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Integrated Macroeconomic Variables and Financial Growth of the Real Estate Sector in Kenya

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Abstract

The real estate sector has been growing over the years because of major infrastructural developments and high population growth in Kenya. However, the sector has been facing some challenges that have been affecting its growth. This research aimed to assess how macroeconomic factors influence Kenya's real estate financial success. The research primarily focused on determining inflation, interest rates, exchange rates' impact and economic growth on Kenya's real estate sector. The study was underpinned by demand-pull inflation theory, the classical/neo classical theory for interest rates, the classical growth theory and purchasing power parity. The study employed causal research design and targeted three main Kenyan real estate developers in Kenya; Cytonn Investments, Hass Consult, and Knight Frank. In light of the small target population, a census approach was used and the research employed secondary data. As a result, secondary data from the property developers' yearly market reports from 2016 to 2022 was gathered. Pearson's correlation and panel data analysis methods were also employed. The findings revealed that the relationship between inflation, interest rates, exchange rates and economic growth revealed R-squared value of 0.8057, implying that the macroeconomic variables explains around 81% of the variation in financial growth within the real estate sector. The study also found that inflation had positive and significant effect on financial growth ($\beta = 0.0045187$, $p = 0.048 < .05$), interest rate had positive and significant effect on financial growth ($\beta = 0.044177$, $p = 0.011 < .05$), exchange rate had negative but insignificant effect on financial growth ($\beta = -0.0178337$, $p = 0.227 > .05$), economic growth had positive and significant effect on financial growth ($\beta = 0.0980943$, $p = 0.007 < .05$). The study recommends that financial institutions, policy

makers, and developers should implement measures to mitigate the adverse effects of high inflation on the real estate sector.

Keywords: *Inflation, Interest rates, Exchange rates, Economic growth, Macroeconomics factor.*

1.0 Introduction

In the 2021 global real estate market, Asia Pacific was the largest region followed by North America. In recent years, the market has suffered a decline across the world due to the COVID-19 pandemic. The lockdown resulted in slow growth of the sector as new construction projects were delayed. Because property values are going down, it's getting more difficult for people who invest in commercial properties to access loans from financial institutions (Balemi, 2021). However, the industry is slowly returning to the previous levels before the pandemic. Prospective buyers have begun purchasing homes which have improved the industry. The internet has aided in promoting real estate awareness amongst potential buyers. Many real estate agents are providing several online services such as live streaming rooms. In these rooms, the potential buyers can explore different properties and make all the transactions from home. The real estate industry continues to intensify across Africa, experiencing unprecedented need for top-notch accommodation for both residential and commercial purposes. A report by McKinsey stated that processes that took years to be implemented such as implementing technology in operations, transitioning to remote work and collaboration, and changing ownership of last-mile delivery were accomplished in a few days or week (Luciano, 2021).

The Kenyan real estate sector has had notable growth for the past couple of years with high average returns of around 25% to 30%. However, the growth of the sector is affected by several factors sometimes not within the control of the property developers. In 2020, the sector contributed \$8.8 billion to the country's GDP, while in 2021, the value added was measured at \$4.7 billion (Faria, 2022). With the growing population and increased urbanization accompanied by improved economic performance, the demand for property has progressively increased over time. Currently, Kenya's population growth and urbanization rate stands at 2.3% and 4.0% p.a. respectively. This is relatively higher than the global average rates of 1.0% and 1.8% p.a. respectively. Macroeconomic factors and their impact on the real estate sector is critical area of study because it would inform development of government policies that would attempt to protect property developers and investors from impending factors outside their control, thus enhancing the overall growth of the sector.

Inflation is the change in the price of different products and services in a country over time. According to Wessel (2021), it is calculated by adjusting current prices to those of the past. This can be done with the help of CPI. A fixed basket of 80,000 goods and services is used to calculate the CPI every month. A basket is a typical daily buy for an American. The purchases can range from apples to health visits, to gasoline, to TV cable bills. The Bureau of Labor Statistics uses the Consumer Expenditure Survey to determine the basket items and the prices to put on each, depending on their importance to the average consumer. Interest rates are charges for debt given to a borrower by a lender (CFI T., 2022). An exchange rate refers to the amount of one currency that can be exchanged for another currency or set of currencies. For instance, you can exchange 1 USD for 0.83 EUR, or 1.21 EUR for 1 USD (Lowry, 2022). The growth of the real estate sector is determined by factors such as location, the existing property, property

valuation, expected profits and flow of cash, investment purpose, the overall real estate market, and so on (Seth, 2022).

1.1 Research Problem

In Kenya, the real estate industry contributes towards the economy and GDP which stands at 7% as per the Kenya Economic Report (2018). According to a report by Cytonn (2022), the sector has been growing over the years especially because of the recent developments in infrastructure such as roads and utility connections as well as high population growth and rapid urbanization in the country which stands at an annual rate of 4.4% compared to the global average of 2.5%. However, the real estate sector has not been without its challenges that have derailed the growth of the sector. In particular, macroeconomic variables remain the key determinants of real estate sector financial growth in view of empirical evidence across the globe. However, the relationship is still a problem for empirical research in the country. In the year 2016 for instance, global oil prices fell which saw many oil companies close down and many offices previously let by these companies were therefore left vacant (Rogoff, 2016). In the same year, the government introduced an interest rate cap which seemed unfavorable for banks considering the risk associated with lending. This ultimately meant that financing real estate development was a problem. Political heat and elections in year 2017 also resulted in many construction projects and developments being kept on hold, and this largely affects property prices and rental yields. Investors and property seekers in the sector also put their investment plans on hold due to the economic uncertainties that come with the election period, resulting in low occupancy rates (Kyalo, 2022).

Extensive empirical evidence on the real estate sector mainly considers the availability of real estate financing and how an increase in interest rates and construction costs impact on the overall growth of the sector. Findings from the studies related to the research topic on the other hand, are largely inconsistent and that forms the basis of this research. Brad et al. (2017) consider how inflation affects the debt structure of real estate investments and concluded that the debt would be cheaper in times of high inflation if the interest rates are fixed. Muthaura (2012) study found that real interest rates increase with an increase in inflation as CBK attempts to clean up excess money from the economy. Cheruiyot (2015) investigated the impact of macroeconomic factors on Kenyan rental costs and concluded that an increase in interest rates by 1% leads to a decrease in rent payable by 8%. However, research by IMF (2021) indicates that a 1% change in the cost to the developer increases housing prices by up to 0.85%. The impact of interest rates and inflation on property prices and rent is therefore not very clear and this study aimed at providing more light on how macroeconomic factors affect the real estate industry's performance.

In the view of Mallick and Mahalik (2015), the main observation was that changes in exchange rates have no effect on housing prices in India. However, in another study by Richard et al. (2016) arise in the exchange rate has a negative impact on the real estate sector contribution to the economy in Nigeria. These two studies generate different results in different countries. This study attempted to determine the actual impact that changes in exchange rates have on the real estate performance in Kenya. Nthenya (2015) found that there is a significant inverse relationship between economic growth and the return on investment from the sector. On the other hand, Bakham (2012) indicates that arise in GDP strengthens the value of real estate in the country. Such inconsistencies were evaluated further in this study. There is dearth of studies examining the financial growth of real estate industry post development and the return on investment for the developers. However, this study specifically examined the impact of macro-

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economic factors comprising interest, inflation, exchange rates and economic growth on the financial growth of the real estate sector in Kenya.

1.2 General Objective

To determining the effect of inflation, interest rates, exchange rates' impact and economic growth on Kenya's real estate sector.

Specific Objectives

- i. To determine the effect of inflation on financial growth of the real estate sector in Kenya.
- ii. To assess the effect of interest rates on financial growth of the real estate sector in Kenya.
- iii. To evaluate the effect of exchange rates on financial growth of the real estate sector in Kenya.
- iv. To determine the effect of economic growth on financial growth of the real estate sector in Kenya.

1.3 Research Hypotheses

The study tested the following null hypotheses:

- H₀₁:** Inflation does not have a significant effect on the financial growth of the real estate sector in Kenya.
- H₀₂:** Interest rates do not have a significant effect on the financial growth of the real estate sector in Kenya.
- H₀₃:** Exchange rates do not have a significant effect on the financial growth of the real estate sector in Kenya.
- H₀₄:** Economic growth does not have a significant effect on the financial growth of the real estate sector in Kenya.

2.0 Literature Review

2.1 Theoretical Review

2.1.1 Demand Pull Theory of Inflation

The demand-pull theory of inflation was proposed by economist Keynes. Inflation happens when the total demand for products and services goes above what can be supplied in a specific economy (Amadeo, 2021). Inflation can be defined as spending too much money to acquire too few goods. This is known as the demand-pull theory of inflation. In this case, the level of unemployment goes down as the gross domestic product increases. It happens only when the economy is at the level of full employment. Cost-push inflation is the opposite of demand-pull inflation. This kind of inflation is brought on by an increase in the cost of raw materials or production costs. It explains why it is hard to end inflation once it begins (White, 2022).

This theory was considered important to the study because the financial performance of the real estate market is highly impacted by the rate of inflation. With an increasing rate of inflation, the property prices and average rental yield also tend to increase over time. The Kenyan population has also been increasing steadily over time, which creates more demand for housing and this has caused more increase in property prices. Demand for commercial properties has also been on the rise in an attempt to meet the need for goods and services created by the increasing population. High demand creates room for an increase in the rate of inflation.

2.1.2 Classical/Neo Classical Theory of Interest Rates

The views put out by Adam Smith, which shift the emphasis of the economy away from safeguarding individual interests towards advancing the interests of the entire nation, are reflective of the foundational principles of economic classicism (Hudea, 2014). Based on the classical conception, the determination of the interest rate is contingent upon the interplay between saving and investment (Agarwal, 2022). The intervention of the government is only necessary to ensure a balanced budget and free market operation. Full employment is the key element of the classical theory as it is the nature of a free economy. In the case of disequilibrium, the wages are lowered to increase the labor demand thus restoring the equilibrium. The classical theory then slowly transitions into the neo-classical theory of interest rates. This theory is vital to the study because investors in the real estate market highly depend on loanable funds to construct and purchase property. In times when the interest rates are high because of a decrease in the supply of loanable funds, the cost of construction increases which causes a subsequent increase in the property prices and the average rental yield that the investors expect in return.

2.1.3 Purchasing Power Parity Theory

The word Purchasing Power Parity was coined by the Swedish economist Gustav Cassel, dating from the early twentieth century, but the original concept had different levels of success since the sixteenth century in Spain (Taylor, 2013). This theory was initially developed by the International Comparisons Programs between the University of Pennsylvania and the United Nations in 1968. International contrasts of levels of productivity by the origin industry are a major indicator of economic performance as well as contrasting per capita income among other aggregate measures at the national level (Ark & Timmer, 2001). This theory was relevant to the study because the motivation of foreign investors to invest in a foreign country depends on the strength of their currency. Some foreign investors may choose to invest in a country whose foreign currency is weaker because consequently the construction and purchase costs would be much lower for them, this would enable them to bring more affordable properties in the market.

2.2 Empirical Review

2.2.1 Inflation and Financial Growth

Joe and Nadeem (2022) measured the 15-year average inflation rate in the U.S. using CPI. They came to a consensus that the forecasted inflation rate for year 2022 is likely to be much greater than the 15-year average and it's therefore very important for investors to consider whether their investment portfolio can withstand pressures that come with high inflation rates and consequently high interest rates and market volatility. According to the scholars, the best performing sectors that are well able withstand inflationary pressures are the residential and industrial sectors because there has been constant demand for property and the rental income has therefore continued to grow at a steady rate. Other sectors like the U.S. regional malls and office premises in the urban areas find it hard to keep up with the inflationary pressures. The study however does not quantify the financial growth of the different sectors. This study focused on quantifying the financial growth of the different sectors in the real estate industry.

Olive (2021) analyzed which region provides the best inflation hedge. She found out that Europe has the best inflation hedge compared to North America and Asia Pacific. This is mainly because of the use of indexation which accounts for the effects of inflation on property prices and this is unique to the European real estate industry. However, in the UK, the London office market does

rent reviews after every five years instead of using indexation. The pricing power of investors is however quite low because there are considerable levels of vacancy. The US markets on the other hand provide for fixed rental income over the lease term, which puts the income at risk in a period with high and unexpected levels of inflation. The pricing power of investors is also quite low because there are high levels of vacancy considering that the lease agreement are usually long term mainly for offices.

2.2.2 Interest Rates and Financial Performance

Kipkirui Cheruiyot (2015) found that low interest rates encourage real estate developers to take up loans from financial institutions while investors gain from the low interest credit institutions while acquiring property. The study shows that as a result, the construction cost increases for the seller while the cost of purchase increases for the buyer. High costs reduce the purchasing power of buyers, reducing the demand significantly. This discourages investors of real estate from venturing into the sector. Similarly, when the interest rates are low, the construction cost for developers and the cost of acquisition for the investors decrease. Buyer purchasing power rises and consequently increases the demand. This encourage both parties to venture into the sector. Although it is debatable, the study makes the assumption that high loan rates are a factor in the rising cost of construction materials. Onyango George (2019) assessed the effect of real estate financing on the financial growth of commercial properties in Kenya. In his findings, the mortgage rate of interest accounts for 52.2% of the real estate return on investment, all factors held constant. This led to the assumption that the developers had enough information to support the property performance.

2.2.3 Exchange Rates and Financial Performance

Kok, Ismail and Lee (2018) examined the sources of house price variations in Malaysia from 2002 to 2015. In this study, they used structural vector autoregressive regression to determine the changes that were not expected in house prices and demand. This was based on the economic reasoning in theory that put into consideration the shock from macroeconomic factors. The results of the study indicated that the exchange rate played an important role in displaying the transaction volume of the housing market, if positive and effective. This means that exchange rate had a great impact on the demand on housing in Malaysia. This might be different from the impact in Kenya.

In a separate study, Andrew (2017) evaluated the impact of foreign direct investments on the financial performance of Kenya's housing sector. In the context of this research, Foreign Direct Investment (FDI) served as the focal variable, derived from quarterly measurements of FDI inflows. The present study focuses on examining financial performance, while controlling interest, exchange and inflation rates. The analysis revealed that the variance in the financial performance of the real estate industry can be attributed to the independent and controllable variables by around 1%. Some other unquantified factors could well be causing the percentage of the variation left in this study. In contrast to previous research, this study examines Foreign Direct Investment (FDI) as the independent variable.

2.2.4 Economic growth and Financial Performance

Knight Frank (2017) found that between 2000 and 2014, the continent had a median of more than 5% per annum GDP growth, owing to the speedy growth sub-Saharan countries. Even with growth in GDP, countries like South Africa have experienced slow growth in real estate in the

recent years. According to Lalaine Delmendo (2021), the country's real estate sector is currently having signs of improvement after a five-year depression and lag over several years. This has mainly been brought about by the high rate of unemployment, inflation, and a mortgage market that is underdeveloped. Between 2007 and 2020, the prices of houses increased by about 62% which when adjusted for inflation, reduced to 18.

Tony Guerra (2018) found that San Francisco's booming economy has contributed to the city being one of the most desirable housing markets. Buyers compete with one another by bidding up their property at their own prices over the fair market value and covering up the balance out of pocket. However, this trend is most likely to slow down owing to a decline in the number of buyers who can afford the average cost of a home. This has been witnessed in the West Coast where the economy progressively grows but housing sales decline in some California cities such as San Diego and Los Angeles.

3.0 Methodology

The study employed a causal or experimental research. The study's target population comprised three of the top real estate property developers: HassConsult, Cytonn Investments and Knight Frank because they have published comprehensive information about the level of average property prices which may be used to measure the dependent variable. A census approach was therefore adopted in this study because the target population to be studied was small as recommended by (Mugenda, 2013). Secondary data for each quarter was collected from the annual market reports published by the real estate developers in Kenya from 2016 to 2022. Using the Pearson correlation technique, a correlation between macroeconomic factors and financial growth was examined. Quarterly panel data collected between year 2016 and year 2022, was analyzed using panel data analysis. The study adopted the following panel regression analysis model;

$$Y_t = \beta_0 + \beta_1 X_{1t} + \beta_2 X_{2t} + \beta_3 X_{3t} + \beta_4 X_{4t} + \epsilon$$

Where:

Y_t = Financial Growth at time t

β_0 = Intercept

X_{1t} = Inflation

X_{2t} = Interest Rate

X_{3t} = Exchange Rate

X_{4t} = Economic Growth

β_1 - β_4 = Regression Coefficients

ϵ = error term

4.0 Results and Findings

4.1 Descriptive Statistics

Table 1 shows the descriptive statistics results for the study variables inflation, interest rates, exchange rates, economic growth and financial growth.

Table 4.1 Descriptive Statistics Summary

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Average Price	84	22158176.0000	100166818.0000	58973488.7381	21151428.7781
Inflation	84	4.0000	10.8000	6.1679	1.6128
Interest Rate	84	11.8800	18.1500	13.1671	1.6582
Exchange Rate	84	100.7000	121.9500	106.0232	5.8997
GDP	84	-0.2900	7.5900	4.3701	2.2269

The descriptive results in Table 1 show that from the data presented in Table 4.1, the financial growth of the real estate sector in Kenya, as represented by average property prices, ranged from KES 22,158,176 to a high of KES 100,166,818 over the study period. The average property price stood at KES 58,973,488.74. This relatively high standard deviation of KES 21,151,428.78 suggests that property prices have experienced significant fluctuations over the period in consideration. This implies that the real estate sector has been experiencing volatile growth patterns, which could be attributed to various macroeconomic determinants as the study seeks to establish.

The results show that the inflation rate had shown variations between 4.0% and 10.8%, averaging 6.1679% and with a deviation of 1.6128. Moreover, interest rates, ranged from a minimum of 11.88% to a maximum of 18.15% with an average value of 13.1671%. The standard deviation of 1.6582 denotes moderate fluctuations in interest rates over the period (2016-2022). Regarding exchange rate, the findings show that the Kenyan Shilling had experienced fluctuations against the US dollar over the study period (2016-2022), with the exchange rate ranging from a minimum of KES 100.70 against USD to a maximum of KES 121.95 against the USD. The average rate during the period was 106.0232, and the standard deviation of 5.8997 suggests that there have been periods of significant volatility. Exchange rate stability is crucial for foreign investments in real estate, and significant fluctuations can deter foreign investors or make importing construction materials more expensive.

Finally, Kenya's GDP, representing economic growth, is shown to have varied between a minimum of -0.29% and a maximum of 7.59% with an average growth rate of 4.3701%. This implies that there were periods of economic contraction within the study period. The standard deviation of 2.2269 suggests notable variations in economic growth over the years. Economic growth can be directly linked to increased demand in the real estate sector as prosperity may drive up housing and property demand.

4.2 Correlation Analysis

One of the inferential analysis of this study was correlation which aimed at determining the nature and strength of the association between the macroeconomic variables and financial growth of real estate sector in Kenya. Table 2 shows the correlation matrix.

Table 2: Correlation Matrix

		Log of Average Prices	Inflation	Interest Rate	Exchange Rate	GDP Growth
Log of Average Prices	Pearson Correlation	1.0000				
Inflation	Pearson Correlation	0.4722*	1.0000			
Interest Rate	Pearson Correlation	0.7872*	0.3759	1.0000		
Exchange Rate	Pearson Correlation	-0.6087	-0.0766	-0.3957	1.000	
GDP Growth	Pearson Correlation	0.0852*	0.3331	0.0243 *	0.3870	1.000

The results in Table 2 show positive and significant association between inflation and financial growth (0.4722*). This implies that there is a direct correlation between inflation and financial growth among real estate firms in Kenya as inflation increases, financial growth also tends to increase, and vice versa. Since the association is significant, it suggests that the observed association is unlikely due to random chance. Additionally, there existed a positive association between interest rate and financial growth, which was significant (0.7872*). This implies that as interest rates increase, financial growth also tends to rise, and conversely, as interest rates decrease, financial growth tends to decline. This suggests that in the context of real estate sector in Kenya, interest rates play a crucial role in influencing financial growth. Moreover, the findings show a negative but insignificant association between exchange rate and financial growth (-0.6087). The negative association indicates that, an appreciation in the exchange rate is linked with a potential decrease in financial growth in the real estate sector in Kenya. Moreover, the study findings show that GDP Growth has a positive and significant association with financial growth among real estate firms in Kenya (0.0852*).

4.3 Regression Analysis

To examine the relationship between macroeconomic variables and financial growth of the real estate sector in Kenya, a regression analysis was conducted. The regression analysis findings are presented in Table 3.

Table 3: Regression Analysis

Dep Var: Log of Average Prices	Coef. (β)	Std. Err.	z	P> z
Inflation	0.0045187	0.0022877	1.98	0.048
Interest Rate	0.044177	0.0173369	2.55	0.011
Exchange Rate	-0.0178337	0.014762	-1.21	0.227
GDP Growth	0.0980943	0.0361506	2.71	0.007
Constant	6.68279	0.834598	8.01	0.000
R Squared	0.8057			
F statistic	35.05			
P-value	0.0000			

$$Y=6.68279+0.0045187X_1+0.044177X_2-0.0178337X_3+ 0.0980943 X_4$$

Where:

Y = Financial Growth

X₁ = Inflation

X₂= Interest Rate

X₃= Exchange Rate

X₄= GDP Growth

Table 3 presents panel regression results that shed light on the relationship between macroeconomic variables and financial growth in the real estate sector in Kenya. With a value of 0.8057 for the coefficient of determination, R-squared, the independent variables Inflation, Interest Rate, Exchange Rate, GDP Growth jointly explain 80.57% of the observed variation related to financial growth – specifically logarithm average property prices in the real estate sector. The study's findings reveal a positive coefficient associated with inflation, implying a positive association between inflation rate and average price's logarithms. The obtained p-value of 0.048 indicates that the observed association is statistically significant when evaluated at the conventional significance threshold of 0.05.

Moreover, it was established that the interest rate coefficient displays a positive sign implying a positive association between interest rates and the logarithm of the average prices in Real Estate industry. The resulting p-value 0.011 indicates that the observed relationship is statistically significant, since it is less than a predetermined significance level of 0.05. The effect of interest rates on real estate prices is mildly significant, just like the impact of inflation.

The coefficient associated with the exchange rate exhibits a negative sign, indicating an inverse relationship between exchange rates and the logarithm of average prices within the real estate industry. Nevertheless, the obtained p-value of 0.227 exceeds the critical significance level of 0.05, indicating a lack of statistical significance in the observed relationship. The coefficient associated with GDP growth exhibits a positive sign, suggesting a positive relationship between the growth of GDP and the logarithm of average prices within the real estate industry. The obtained p-value of 0.007 indicates that the observed relationship possesses statistical significance when evaluated at the conventional significance level of 0.05. The effect size of GDP growth on real estate prices seems relatively strong. The constant term represents the intercept of the regression equation. The coefficient is significant ($p < 0.0001$), indicating that there is a statistically significant intercept even when all independent variables are zero.

4.4 Hypotheses Testing

The study null hypotheses were tested at 0.05 significance level as represented in Table 3.

H₀₁: Inflation does not have a significant effect on the financial growth of the real estate sector in Kenya.

Based on the results displayed in Table 3, it can be observed that the p-value associated with inflation was less than 0.05. As a result, the null hypothesis was shown to be invalid, leading to the selection of the alternative hypothesis. Based on the research findings, the study finds that inflation has significant influence on the growth and development of the real estate industry in Kenya.

H₀₂: Interest rates do not have a significant effect on the financial growth of the real estate sector in Kenya.

The results indicate that interest rates had significant effect on financial growth ($p < 0.05$). The study therefore finds that interest rates have a significant effect on the financial growth of the real estate sector in Kenya.

H₀₃: Exchange rates do not have a significant effect on the financial growth of the real estate sector in Kenya.

The results indicate that exchange rates had insignificant effect on financial growth ($p > 0.05$). The study finds that exchange rates do not have a significant effect on the financial growth of the real estate sector in Kenya.

H₀₄: Economic growth does not have a significant effect on the financial growth of the real estate sector in Kenya.

The results indicate that economic growth had significant effect on financial growth ($p < 0.05$). The study finds that Economic growth has a significant effect on the financial growth of the real estate sector in Kenya.

5.0 Conclusion

Inflation exerts a substantial influence on the financial advancement of the business. It is important for investors to be aware that their returns in the real estate sector are likely to be influenced by fluctuations in inflation rates. Moreover, this study concludes that inflation, despite its inherent pressures, acts as a driver for the financial growth of the real estate sector in Kenya. Stable periods intermingled with heightened inflationary phases do not deter the upward trajectory of the market. The relationship between borrowing costs and real estate prices in Kenya exhibits a departure from conventional economic assumptions, as elevated interest rates stimulate growth instead of dampening it. An increase in interest rates results in elevated borrowing costs, which has the ability to impede the progress of investment in new ventures or the growth of established ones. The Kenyan Shilling experienced notable fluctuations against the US dollar from 2016 to 2022, impacting the cost of imported construction materials and possibly deterring foreign investment. The level of economic prosperity seen in Kenya is intricately linked to the vitality and robustness of its real estate industry.

6.0 Recommendations

Investors should incorporate hedging strategies that shield their portfolios from high inflation rates. Moreover, for those looking to venture into real estate investment, they should be proactive in analyzing the prevailing inflation trends to ensure their investments can weather potential inflationary pressures. Policy interventions should focus on finding the right balance that benefits the real estate sector without negatively impacting other parts of the economy. Further, given the significant impact of interest rates, policy makers should also consider how monetary policies like rate adjustments can either help or harm the real estate market. Monetary policy that considers the unique attributes of the Kenyan market could be more effective in promoting financial growth in real estate. Practitioners in the real estate industry should keep a close eye on interest rate movements and adapt their business strategies accordingly. Additionally, although the impact of exchange rates was found to be insignificant, practitioners should still be cautious when dealing with international transactions or imported goods, as other unpredictable factors could come into play.

The findings challenge some conventional wisdoms particularly the role of interest rates in financial growth which opens up new avenues for research. Future work should aim to unpack the underlying mechanisms that cause the Kenyan real estate market to behave differently from other global markets in this respect. Given the unique relationship between interest rates and financial growth in this sector, existing theories should be revisited to accommodate these findings. A multi-disciplinary approach, integrating elements of behavioral finance, should be particularly enlightening. With economic growth showing a direct correlation with financial growth in the real estate sector, general fiscal policies that encourage economic stability and growth will inherently benefit this market. Measures should include tax incentives for real estate investments or easier access to credit for construction projects.

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