better society than the one we have today, by the year 2030. The aim of Kenya Vision 2030 is "the globally competitive and prosperous country with a high quality of life by 2030." It aims at transforming Kenya into "a newly industrializing, middle income country providing a high quality of life to all her citizens in a clean and secure environment". In other words the vision aspires to meet the Millennium Development Goals (MDGs) for Kenyans. The Vision is anchored on three key pillars: Economic; Social; and Political Governance. The economic pillar aims to achieve an economic growth rate of 10 per cent per annum which is propelled by the growth of the real estate as part (Republic of Kenya, 2007).
According to World Bank report (2016) Kenya is urbanizing rapidly but is under-urbanized nation, meaning that it still can leverage the benefits of urbanization and attain its goal of becoming an upper middle-income country by 2030. It is estimated that about 200,000 Kenyans move to cities every year and the formerly rural areas are increasingly becoming urban. However, the increase in urbanization has forced the real estate sector grow rapidly, this is an important international and local asset estimated to about 55 percent of world assets (Wachira, 2017).The increase in the cost of land has a positive impact on prices of houses making it unaffordable to low income earners. Besides, land usually makes 60 percent of the cost of housing in urban areas which has more than doubled in the past few years in Kenya and this has stir some pertinent questions which 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).

Worldwide the 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 US, the market for property derivatives shows a healthy demand and tight supply for houses supported by steady prices. However, the international investors are adding the demand as non residents are forced to buy at a record of USD 75bn representing 5 percent of the dollar volume of the existing home purchase and 2 percent of unit sale. The residents account 5 percent dollar volume and 3percent of unit purchase (Scotiabank report, 2018)**.**
Already half of the world's population lives in urban centers 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. Poverty and urbanization are interconnected and multidimensional. They relate with economic issues such as income, labor market; social issues like public infrastructure, shelter, environmental and physical issues. Therefore, to end poverty and achieve sustainable urbanization, a comprehensive view and concerted action on these dimensions is necessary.
The economic factors on real estate developers
According to a study conducted by Omare (2014), analyzed on the effects of macroeconomic variables on performance and found that inflation, interest rate and GDP are the most relevant indicators to examine. However there are several inputs that lead to development of real estate and these are; Infrastructure, labour, land and materials. And as a result this brings about forms of real estate, residential, commercial, institutional or industrial buildings. It also involves purchase of real estate, ownership of real estate, rental or sale of the same for profits. According to Loyford & Moronge (2014). On Effects of economic factors on performance of real estate in Kenya concluded that, interest rate, inflation, transactions cost and demand for housing highly influence the performance of real estate industry. It was settled that interest rate is stochastic in determining the performance of any property market.
Like all experts the government, in order to do a good job of macro managing the economy must study, analysis and understand the major variables that determine the current behavior of macro

economy (Bernharden, 2009). Research from Lioe (2006), analyze economic influences on worldwide property market and finds that competition, inflation, interest rate and demand and supply are both relevant macroeconomic and microeconomic indicators to examine. These are major indicators for the real estate industry. Aguiar and Broner (2006), believe that emerging market predicaments may be associated with huge movements in economic fundamentals and asset prices, and so there is all the more reason for making a distinction between directly-observed macro and microeconomic variables and a computed series of innovations to the economic fundamentals.

Performance of real estate developers are affected positively with the overwhelming rate of competitors in the market. The management of the real estate business is very competitive which creates the rivalry between the real estate market participants. This depends on the competitive position of the companies operating in this market, and the level of competition increases with time. The increase leads to the downfall of profit margin among the real estate management and asset management service providers. This mounting demand from property owners and customers and rising expectations among tenants and buyers (home Kenya, 2009). The stiff competition forces real estate management to continually satisfy their clients to remain more competitive in the market (Banning 1992).
Interest rate also affects the growth and investment on real estate, and any change might result to either one to purchase when its interest rates are down and abscond to purchase residential property (Sibanda & Mhlanga, 2013). When the interest rate are higher the demand to purchase falls, but when the interest rate down the demand to purchase rises (Mati & Makori, 2014). Nevertheless, when appears that effect of rates on an equity investment like a real estate investment trust (REIT), its relationship can be thought of same as interest rate (Lahiri, 2009) also when the interest rate price of bond rise its package purchase turn in to more attractive, usually when interest rate rise, its price on bond fall. Meanwhile interest rate fall at market, REITs' lofty yields turn in to striking and price rises up. Interest rates rise, this result on REIT turn in to less striking and makes the price to fall. This research will determine the degree to which interest rates affect growth and performance of real estate industry.

The interest rate is positively affected by the rising level of Inflation rate. The lower the inflation rate the less the interest rate paid by borrowers to the lender and vice versa. This occurs because lenders tend to demand higher interest rates as compensation for the decrease in the purchasing power of the money they are expected to be repaid in the future. (James, 2001) .There is a positive correlation between inflation and house prices - in fact there are correlations between inflation and any good with a limited supply. Under such circumstances when there is an increase in money supply in the economy results to prices for houses, raw materials and inflation to increase and vice versa (Modigliani, 1996).

Chetty (2007) specifically suggests that investment is backward-bending function of interest rate. This means that a decrease in the interest rate reduces investment when the interest rate is low, the difference between the interest rate and the expected future income growth is small and increases investment when the interest rate is high. Market changes have had a direct relationship on the supply of real estate. The real estate market comprises of the owner or user on the demand side of the market while developers and renovators comprise the supply side. The higher the interest rates the higher the housing price which will result in a drop in the supply for housing and vice versa.

With constant higher rate of inflation experienced in different countries the rate of currency level falls as purchasing power decreases in relation to other particular currencies. Creditors will have to demand high interest on the loans so as to decrease the purchasing power of the money in circulation (McGraw, 1999). Additionally, the forces of demand and supply acts positively on the prices of real estates. The higher the demand for houses with less supply impacts on the prices of the houses to rise and vice versa.

The prevailing demand and supply conditions however point to the fast that the growth in home ownership is constrained by the preferences in both modality of acquisition, funding options and risks associated to housing development (Centre for Research on Financial Markets & Policy, 2015).Alternatively, 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). Kariuki, (2012) finds that the housing demand is a function of locals, the increasing expatriates, and staff of the various agencies and multinationals who are looking for permanent high-end homes within easy reach of public services. But to what extend? Aden, (2013) notes that the property prices in Kenya continue to rise at a rapid rate. At which rate? Therefore it is vital to understand market positioning and demand trends in property choices and investment.

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, 2004). 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, 2004). 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 house as it will increase the supply in the economy hence reducing the prices.

The performance of real estate developers in Nakuru County

Real estate developers in Nakuru have stepped up investments in commercial buildings as banks, learning institutions and the retail sector drive demand for space. Several banks, retail superstores, colleges and universities have taken up commercial space in the town and across the county in the last three years, exciting the local real estate market. According to the recent Central Bank of Kenya (CBK) Bank Supervision Survey for 2011, Nakuru County had the third largest branch network of banks with 52 bank branches, after Nairobi's 465 and Mombasa's 98 branches. The bulk of bank branches are located in Nakuru town, which also had two operating Forex bureaus as at December 2011, according to the survey. The banks are competing for commercial space with learning institutions setting up mini-campuses in the town, while major retail chains have returned to the town with Uchumi, Nakumatt, Tuskys and Naivas having opened outlets within the last two year (Koech, 2013).

According to kings developers report (2012) the kings developers is among the leading developers company having developed different properties around Nakuru which targets different status of people in the market and tried to incorporate the urgency to provide well affordable houses. They have erected different estates in different places across the country with 360 court phase apartments in Nairobi, milimani apartments both phase one and phase two where they have targeted high income earners. According to Kings property developers, the company is synonymous with the development of ultra-high commercial, residential, retail, hospitality and mixed-use properties which has made a premier quality homes. The houses built in Kenya continually record an increased growth as from the current demand of 250,000 housing units. This is brought up by the demand of young upcoming home buyers who are looking for homes in urbanized areas. They also have allowed the ability for one to trade the homes that they initially owned as they advance in life.

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. According to first county integrated plan (2013-2017) *the total population of Nakuru town 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.* The purpose of this research project is therefore to unearth the circumstances of various economic factors on the real estate developers.

2. Statement of the Problem

The real estate industry is one of the most lucrative in the country, competing with the trade in stock and shares, and has a direct impact on the cost of land and is fast catching up in Nakuru town. According to Kenya GDP Annual Growth Rate 2014-2017 report argued that the real estate sector is ranked third on country's GDP with agriculture 22% and manufacturing 11% and real estate 8.8% to Kenya's GDP in the year 2016. This was an increase from 7.2% realized in 2015 with the overall contribution to GDP by the real estate standing at 8.4% in 2016 compared to 8.2% in 2015.However, with high rate of urbanization in the county, the developers have had big role to play to meet the rising rate of demand for houses. Additionally, performance has been affected with certain economic factors which have had a major decline on real estate with the rising rate of competition among developers causing the prices of houses to drastically reduce. The rise of rate of inflation and lending rate discourages home ownership. In this respect, the variables mentioned are likely to affect real estate developers in Nakuru County.

The housing industry is very significant for many countries all ensure that the infrastructures are in place to ensure that the country's economy growth is foreseen (Jones Lang LaSalle, 2006). However it is a great research study to carry out to because of interest on developers. The movement of individuals to urban has led to increase in demand for housing in developing countries. This has attracted research across the globe to determine the growth and performance of real estate investment in developing and developed economies (Golob, Bastic&Psunder, 2012; Ding, 2014).

An understanding on economic variables affecting the financial performance of real estate industry is necessary which the previous local studies in real estate done in Kenya such as (Muli, 2013) and (Jumbale, 2013) have left unaddressed. Few studies have been done addressing factors influencing the performance of real estate developers in Kenya and more so in Nakuru town county. Therefore the study sought to determine the key economic variables that affect performance of real estate developers in Nakuru County and contribute to other studies by ascertaining if the selected variables affect Kenya's property market as a whole. It sought to answer the following question: what are the effects of the economic variables on the performance of real estate developers in Nakuru?

3. Specific Objective

i. To determine how real estate competition affects the performance of estate developers in Nakuru, Kenya.
ii. To establish how interest rate affects the performance of estate developers in Nakuru, Kenya.
iii. To examine the influence of demand and supply of houses on performance of developers in Nakuru CBD, Kenya.
iv. To analyze how inflation rate affect the performance of real estate developers in Nakuru, Kenya

4. Research Questions

i. Does real estate competition affect the performance of developers in Nakuru CBD, Kenya?
ii. How does interest rate on loan affect performance of estate developers Nakuru CBD, Kenya?
iii. What is the effect of demand and supply of houses on the performance of developers Nakuru CBD, Kenya?
iv. What is the influence of inflation rate on the performance of estate developers in the market Nakuru CBD, Kenya?

5. LITERATURE REVIEW

Monetarism Theory of Inflation

Friedman and Schwartz (1963) holds that only money matters and this led to the development of the monetary theory and as such monetary policy which is a more potent instrument that financial policy in an economic stabilization. According to monetarism the money supply is dominate though not exclusive determinant of both the level of output and prices in the short-run, and of the level of price in the long-run. The long-run level of output is not influenced by the money supply.

Inflation is always and everywhere and it's a monetary phenomenon that arises from a more rapid expansion in the quantity of money than in total output. The money that exists will determine the amount of money people spend in acquiring real estate. In the real estate market the price of the property is determined by the supply and demand, therefore the prices of items will go up only when the supply is lower than the demand and vise visa. According to Chin (2002), real estate markets are continuously adjusted to equilibrium where price range is adjusted according to supply. Therefore the rise of property prices in Kenya is attributed to the high demand and low supply.

As explained by Flannery & Protopapadakis (2002), inflation should have a significant relationship with asset prices. What concerns the securitized real estate market specifically, it is independently shown by both Ling and Naranjo (1997) and Brooks and Tsolakos (1998) that unexpected inflation affects these assets. Ewing and Payne (2003) further show that shocks in the aggregate price level have a negative effect on asset prices. There is a long-term co-movement between inflation and the real estate market. Theory suggests that growing output and therefore growing income levels in the society creates demand through enhanced consumption and investment, which in turn positively affects prices on goods and services (Blanchard, 2010). In the pre-crisis period, the prices of stocks substantially exceeded the general price level.

Inflation Rate

Inflation rate is determined by fluctuations in the price of goods and services in an economy. Inflation is dictated by cost of credit. Due to this the cost of goods such as food items, fuels, and others increase, leading to higher inflation rate (Jain, 2017). Higher inflation rate leads to decrease in purchasing power of people. As their disposable income decreases the demand for real estate too decreases, bringing down property prices. For instance, for the period January to June 2014, the sale of properties in Delhi-NCR was down 50% due to recession and high inflation (Datta, 2015).

Interest rate plays an important role in the performance of any type of investment as their present value affects the future cash flow. If the interest rate rises, cost of borrowing increases, resulting in its devaluation (Razin, 2017). This applies to real estate too. Also high interest rate signifies the less return on the borrowings, which makes a property less valuable with time. Interest rate on housing loan has been on a downward trend in past few years in India. This is a measure to boost the demand for property (Sharma, 2017).

Financing of real estate has unique characteristics of monthly repayment, long maturity and constant increase in prices of properties. Due to these characteristics, the prices of houses keep on increasing which eventually leads to decreased affordability by potential home owners. Murungi (2014) on his study on the factors causing price changes of residential houses in Nairobi over the period 2008-2012 found that ease of access to and availability of mortgages has contributed to increased prices of residential houses in Nairobi County over the last four years. Murungi observed that 97% of the respondents stated that the interest rate charged on mortgages had effect on property price. They responded that higher interest rate contributes to higher charges on mortgage acquired. This increases the amount of money spent by property developers who use mortgages to finance property which leads to increased prices of property.

Bad lending practice is one of the causes of real estate bubble. This happens when loans or mortgages are given to real estate consumers who should not or do not meet the minimum set qualifications (Hardaway, 2011). Due to the fact that the peoples awarded these loans did not have down payments, reserved funds and good income, thus making the loans carry low interest rates. This increases the level of demand for real estate property which leads to high prices of the available properties.

The inflation has some result on real estate; and inflation had a connection of each other. The real estate rises as the value of commodity grows up. The increase of value, exact cost price of labour, influences value of real estate which will in turn increase the real estate value. When the goods rise abnormally, then it will result to loss of value of money in the circulation thus leading to the demand for houses to decline. Prices on consumer goods may counterbalance the interest from the bank and then majority of consumers would like to choose the estate as an investment instead of currency assets. Hence, the fluctuation of inflation to some extent increase the real estate price (Ding, 2014).Psunder (2009) ascertains that real estate development had been escorted by positive impact indicator. These are the indicator of real estate development or declines are: demographic and social factors, household income, funding costs and offer, the influence on status. Researcher as well specify that bigger fall of construction part may be inflicted by high price. This leads in lesser order for real estate assets and exert force on value.

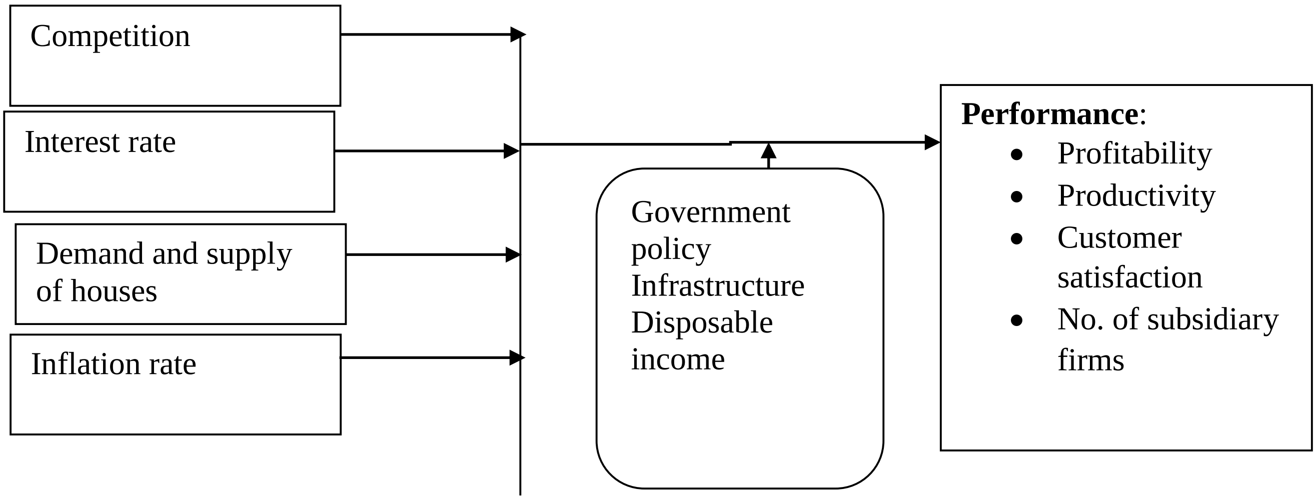
Frappa and Mesonnier (2010) indicated that robust proof of an optimistic result of rise goals on real estate value rise and home value to rent ratio. The rise has some positive impact for profits returns on many companies. Thus inflation lowers rate and inflation momentum meaning on the nominal interest rate (Golob, Bastic et. al, 2012). The inflation rate will achieve interest rate level (Mati&Makori, 2014). When inflation rate is higher the interest rate also increases; this is witnessed because the lenders will increase the interest rate as return on falling for bargain authority of money they will pay in full in yet to coming days.

The performance of real estate developers

Performance of firm's level is measured in many different ways. Such ways include accounting measures of profitability, sales per input and total factor productivity. While correlated, the various measures capture different aspects of the firm performance, and exposure to a global market is not expected to affect these aspects in the same way. Variables relating the firm to its competitors include; market share, a variable which has been widely used in strategy and is emphasized by (Buzzell and Gale, 1987). Kangogo (2013) found that the interest rates do affect the real estate market and it influences real estate prices. However, the study disagreed with the views of Karoki (2013) who identified that there is a significant negative relationship between residential real estate prices and interest rates, real GDP and the level of money supply.

Loyford et.al (2014).on their study on analyzing the effects of economic factors on performance of real estate in Kenya indicated that, interest rate, inflation, cost of transactions and the availability level highly influence the performance of real estate industry. The study revealed that the effect of the interest rate volatility on income and its interest rate elasticity performance. Findings in this study led to a conclusion that the performance for risky assets depends upon the joint probability distribution of asset returns and in a mean-variance framework, the performance for an asset is a function of both the expected rates of return on all assets and the covariance among asset returns. This will produce a shift in asset performance equations in general and in the real estate performance function in particular.

Conceptual Framework
Independent Variables **Dependent Variable**



6. RESEARCH METHODOLOGY

The study adopted descriptive research design since the study intended to gather quantitative and qualitative data that would help address all information about the economic factors on Estate developers. The target population of interest of this study were managers of 62 registered real estate developer whereby the census method as the number was manageable The data collection was based on Primary data collection method by administering questionnaires. Questionnaires were efficient as a research tool because the researcher was likely to obtain personal ideas from the respondent, in respect to that the use of likert scale was used in questionnaires. Secondary data was also obtained from published reports from Real Estate Firms, Banks and Central Bank of Kenya, while data on market variables were obtained from Government of Kenya Economic Surveys among others. To ensure validity of the research instrument to be used in collecting data the researcher ensured that the questionnaires were thoroughly checked for validity and assess the relevance of the questions and content of the study.

The reliability of the study was tested using the Cronbach`s alpha whereby an alpha value of 0.521 was obtained. The alpha value ranges between 0 and 1 with reliability increasing with the increase in value. The alpha value ranges between 0 and 1 with reliability increasing with the increase in value. A coefficient of more than 0.7 are considered good but values of more than 0.5 are acceptable (Ramayah, 2011)

7. DATA ANALYSIS, PRESENTATION AND DISCUSSION

Response Rate

The researcher distributed 62 questionnaires to be filled by the respondents of which 52 of them were completely filled and returned. This represented a response rate of 84% which was characterized as very good.

Inflation Rate

The fourth research question sought to analyze the effect of inflation rate on the performance of the real estate developers. The researcher sought to examine the relationship between inflation rate and performance of developers in Nakuru County. The objective was achieved by asking respondents to respond to questions that best describe their working environment. Table 4.7 shows the responses of respondents view on impact of inflation on performance.

Table 4.1: Inflation Rate

Inflation rate	**S.D** Freq (%)	**D** Freq (%)	**N** Freq (%)	**A** Freq (%)	**S.A** Freq (%)	**X^2**	**P>CHSQ**
Does the rate of inflation affect the prices of houses?	3 (5.8%)	4 (7.7%)	4 (7.7%)	14 (26.9%)	27 (51.9%)	40.89	<0.0001
With the moderate rate of inflation, the banks have attractive financial packages for home developers making it easy to access construction capital	4 (7.7%)	0 (0%)	8 (15.4%)	36 (69.2%)	4 (7.7%)	55.08	<0.0001
Does the low inflation rate influence the cost of land acquisition?	0 (0%)	6 (11.5%)	11 (21.2%)	22 (42.3%)	13 (25.0%)	10.31	<0.0001
Do most of the people in this area rely on their savings to buy housing properties?	7 (13.5%)	1 (1.9%)	26 (50%)	14 (26.9%)	4 (7.7%)	38.19	<0.0001
Does the qualifications for mortgage at high inflation rate for people to afford?	8 (15.4%)	2 (3.8%)	18 (34.6%)	19 (36.5%)	5 (9.6%)	20.46	<0.0001

Key: SD= Strongly Disagree, D= Disagree, N= Neutral, A= Agree, SA=Strongly Agree, Freq= Frequency, %= Percentage.
Source: Research data (2018)

This research finding from table 4.7 shows that 51.9%of the respondents (χ^2 = 40.89, P<0.0001) strongly agreed that the rate of inflation affects the prices of houses. 42.3% (χ^2 =10.31, P<0.0001) agreed that low inflation rate influence the cost of land acquisition, this conformed with the finding of Datta (2015) who found out that for the period of January to June 2014, the sale of properties in Delhi-NCR were down 50% due to recession and high inflation. It also conforms to Jain (2017), Inflation is dictated by cost of credit. Due to this; the cost of goods such as food items, fuels, and others increase, leading to higher inflation rate which in turn leads to decrease in purchasing power of people. As their disposable income decreases the demand for real estate too decreases, bringing down property prices, Ding (2014) also said that Inflation has some result on real estate; and inflation has a connection to each other. The real estate rises as the value of commodity grows up. The increase of value, exact cost price of labour which influences value of real estate which will in turn increase the real estate value. When the goods rise abnormally, then it will result to loss of value of money in the circulation thus leading to the demand for houses to decline. Prices on consumer goods may counterbalance the interest from the bank and then majority of consumers would like to choose the estate as an investment instead of currency assets. Hence, the fluctuation of inflation to some extent leads to possibilities to increase the real estate price.

Performance

The study sought to determine the indicators of performance. The findings are presented in table 4.8

Table 4.2: Performance

Performance	**S.D Freq (%)**	**D Freq (%)**	**N Freq (%)**	**A Freq (%)**	**S.A Freq (%)**	**X^2**	**P>CHSQ**
Has the increase in property development increased your performance?	0 (0%)	0 (0%)	6 (11.5%)	14 (26.9%)	32 (61.5%)	20.46	<0.0001
Has the increase in loanable interest increased your performance?	1 (1.9%)	12 (23.1%)	14 (26.9%)	21 (40.4%)	4 (7.7%)	24.73	<0.0001
Has the intervention of government laws/policy affected your performance?	6 (11.5%)	5 (9.6%)	6 (11.5%)	25 (48.1%)	10 (19.2%)	27.04	<0.0001
Has the establishment of good infrastructure improve performance?	0 (0%)	3 (5.8%)	4 (7.7%)	36 (69.2%)	9 (17.3%)	55.85	<0.0001
Has the performance of real estate increased your business returns?	3 (5.8%)	4 (7.7%)	2 (3.8%)	17 (32.7%)	26 (50%)	43.58	<0.0001
Has the rate of inflation affected your performance?	2 (3.8%)	5 (9.6%)	9 (17.3%)	14 (26.9%)	22 (42.3%)	23.96	<0.0001

Key: SD= Strongly Disagree, D= Disagree, N= Neutral, A/= Agree, SA=Strongly Agree, Freq= Frequency, %= Percentage.

Source: Research data (2018)

The research findings state that 42.3% (χ^2 =23.96 p=<0.0001) of the respondents strongly agree that the rate of inflation influence performance. This conquers with Loyford&Moronge (2014).on their study on analyzing the effects of economic factors on performance of real estate in Kenya indicated that, interest rate, inflation, cost of transactions and the availability level highly influence the performance of real estate industry. Additionally, 61.5% (χ^2 =20.46 p=<0.0001) the respondents strongly agreed with the growth in property development which has increased their performance in the market environment conforms with Buzzell and Gale(1997) who indicated that, competitors include market share, a variable widely used as astrategy over other competitors.

4.4.1 Correlation Analysis

Table 4.3: Correlation Analysis

		Competition	Interest Rate	Demand Supply	Inflation Rate	Performance
Competition	Pearson Correlation	1				
	Sig. (2-taileds)					
	N	52				
Interest Rate	Pearson Correlation	.235	1			
	Sig. (2-tailed)	.093				
	N	52	52			
Demand Supply	Pearson Correlation	.373**	.374**	1		
	Sig. (2-tailed)	.006	.006			
	N	52	52	52		
Inflation Rate	Pearson Correlation	.102	-.156	.152	1	
	Sig. (2-tailed)	.474	.270	.283		
	N	52	52	52	52	
Performance	Pearson Correlation	.166	-.260	.333*	.585**	1
	Sig. (2-tailed)	.239	.063	.016	.000	
	N	52	52	52	52	52

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
Source: Research data (2018)

The correlation results shown in table 4.9 above revealed that real estate competition has a significant positive effect on the performance of estate developers in Nakuru CBD ($r = 0.166$, $\alpha = 0.01$). The study also sought to find out how interest rate affects the performance of estate developers and from the correlation results, we find out that there is a negative relationship ($r = -0.260$, $\alpha = 0.01$), meaning as interest rate goes up performance of estate developers goes down. A positive correlation result ($r = .333$, $\alpha = 0.01$), was evident between demand and supply of houses on performance of developers in Nakuru CBD and finally Inflation rate and performance of estate developers showed a positive correlation($r = 0.585$, $\alpha = 0.01$), despite the fact that this was not the case with most researchers as discussed in chapter 2 of this research project. The result generally showed that inflation rate had the highest positive correlation with performance while interest rate had the strongest negative relationship with performance.

8. CONCLUSIONS

Inflation rate

The study has found out that inflation rate had the biggest positive effect on performance; this finding however didn't not agree with that of Razin (2017) who found out that if the interest rate rises, cost of borrowing increases, resulting in its devaluation This applies to real estate too. Also high inflation rate signifies the less return on the borrowings, which makes a property less valuable with time. Based on the study findings, it is evident that the independent variables taken together significantly influenced the performance of real estate developers. Therefore the study recommends that the real estate industry should have a governing body that establishes policies to protect both the developers and consumers` rights to ensure that the cost of land is brought down to encourage more developers to buy land. Further, the banks should take advantage of the increasing demand for home ownership by bringing down the interest rates on loans thus attracting more developers to take up loans thus creating more profits for the bank. Further the inflation rate should be moderated so as to provide a conducive market environment for potential home developers to afford the facilities with lower mortgage risk implication.

REFERENCES

Aden.V. (2013). *ABCs of affordable housing*.Acumen Fund.
Banning K. (1992). *Residential Property Management Hand Book.* USA: McGraw Hill
Blanchard O., (2009). *Macroeconomics*. 5th ed. New Jersey: Pearson Education
Buzzell, R. and Gale, B. (1987).*The PIMS Principles: Linking Strategy to Performance*. New York: Free Press
Centre for Research on Financial Markets & Policy. (2015). *The State of Urban Home Ownership in Kenya*: A Survey. Nairobi: Kenya bankers association.
Chetty, Raj, 2007, Interest rates, irreversibility, and backward-bending investment, *Review of Economic Studies*74,67-91
Datta, D. (2015). *Recession, inflation haunt real estate*.
Ding, J. (2014). An *Empirical Analysis of Factors Affecting Chinese Real Estate Prices, School of Economic and Management*, Central China Normal University.
Ewing, B.,& Payne, J., (2005). The response of real estate investment trust returns to macroeconomic shocks. *Journal of Business Research*.
Frappa, S., &Mesonnier, J. S. (2010). The Housing Price Boom of the late 1990s: Did Inflation Targeting matter. *Journal of Financial Stability, 6*(4), 243-254.
Friedman, M. & Schwartz, A. J. (1983).*Monetary Trends in the United States and the United Kingdom: Their Relation to Income, Prices, and Interest Rates*, 1867- 1975. University of Chicago Press for the NBER, Chicago.
Golob K., Bastic, M. &Psunder, I. (2012). Analysis of Impact Factors on the Real Estate Market: Case Slovenia*. InzinerineEkonomika-Engineering Economics, 23*(4), 357-367.
Government of Kenya (2009), *Kenya Population and Housing Census 2009*: Kenya National Bureau of Statistics, Government of Kenya (Gok), Nairobi.

GOK (2004) *Sessional Paper No. 3 on National Housing Policy for Kenya 2004*; Ministry of Housing
Jain, A. (2017). *How inflation impacts property market*
Jones Lang LaSalle. (2006). A *Real Estate Investment Future, World Winning Cities Series/Emerging City Winners*: India, 1-16.
Jumbale, D.K (2012). *The Relationship between House Prices and Real Estate Financing in Kenya*. *Unpublished MBA Project*, University of Nairobi.
Kangogo, C. S. (2011). *The relationship between Inflation Rates and Real Estate Prices in Kenya. Case of Nairobi county*, *unpublished project,* University of Nairobi.
Karoki, R. W. (2013). *Studied the Determinants of Residential Real Estate Prices in Kenya. Unpublished,* University of Nairobi.
Kariuki, C. (2012). *The Factors Affecting Residential Property Values in Nairobi, Kenya*. 8th FIG Regional Conference 2012, (pp. 2-6). Montevideo, Uruguay,.
Kenya GDP Annual Growth /2014-2017: from http://tradingeconomics.com/kenya/gdp-growth-annual.
Koech, L. (2013). *The Effect of Real Estate Development on the Growth of Estate Agents in Nakuru Municipality*.MBA Project, Kenyatta University, Kenya.
Kings Developers Company. (2013). *Residential Real Estate Investment Performance in Kenya*: A Review of the Kenyan Middle-Income Residential Sub-Sector. Nairobi, Kenya.
Li, L. (2016). *Prices and Bubbles: Factors Affecting the Chinese Real Estate Market*. Master Program in International Economics with a focus on China, Lund University, Sweden.
Ling D. C. & Archer W. R. (2008).*Real Estate Principles.A Value Approach*. (2ndEdition). McGraw- Hill Irwin, Boston
Ling &Naranjo (1997) *Journal of Real Estate Finance and Economics,* Vol. 14, No. 3 Economic, Risk Factors and Commercial Real Estate Returns.
Loyford, M. M. &Moronge, M. (2014).Effects of economic factors onperformance of real estate in Kenya.*European Journal of Business Management, 1* (11),

181-200.
Mati L.M. &Makori M. (2014).Effects of economic factors on performance of real estate in Kenya.*European Journal of Business Management, 1* (11), 181-200.
Muli N.F. (2013). *An assessment of the factors affecting the growth in real estate investment in Kenya,* an unpublished Postgraduate Diploma research project, Department of Real Estate and Construction Management, University of Nairobi.
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 OfLavington. Unpublished Thesis, University of Nairobi, Kenya.
Omare B. (2015). *The effect of macro-economic variables on performance of real estate industry in Kenya,* MBA project, University of Nairobi, Kenya
PsunderI.(2009).DemografskeSpremembeinTrgNepremicnin.SlovenskaNepremicninskaKonferenca. Portoroz
Ramayah T (2011). *Data analysis workshop*, School of management University Sains Malaysia

Razin, El. (2017, April 15). *Interest Rates Are Rising Again. Here's How That Affects CommercialRealty*.*Forbes*.Retrievedfromhttps://www.forbes.com/sites/elyrazin/2017/04/05/interest-rates-are-rising-again-heres-how-that-affects-commercial-real estate/#1f4624a83c3b
Republic of Kenya (2007), *vision 2030*

Scotiabank (2018). *Global real estate trends report.*

Sibanda, M. & Mhlanga, R. (2013).*The interaction between property returns and the macro-economy*: Evidence from South Africa. International Journal of Business and Social Research (IJBSR), 3 (4), 146-152.

Sharma, S. (2017, May 9). *SBI cuts home loan rates in affordable housing push*. *Live Mint*. Retrieved from http://www.livemint.com/Industry/rTVxtOwEAJfaMUkkZBc2HO/SBI-cuts-home-loan-interest-rates.html
UN- Habitat Report (2011). "*Housing Challenges in Upcoming Countries'*
Wachira M. (2017) *factors influencing the cost of land in nakuru county*, MBA Project, University of Nairobi, Kenya.
Wiśniewski R. (2011). *Modeling of residential property prices index using committees of Artificial neural networks for PIGS, the European-G8, and Poland.Economic Modeling*.
World Bank Report (2016). "*Kenya's Informal Settlement*"
Zoopla,V. (2012). *Financial policies and economic growth: theory, evidence and country-specific experience from sub-Saharan Africa.* AERC Special Paper, African Economic Research Consortium.