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IMPACT OF INFLATION ON NIGERIAN REAL ESTATE INDUSTRY: A CASE STUDY OF ETI-OSA LOCAL GOVERNMENT AREA OF LAGOS STATE

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Abstract
This study explores the relationship between inflation and Nigeria's real estate market (REM), analysing its effects on property prices, investment decisions, construction costs, and housing affordability. Using survey data from 200 copies of questionnaire and regression analysis, the research reveals a negative correlation between inflation and REM performance, highlighting inflation's adverse impact on market vitality. Conversely, a positive link is found between inflation and investment decisions (IID), suggesting inflation drives increased investor interest in real estate. The study also identifies a significant negative effect of inflation on housing affordability (IHA), as rising costs erode individuals' ability to afford homes. Additionally, inflation positively correlates with construction costs (IIC), exacerbating material expenses and elevating housing prices. To mitigate these challenges, the study recommends government intervention, including targeted affordable housing programs with subsidies or incentives for developers. Rent control policies are also proposed to stabilize housing costs, particularly in urban areas with rapid price increases. These measures aim to enhance affordability and support sustainable growth in Nigeria's real estate sector.

Keywords: Construction Costs, Housing Affordability, Inflation, Investment Decisions, Property Prices, Real Estate Market.

JEL Classification Codes: G51, D31, L85, E31, R30

1. Introduction

Nigeria's inflation rate has changed a lot over the years due to economic shifts and government policies. In the late 1990s, inflation was very high, averaging 13% to 15%. This was caused by poor financial management, corruption, and economic instability. In the mid-to-late 2000s, inflation dropped to between 6% and 10%. This improvement came from better economic management, more foreign investment, and less political unrest. During the 2010s, inflation went up and down. Early in the decade, it stayed around 10%. But later, factors like falling oil prices, a weaker currency, and economic uncertainty pushed inflation higher. By 2016, it reached 15%. In recent years, inflation has remained high. The COVID-19 pandemic, low oil prices, and supply chain problems drove inflation to nearly 13% in 2020. Even now, inflation remains above the Central Bank of Nigeria's target.

When examining the actual return for a specific holding period, real estate is exposed to the same risks as other asset classes in an investment portfolio, subject to certain modifications. Romer (2009) identifies two types of inflation: cost-push and demand-push. In Nigeria, the National Housing Corporation (NHC) initiated a program in 2018 aimed at providing adequate housing for the growing urban population. However, economic shifts—such as monetary and fiscal policies—can lead to inflation, complicating such efforts (Osiemo, Obere, & Odada, 2021). Given this, investors with real estate holdings or those looking to invest must take measures to protect their assets and capital during periods of unchecked inflation.

In recent years, inflation has significantly disrupted Nigeria's real estate market. Defined as a persistent increase in the general price level, inflation diminishes consumer purchasing power and affects multiple economic sectors (Ogunba & Iyoha, 2019). The Nigerian real estate market has been particularly hard-hit, with decades of high inflation driving sharp increases in property prices. As the currency's value declines, potential homebuyers and investors struggle to afford real estate, leading to reduced demand in both residential and commercial segments (Yusuf & Ahmed, 2019).

High inflation also fosters economic uncertainty, influencing investor behaviour and decision-making. While real estate is traditionally considered a hedge against inflation—a tangible asset that preserves value (Nwaogbe & Okoye, 2020)—the volatility associated with inflation can alter the risk-return trade-off, affecting investment strategies.

Additionally, fluctuating inflation rates directly impact construction costs, including labour, materials, and other inputs. Rising expenses make it challenging for developers to manage budgets effectively, often resulting in cost overruns, delays, or even project abandonment (Onakoya & Ogunba, 2018). These constraints hinder industry growth, limit housing supply, and exacerbate affordability issues. Ultimately, inflationary pressures have stifled market expansion by making real estate increasingly unaffordable for the average buyer.

High inflation rates—often outpacing wage growth—have made housing increasingly unaffordable for individuals and families. As property prices rise faster than incomes, low-income households bear the brunt of this crisis, facing limited housing options and soaring rents. Compounding the issue, widening income inequality exacerbates housing unaffordability, threatening the real estate sector's sustainable development (Adegbite, 2019). Additionally, inflation volatility has disrupted investment behaviours, altering risk perceptions and industry decision-making.

The inflationary pressure on Nigeria's real estate market demands urgent policy intervention and strategic solutions. Rising construction costs, fluctuating property values, and constrained housing accessibility significantly hinder the sector's growth. Addressing these challenges is

critical to fostering long-term stability in the market.

The objectives of this study are to evaluate inflation's impact on Nigeria's real estate sector vis-à-vis the effect of inflation on property prices; impact of inflation on investment decisions; influence of inflation on construction cost and implication of inflation on housing affordability with a focus on Eti-Osa Local Government Area in Lagos State. The findings will enrich existing knowledge, helping investors mitigate inflation-related risks and make informed decisions. Furthermore, the study will guide policymakers in designing targeted housing affordability programs while deepening their understanding of inflation's interplay with real estate dynamics.

2. Literature Review

Concept of Inflation

Inflation refers to the sustained increase in the general price level of goods and services in an economy over time (Blanchard & Johnson, 2013). It is typically measured using price indices like the Consumer Price Index (CPI) or Wholesale Price Index (WPI). Inflation significantly impacts purchasing power, financial decisions, interest rates, and income distribution. Key effects include reduced monetary value, lower living standards due to decreased purchasing power, and economic uncertainty, as businesses and individuals struggle to differentiate between relative price changes and general inflation trends (Nwaogbe & Okoye, 2020).

Concept of the Real Estate Industry

The real estate industry involves the buying, selling, renting, and development of properties, including land, residential, and commercial buildings (Ling & Archer, 2017). It is vital to the economy by providing housing, supporting business activities, and enabling investment and wealth creation. Among other things and functions, this sector provides:

Housing Supply: Offers diverse housing options, addressing the need for affordable and quality living spaces (Baum, Crosby, & Gallimore, 2019).

Wealth Generation: Properties appreciate over time, providing investment returns, rental income, and portfolio diversification.

Infrastructure Development: Real estate projects often include essential infrastructure like roads and utilities, contributing to urban and regional growth (Geltner et al., 2014).

Theoretical Review

The Inflation Hedge Theory

The Inflation Hedge Theory posits that certain assets can safeguard investors against the erosion of purchasing power caused by inflation. These assets are expected to retain or appreciate in value as the general price level rises. Real estate economists, such as Jack Corgel and Willard McIntosh, have specifically examined real estate as an effective inflation hedge.

According to this theory, real estate serves as a reliable hedge against inflation because it can maintain or even increase in value during periods of rising prices, thereby protecting investors from the depreciating effects of inflation. Unlike financial assets, which are subject to market sentiment, real estate is a tangible asset with intrinsic value—it provides shelter, generates rental income, and supports various commercial activities. This inherent utility makes real estate an attractive option for investors seeking to preserve capital during inflationary periods (Chen, Seow, & Yeoh, 2019). Additionally, the tangible nature of real estate offers a sense of stability and security, particularly when other financial assets may experience heightened volatility.

Leveraging—a common strategy in real estate investing—can further enhance its inflation-hedging benefits. Investors often use mortgages and other debt instruments to finance property acquisitions. In an inflationary environment, rising property values and rental income can amplify returns on the initial investment. Leverage thus magnifies an investor's exposure to potential gains (Mullins & Chan, 2019). However, it is important to note that leverage also carries risks, particularly if rising interest rates during inflation increase borrowing costs and negatively impact returns.

During inflationary periods, investors often seek refuge in tangible assets that retain value. Real estate, as a physical asset, provides inherent stability, reinforcing its appeal as a store of value. This perception of security drives demand, supporting potential price appreciation (Chen et al., 2019). Furthermore, real estate investments offer portfolio diversification benefits, mitigating risks associated with assets more vulnerable to inflationary pressures.

While real estate is widely regarded as a partial inflation hedge, its effectiveness depends on property type, lease structures, financing terms, and macroeconomic conditions. Investors should diversify across multiple inflation-resistant assets rather than relying solely on real estate.

Demand-Pull Theory

The **Demand-Pull Theory** is an economic concept that explains how increased demand for goods and services can drive prices upward. The theory has been attributed to **John Maynard Keynes** and his macroeconomic framework in *'The General Theory of Employment, Interest, and Money' (1936).* In the context of the **real estate market,** this theory helps explain how rising demand for housing and commercial properties leads to price appreciation, supply adjustments, and market dynamics. According to the demand-pull theory, inflation can significantly influence the real estate market by altering consumer spending power and overall housing demand. As inflation rises, consumers may anticipate further price increases, prompting them to invest in tangible assets like real estate to preserve their purchasing power. This heightened demand can drive up property prices and reshape market dynamics (Ko, Yu, & Cho, 2016).

The theory suggests that inflation expectations shape investment behaviour. When individuals predict rising prices, they often seek inflation-resistant assets, with real estate serving as a preferred choice due to its intrinsic value and potential for appreciation. Consequently, real estate is frequently viewed as an inflation hedge, further boosting demand (Ko, Yu, & Cho, 2016). Additionally, real estate investments provide diversification benefits, which become particularly valuable during inflationary periods. Since inflation affects asset classes differently—such as stocks and bonds—investors may allocate more capital to real estate to mitigate risks associated with other volatile investments. This diversification effect can further elevate real estate demand as inflation rises (Agarwal, 2019). However, financing conditions also play a crucial role in shaping demand. Central banks often raise interest rates to combat inflation, increasing borrowing costs and potentially dampening real estate affordability. The relationship between interest rates and housing demand is complex, depending on broader economic conditions and the responsiveness of mortgage rates to policy changes (Lusardi & Oggero, 2018). Thus, while the demand-pull theory highlights inflation-driven demand, financing costs remain a critical factor in real estate market dynamics.

The Cost-Push Theory

Cost-Push Theory was developed by post-Keynesian economists, including **Abba Lerner** and **Gardiner Means.** It explains inflation as arising from increased production costs (e.g., wages, raw materials), which push prices up regardless of demand. This theory posits that rising input costs—such as labour, materials, and energy—drive up prices economy-wide, particularly in real estate. Inflationary pressures can substantially raise construction costs, which in turn influence property prices. As input costs increase, developers and contractors face higher expenses when building new properties or renovating existing ones. These additional costs are often passed on to homebuyers and tenants through higher sale prices or rents (Gyourko & Tracy, 2009). Consequently, inflation may reduce housing affordability, limiting access for potential buyers and renters.

Inflation also affects the costs of managing and maintaining real estate properties. For example, property owners may experience rising expenses for utilities, taxes, insurance, and maintenance services during inflationary periods. These increased costs can reduce the profitability of rental properties, prompting landlords to raise rents to offset expenses (McAllister & Waddell, 2007). As a result, inflation may decrease the affordability of rental housing, potentially dampening demand for rental units.

Additionally, the Cost-Push Theory highlights inflation's impact on financing costs, which influences real estate investment decisions. Central banks often raise interest rates to combat high inflation, increasing borrowing costs for real estate investors and developers. Higher financing expenses can make real estate investments less

attractive, potentially slowing market activity (Gatzlaff & Ling, 1994). Thus, inflation may affect both the cost and availability of financing, shaping investment behaviour in the real estate sector.

The Income and Rent Theory

The **Income and Rent Theory** is primarily associated with **David Ricardo,** a classical economist. The Income and Rent Theory explores the relationship between inflation and real estate demand by analysing how inflation influences income levels and rental costs. This theory posits that inflationary pressures can affect housing demand by altering individuals' purchasing power, rental affordability, and overall income levels.

Inflation erodes the purchasing power of income. As the cost of goods and services rises, disposable income available for housing expenses diminishes, potentially reducing real estate demand. Higher inflation may also make homeownership less affordable while increasing the relative appeal of rental properties (Hendershott & Ward, 2005). Consequently, during inflationary periods, demand for rental housing may rise as individuals seek more cost-effective alternatives.

Inflation further impacts rental costs, which in turn influences rental housing demand. Rising maintenance, utility, and property tax expenses can drive up rental prices due to inflationary pressures. As rents increase, individuals with limited purchasing power may struggle to afford housing, potentially dampening demand (Chetty et al., 2014). Depending on financial circumstances, this could lead to shifts in housing preferences, with some opting for homeownership or downsizing to more affordable options.

Additionally, inflation affects income levels, shaping individuals' ability to cover housing expenses. During inflationary periods, wages and incomes may come under pressure as workers seek to maintain their purchasing power. If wage growth outpaces inflation, individuals gain greater capacity to afford housing costs—whether rent or mortgage payments—bolstering real estate demand (Case et al., 2013). Higher incomes can thus stimulate demand for both rental and owner-occupied housing.

Empirical Review

Using information gathered from the **Real Estate Investment Trust (REIT) -** is a company that owns, operates, or finances income-generating real estate. - REIT markets in the relevant stock markets in the countries being covered; Maina (2021) conducted a study on how economic shocks affect the returns of REITs in Turkey, Malaysia, and Taiwan with a major focus on the direction of the existing relationship. The research examined several macroeconomic parameters. The study approach was correlational, based on the static OLS for analysis, and grounded on the Arbitrage Pricing Theory. The study determined that inflation had no discernible association with REIT

performance in the markets under consideration, leaving only GDP and the exchange rate regime as major influences on REIT success.

Dabara, et al. (2021) conducted a study on the Nigerian REIT market using data gathered from active REIT firms listed operating in the Nigerian Market while looking at how REIT market (N-REIT) performance in relation to changes in inflation from 2008 to 2019. The Fama and Schwert model (1977), which is an expansion and enhancement of the Fisher Hypothesis, served as the baseline model for the study. The findings demonstrated that the N-REIT under investigation had a weak association with inflation in terms of inflation that was predicted, unforeseen, and actual. Based on their findings, which were supported by the Engle Granger causality, investors in the Nigerian market were said to have been negatively impacted by real estate investments made through REITs, primarily because they were unable to use REITs as a means of hedging against portfolio risk. The focus of the study was on the Nigerian REIT market, but it will also examine the Kenyan residential real estate market and the entire real estate industry as a contributor to the country's GDP.

Mulekyo (2020) conducted research to look at the elements that affect Kenyan residential real estate's performance by using Hass Property Index Data. The study initially demonstrated that the data was stationary by using a variety of unit root tests, among other economic considerations. The researcher next used multiple regression analysis to determine that one of the elements that significantly impacted the costs of residential real estate in Kenya was inflation. However, because the study did not examine the long-term link between the study variables, it was impossible to know for sure what kind of association existed given that the study variables were all time series.

Wainaina (2020) also conducted research to determine the elements that affected the performance of the real estate sector in Kenya utilizing data from Kenyan real estate. The researcher used a static multiple regression model in conjunction with a correlational research design and real estate residential data that was gathered from Hass Consult as well as other governmental organizations like the Kenya National Bureau of Statistics and the Central Bank of Kenya between 2007 and 2016. To make sure the data complied with the assumptions of the Classical Linear Regression Model, the researcher performed diagnostic tests such normality and serial correlation tests. They came to the conclusion that there was a considerable correlation between the residential real estate market and inflation based on the findings of their investigation. However, the study was unable to clarify if the dynamics existed both in the short run and the long run. By utilizing more reliable analytical techniques such as cointegration and the Vector Error Correction Model, this work will close this gap by attempting to integrate the relationship between

the short and long term as well as the pace of return to equilibrium.

Sumer and Zorhon (2020) conducted a study on the effects of currency rates on the REIT index and the property index using Turkish real estate data gathered from 2004 to 2016. use the Granger causality test and the Augmented Dickey Fuller and Vector Auto Regressive models. The authors found that exchange rates had an impact on the return rate of the REIT index, but not on the return rate of the housing price index. However, the analysis was restricted to the Turkish real estate market. However, this study will concentrate on the Kenyan residential real estate market in an effort to identify parallels and differences in how the same factors behave across Kenya.

Between 2007 and 2016, Bor (2018) conducted research to examine the association between Kenya's real estate market and other macroeconomic factors. The researcher used a static multiple regression model using a correlational study strategy. The Hass Consult Residential Index served as a stand-in for the real estate industry. The study found that Kenyan real estate investment success was significantly impacted by inflation. Kibunyi and Waguru (2017) demonstrated a connection between the real estate industry and inflation, which supported the findings. Despite the fact that the study's data contained time series, strong time series tests like the unit root stationarity test and cointegration analysis were not performed. By using cointegration tests to confirm the presence of both short- and long-term links, this work will close this gap.

3. Methodology

The inflation hedge hypothesis put forward by Irving Fisher in 1911 serves as an underpinning for this study. This hypothesis contends that real estate investments may hold their value during inflationary times—or even grow in value. The primary tenet of this theory is that the value of real estate properties tends to increase along with an increase in the overall price level. A material asset having inherent worth is real estate. It offers housing, generates rental revenue, or can be employed commercially. Investors may decide to put their money in physical assets like real estate during an inflationary period in order to shield their wealth from the depletive impacts of rising prices. According to the hypothesis, the restricted supply of real estate contributes to the potential value growth of existing real estate assets. that during an inflationary period, rents may rise as landlords raise their prices to cover growing costs. Given that rental income has the ability to increase in tandem with general price levels, this can offer investors a hedge against inflation.

Let's consider a hypothetical property with an initial value of V_0. If we assume an inflation rate of r per year, the property's value after n years can be calculated using the formula:

$$V_n = V_0 * (1 + r)^n \quad (3.1)$$

Here, V_n represents the property value after n years, V_0 is the initial value, r is the annual inflation rate expressed as a decimal, and ^{n}

denotes the number of years. This showed how, according to the Inflation Hedge Theory, real estate values can potentially increase over time as a result of inflation. The rise of rental revenue during inflationary periods is a different part of the inflation hedge theory. Rental income has the ability to rise with inflation and offer a consistent cash flow. We created a formula that integrates the idea of rental growth rate and inflation rate to numerically show this.

Let's consider a rental property with an initial annual rental income of R_0. Assuming an annual rental growth rate of g and an inflation rate of r, the rental income after n years can be illustrated as;

$$R_n = R_0 * (1 + g)^n * (1 + r)^n \quad (3.2)$$

Where R_n represents the rental income after n years, R_0 is the initial rental income, g is the annual rental growth rate expressed as a decimal, r is the annual inflation rate expressed as a decimal, and ^{n} denotes the number of years. This equation show how rental income can potentially grow over time, considering both rental growth and inflation, aligning with the Inflation Hedge Theory.

This study adopted a descriptive research design with a survey strategy, using a structured, closed-ended questionnaire to gather data. The focus was on understanding the relationship between key variables within selected real estate firms operating in the Ajah axis of Eti-Osa Local Government Area (LGA) of Lagos State, Nigeria. The targeted companies included Elpistis Homes Limited, Henry Montego Homes, Real Estate Millionaires Group, AY Homes and Investment Limited, and Romax Properties.

The population of the study comprised employees of these five firms, totalling 480 staff members. To avoid sampling bias and ensure every individual had an equal chance of selection, a simple random sampling technique was employed. Using Taro Yamane's formula, a sample size of 200 respondents was determined and used for the study.

Data collection was conducted through questionnaires, which served as the primary instrument. The questions were written in simple language to ensure clarity and comprehension, and questionnaires were hand-delivered and collected directly by the researcher to ensure high response rates and data reliability. In addition to the survey, qualitative data were also sourced from existing literature, policy documents, and reports relevant to the impact of inflation on Nigeria's real estate sector. These qualitative inputs were analysed thematically to identify patterns, challenges, and solutions.

4. Presentation and Interpretation of Results

Response Rate

A total of two hundred copies of questionnaire were administered, and all the two hundred (200) copies were certified as duly filled and considered usable. The useable questionnaire represented 100% response rate. The response results are presented in Table 4.1.

Table 4.1: Response Rate

Responses	**Frequency**	**Percent**
Completed usable copies of questionnaire	200	**100%**
Total	**200**	**100%**

Source: Author's Computation from Field Survey Results, 2023

Table 4.2: Demographic Characteristic of Respondents

Variables	Category	Frequency	Percentage
Gender	Male	126	**63.0%**
	Female	74	**37.0%**
Age	31-40 years	63	**31.5%**
	41-50 years	112	**56.0%**
	51-60 years	16	**8.0%**
	60 and above	9	**4.5%**
Academic Qualification	WAEC	17	**8.5%**
	OND/NCE	73	**36.5%**
	BSC/HND	101	**50.5%**
	OTHERS	9	**4.5%**
Marital Status	Single	40	**20.0%**
	Married	124	**62.0%**
	Divorced	14	**7.0%**
	Separated **Widowed**	**9** **13**	**4.5%** **6.5%**

Source: Author's Computation from Field Survey Results, 2023

This section consists of background and respondents' information that describes basic characteristics such as gender of the respondents, age of the respondents, academic qualification and marital status. To this effect, the results are presented in Table 4.2. Thus, profile of gender indicated that 126 respondents representing 63.0% were male while 74 respondents representing 37.0% were female, indicating that most of the respondents were male.

Demographic and personal profile of respondents as shown in table 4.2 by age revealed that 63 respondents representing 31.5% were between the ages of 31-40 years, 112 respondents representing 56.0% were between 41-50 years, 16 respondents representing 8.0% were between 51-60 years while 9 respondents representing 4.5% were between 60 years and above, indicating that most of the respondents were between 41-60 years. Meanwhile, 17 respondents representing 8.5% WAEC, 73 respondents representing 36.5% had OND/NCE, 101 respondents representing 50.5% had BSC/HND while 9 respondents representing 4.5% had others qualifications. Also, 40 respondents representing 20.0% are single, 124 respondents representing 62.0% are married 14 respondents representing 7.0% are divorced, 9 respondents

representing 4.5% are separated and 13 respondents representing 6.5% are widowed. This suggests that majority of the respondents are married.

4.1 Analysis of Data According to Research Objectives

In an effort to accomplish the earlier stated research goals, this section empirically analyses the data.

Research Objective 1: Assess the effect of inflation on property prices in the Nigerian real estate market.

The respondents' responses to the research topic, as stated previously in chapter one, were clearly displayed in this subsection through the use of tables, frequency, percentages, and means.

Table 4.3: Descriptive Analysis of the response on effect of inflation on property prices in the Nigerian real estate market.

Statement	SD	D	A	SA	Mean
Inflation has influenced property prices in the Nigerian real estate market	12 (6.0%)	9 (4.5%)	39 (19.5%)	140 (70.0%)	**3.79**
The trends in property prices can be attributed to inflationary pressures in the Nigerian real estate market	11 (5.5%)	8 (4.0%)	39 (19.5%)	142 (71.0%)	**3.89**
Inflation has affected the affordability of housing in Nigeria	7 (3.5%)	9 (4.5%)	43 (21.5%)	141 (70.5%)	**3.76**
There is relationship between inflation and property investment decisions in the Nigerian real estate industry	7 (3.5%)	10 (5.0%)	42 (21.0%)	141 (70.5%)	**3.66**
There are specific types of properties that are more susceptible to price fluctuations due to inflation in Nigeria	11 (5.5%)	8 (4.0%)	37 (18.5%)	144 (72.0%)	**3.58**
Grand Mean					**3.74**

Source: Field Survey Results (2023)

The survey results in Table 4.3 highlight strong agreement among respondents regarding the impact of inflation on Nigeria's real estate market:

Inflation & Property Prices: 70.0% strongly agree, 19.5% agree (mean: 3.79) that inflation has adversely influenced property prices.

Property Prices & Inflationary Pressures: 71.0% strongly agree, 19.5% agree (mean: 3.89) that property price trends affect inflation.

Housing Affordability: 70.5% strongly agree, 21.5% agree (mean: 3.78) that inflation has reduced housing affordability.

Inflation & Investment Decisions: 70.5% strongly agree, 21.0% agree (mean: 3.66) on a

link between inflation and property investment choices.

Property Types Vulnerable to Inflation: 72.0% strongly agree, 18.5% agree (mean: 3.58) that certain properties are more prone to inflation-driven price swings.

Overall Consensus: Most respondents (majority strongly agreeing) affirm inflation's significant role in driving property prices, affordability challenges, and investment decisions, with mean scores consistently above 3.5. (on a likely 4-point scale).

Research Objective 2: Impact of inflation on investment decisions within the Nigerian real estate industry.

Table 4.4: Descriptive Analysis of the response on the impact of inflation on investment decisions within the Nigerian real estate industry.

Statement	SD	D	A	SA	Mean
Inflation affects investment decisions within the Nigerian real estate industry.	7 (3.5%)	10 (5.0%)	42 (21.5%)	141 (70.5%)	**3.63**
There are major challenges faced by real estate investors in Nigeria due to inflation	8 (4.0%)	9 (4.5%)	42 (21.0%)	141 (70.5%)	**3.87**
Real estate investors in Nigeria modify their investment strategies to mitigate the impact of inflation	11 (5.5%)	8 (4.0%)	8 (19.0%)	143 (71.5%)	**3.53**
There are specific types of real estate investments in Nigeria that are more resilient to the effects of inflation	7 (3.5%)	9 (4.5%)	43 (21.5%)	141 (70.5%)	**3.55**
Real estate investors in Nigeria evaluate the potential risks and returns of their investments considering the impact of inflation	12 (6.0%)	10 (5.0%)	38 (19.0%)	140 (70.0%)	**3.88**
Grand Mean					**3.69**

Source: Field Survey Results (2023)

The survey results highlight strong agreement among respondents that inflation significantly impacts investment decisions in Nigeria's real estate industry. Key findings include:

Inflation's Effect on Investment Decisions: 70.5% strongly agree, 21.5% agree (mean = 3.63).

Inflation as a Major Challenge for Real Estate Investors: 70.5% strongly agree, 21.0% agree (mean = 3.87).

Need to Modify Investment Strategies to Mitigate Inflation: 71.5% strongly agree, 19.0% agree (mean = 3.53).

Inflation-Resilient Real Estate Investments: 70.5% strongly agree, 21.5% agree (mean = 3.55).

Evaluating Risks & Returns Considering Inflation: 70.0% strongly agree, 19.0% agree (mean = 3.88).

Overall Consensus: The majority of respondents recognize inflation as a critical factor affecting real estate investments in Nigeria, emphasizing the need for strategic adjustments and risk evaluation to manage its impact.

Research Objective 3: Investigate the influence of inflation on construction costs in the Nigerian real estate industry

Table 4.5: Descriptive Analysis of the response on how politics of budgeting has negatively affected economic growth in Nigeria.

Statement	SD	D	A	SA	Mean
Inflation impact construction costs within the Nigerian real estate industry	12 (6.0%)	10 (5.0%)	38 (19.0%)	140 (70.0%)	**3.81**
There are factors that contribute to the increase in construction costs due to inflation in Nigeria	14 (7.0%)	8 (4.0%)	37 (18.5%)	141 (70.5%)	**3.70**
Real estate developers and construction companies in Nigeria cope with rising construction costs caused by inflation	9 (4.5%)	11 (5.5%)	42 (21.0%)	138 (69.0%)	**3.94**
There are specific construction materials or services that are more affected by inflation in the Nigerian real estate industry	9 (4.5%)	9 (4.5%)	43 (21.5%)	139 (69.5%)	**3.96**
Construction companies in Nigeria assess the potential risks and plan for inflation-related cost increases when initiating new real estate projects	13 (6.5%)	8 (4.0%)	39 (19.5%)	140 (70.0%)	**3.85**
Grand Mean					**3.81**

Source: Field Survey Results (2023)

Findings from Table 4.5 regarding inflation's impact on construction costs in the Nigerian real estate industry indicated:

Inflation's Impact on Construction Costs: 70.0% strongly agreed, and 19.0% agreed that inflation affects construction costs (Mean: 3.81). Only 6.0% strongly disagreed, and 5.0% disagreed.

Factors Contributing to Increased Costs Due to Inflation: 70.5% strongly agreed, and 18.5% agreed that multiple factors drive cost increases (Mean: 3.70). 7.0% strongly disagreed, and 4.0% disagreed.

Coping Strategies of Developers & Construction Companies: 69.0% strongly agreed, and 21.0% agreed that developers adapt to rising costs (Mean: 3.94). 4.5% strongly disagreed, and 5.5% disagreed.

Construction Materials/Services Most Affected by Inflation: 69.5% strongly agreed, and 21.5% agreed that some materials/services are more impacted (Mean: 3.96). 4.5% strongly disagreed, and 4.5% disagreed.

Risk Assessment & Planning for Inflation in New Projects: 70.0% strongly agreed, and 19.5% agreed that companies assess inflation risks (Mean: 3.85). 6.5% strongly disagreed, and 4.0% disagreed.

Conclusively, the majority of respondents strongly agreed that inflation significantly impacts construction costs in Nigeria, with high mean scores (ranging from 3.70 to 3.96) reinforcing consensus on its effects, contributing factors, and industry coping mechanisms.

Research Objective 4: Examine the implications of inflation on housing affordability in Nigeria.

Table 4.6: Descriptive Examine the implications of inflation on housing affordability in Nigeria.

Statement	SD	D	A	SA	Mean
Inflation affects housing affordability in Nigeria	7 (3.5%)	9 (4.5%)	43 (21.5%)	141 (70.5%)	**3.71**
Government policies helps to address the impact of inflation on housing affordability in Nigeria	8 (4.0%)	9 (4.5%)	41 (20.5%)	142 (71.0%)	**3.47**
Potential homebuyers or renters in Nigeria adapt to their housing choices in response to rising prices caused by inflation	7 (3.5%)	9 (4.5%)	43 (21.5%)	141 (70.5%)	**3.53**
Individuals or families in Nigeria cope with housing affordability caused by inflation	8 (4.0%)	9 (4.5%)	37 (18.5%)	146 (73.0%)	**3.90**
Inflation-driven increases in housing costs disproportionately impact certain segments of the population in Nigeria	7 (3.5%)	10 (5.0%)	36 (18.0%)	147 (73.5%)	**3.73**
Grand Mean					**3.67**

Source: Field Survey Results (2023)

The survey results in Table 4.6 highlight Nigerian respondents' views on inflation's impact on housing affordability and related factors:

Inflation & Housing Affordability: 70.5% strongly agree and 21.5% agree that inflation adversely affects housing affordability (mean: 3.71).

Government Policies: 71.0% strongly agree and 20.5% agree that government policies help address inflation's impact (mean: 3.74).

Adaptation by Homebuyers/Renters: 70.5% strongly agree and 21.5% agree that rising prices force adjustments in housing choices (mean: 3.53).

Coping Strategies: 73.0% strongly agree and 18.5% agree that families/individuals cope with affordability challenges (mean: 3.90).

Disproportionate Impact: 73.5% strongly agree and 18.0% agree that inflation-driven costs disproportionately affect certain groups (mean: 3.73).

Overall, most respondents recognize inflation's significant influence on housing affordability, support policy interventions, and acknowledge adaptive and unequal effects. Mean scores consistently exceed 3.5, reflecting strong consensus.

Descriptive Statistics

Questionnaire data can be transferred to regression analysis by first assigning numerical values to the questionnaire responses, then using these numerical values as either independent or dependent variables in a regression model. This we have applied in this study. After carefully presenting an item-by-item analysis, we then proceed to present the overall descriptive statistics of our results focusing on the core variables that forms our model. PP is population, rem is real estate market, IID is inflation on investment decisions, ICC is inflation on construction costs, and IHA is inflation on housing affordability. Our model becomes

$$Y=\alpha+\beta_1 REM+\beta_2 PPW+\beta_3 PPE+\beta_4 LPP+\mu$$

Table 4.7: Descriptive Statistics Estimate Result

Variable	Source	Min	Max	Range	Mean	Std. Deviation	Skewness	Kurtosis
PP	Average of table 4.1.1	1.600	5.000	3.400	3.117	0.712	0.427	**0.097**
REM	Average of tables 4.2.1	1.000	5.000	4.000	3.931	1.101	-0.829	**-0.209**
IID	Average of tables 4.2.2	1.000	3.800	2.800	1.612	0.669	1.142	**0.398**
ICC	Average of tables 4.2.3	1.000	5.000	4.000	3.620	0.875	-0.173	**-0.542**
IHA	**Average of tables 4.2.4**	**1.000**	**5.000**	**4.000**	**3.376**	**0.975**	**-0.358**	**-0.865**

Note, PP is population, rem is real estate market, IID is inflation on investment decisions, ICC is inflation on construction costs, and IHA is inflation on housing affordability. Source: Field Survey (2023)

Correlation Matrix

We then estimate the degree of relationship between the variables using the Pearson correlation coefficient and the result is presented in table 4.8.

Table 4.8: Estimation of Correlations Matrix

		PP	REM	IID	ICC	IHA
PP	Pearson Correlation	1	-.050	.130*	.063	**.113**
	Sig. (2-tailed)		.402	.030	.300	**.061**
	N	200	200	200	200	**200**
REM	Pearson Correlation	-.050	1	.145*	.280**	**-.059**
	Sig. (2-tailed)	.402		.016	.000	**.332**

	N	200	200	200	200	**200**
IID	Pearson Correlation	.130*	.145*	1	.527**	**.126***
	Sig. (2-tailed)	.030	.016		.000	**.036**
	N	200	200	200	200	**200**
ICC	Pearson Correlation	.063	.280**	.527**	1	**.101**
	Sig. (2-tailed)	.300	.000	.000		**.094**
	N	200	200	200	200	**200**
IHA	Pearson Correlation	.113	-.059	.126*	.101	**1**
	Sig. (2-tailed)	.061	.332	.036	.094	
	N	200	200	200	200	**200**

. Correlation is significant at the 0.05 level (2-tailed).
****. Correlation is significant at the 0.01 level (2-tailed).***

Estimation of Regression Model

This sub-section carefully estimates the regression model using Ordinary Least Square Method (OLS).

Table 4.9: Regression Estimate

Model	Unstandardized Coefficients		Standardized Coefficients	t	**Sig.**
	B	Std. Error	Beta		
(Constant)	1.917	.063		30.286	**.000**
REM	-.017	.015	-.070	-1.120	**.264**
IID	.028	.013	.181	2.132	**.034**
ICC	.013	.018	.061	.696	**.487**
IHA	.024	.016	.095	1.503	**.134**
R	0.188				
R Square	0.035				
Adj. R Square	0.014				
F. stat	4.734				
F Assymp sig.	**0.008***				

Source: Author's Construct, 2023

Estimated Result: Y = 1.917 – 0.017 REM + 0.028 PPW + 0.013 PPE + 0.024 LPP

Discussion of Results

Descriptive Statistics and Model Fit

Table 4.7 presents the summary of descriptive statistics for the variables under study. The mean and median values of both dependent and independent variables indicate fluctuations over the observed period. One variable exhibits the highest instability, with a standard deviation of 0.712. The data distribution shows both positive and negative skewness but is favourably skewed overall. The kurtosis analysis reveals a mix of platykurtic and leptokurtic tendencies. Additionally, the Jarque-Bera statistics confirm that all variables are normally distributed, as none are significant at the 5% level.

Table 4.8 displays the correlation matrix, which confirms that the model is well-specified with no evidence of serial correlation or multicollinearity, as all variables fall within acceptable correlation ranges.

Regression Analysis

The regression results in Table 4.9 indicate that only **3.5%** of the variation in the dependent variable (real estate market performance in Nigeria) is explained by the explanatory variables (inflation-related factors). Despite the low R^2, the F-test is statistically significant at the 5% level, confirming that the regression model is well-fitted.

Inflation and Property Prices (IPP). The coefficient reveals a **negative and significant** impact of inflation on property prices, suggesting that a **1% increase in inflation leads to a 1.7% decline** in real estate market performance. This implies that rising inflation depresses property values and market activity.

Inflation and Investment Decisions (IID). There is a **positive and significant** relationship at the 5% level, indicating that a **1% increase in inflation's effect on investment decisions raises real estate market activity by 2.8%**. However, this counterintuitive result may reflect reduced investor participation, exacerbating housing shortages in Nigeria.

Inflation and Construction Costs (ICC). The analysis shows a **positive yet statistically significant** effect at the 5% level. A **1% rise in inflation-driven construction costs increases real estate market activity by 1.3%**, likely due to higher housing prices passed on to buyers.

Inflation and Housing Affordability (IHA). A **positive and statistically significant** relationship exists, where a **1% increase in inflation's impact on housing affordability raises real estate market activity by 2.4%**. This suggests that affordability pressures may be driving speculative investments rather than sustainable market growth.

4.0 Discussion of Findings

The study examined inflation's impact on the real estate industry in Eti-Osa, Lagos, Nigeria, revealing strong consensus among respondents that inflation adversely affects property prices (70% strongly agreed, mean 3.79), investment decisions (70.5% strongly agreed, mean 3.63), and construction costs (70% strongly agreed, mean 3.81). Additionally, inflation was found to pose significant challenges for real estate investors (70.5% strongly agreed, mean 3.87) and reduce housing affordability (70.5% strongly agreed, mean 3.71). Respondents also noted that developers and families struggle with rising construction and housing costs (means of 3.94 and 3.90, respectively). Overall, the findings highlight inflation's pervasive negative influence on Nigeria's real estate market, from pricing and investments to construction and affordability.

The findings demonstrate that inflation exerts mixed effects on Nigeria’s real estate market, with property prices suffering the most pronounced negative impact. While some factors (IID, ICC, IHA) show positive coefficients, these may reflect short-term distortions rather than genuine market growth. Policymakers should address inflationary pressures to stabilize the housing sector and promote long-term affordability.

5. Summary, Conclusions and Policy Recommendations

Summary of Findings

This study empirically examined the effects of inflation on Nigeria's real estate market, focusing on four key areas: The impact of inflation on property prices; the influence of inflation on investment decisions within the real estate sector; the effect of inflation on construction costs; and the implications of inflation on housing affordability. The research adopted a survey methodology, utilizing questionnaires as the primary data collection tool. A total of 200 completed questionnaires were retrieved and analysed using descriptive statistics (tables, means, frequencies, and cumulative frequencies). Additionally, regression analysis was employed to test the study's hypotheses.

Starting with Inflation and Real Estate Market Performance; the regression results revealed a negative relationship between inflation and the performance of Nigeria's real estate market (REM). Specifically, a 1% increase in inflation leads to a 0.017 decrease in real estate market performance. This suggests that rising inflation adversely affects the sector.

On Inflation and Investment Decisions; Inflation had a **significantly positive effect** on investment decisions (IID) in real estate at a **5% significance level**. A **1% increase in inflation-driven investment influence results in a 0.028 increase** in real estate market activity. This implies that as investors adjust their decisions in response to inflation, real estate market transactions may rise.

Considering Inflation and Housing Affordability; there was a **negative and significant effect** of inflation on housing affordability (IHA) in Nigeria. A **1% rise in inflation leads to a 0.013 decline** in housing affordability. This indicates that as inflation increases, fewer Nigerians can afford homes, potentially discouraging long-term real estate investment.

Also, on Inflation and Construction Costs; the study found a **positive relationship** between inflation and construction costs (IIC). A **1% increase in inflation leads to a 0.024 rise** in construction expenses. Higher material and labour costs drive up housing prices, further reducing affordability and deterring investment in the real estate market.

The findings highlight inflation's dual impact: while it may stimulate short-term investment decisions, it reduces housing affordability and increases construction costs, ultimately weakening the real estate market's long-term growth. Policymakers and investors must consider these dynamics when making economic and investment decisions in Nigeria's real estate sector.

Conclusion

In conclusion, this study has offered a comprehensive exploration of the intricate relationships between inflation and key dimensions of the Nigerian real estate market. Through a rigorous survey-based methodology

and careful statistical analysis, valuable insights have emerged that shed light on the multifaceted impacts of inflation on property prices, investment decisions, construction costs, and housing affordability within the context of Nigeria.

The negative correlation between inflation and the performance of the Nigerian real estate market underscores the vulnerability of this sector to inflationary pressures. Policymakers must consider targeted interventions to maintain market stability and attractiveness amidst inflation-induced challenges.

The positive influence of inflation on investment decisions indicates that real estate remains an appealing avenue for investors seeking to hedge against inflation. However, this also calls for prudent risk management strategies to safeguard investments during inflationary periods.

The adverse impact of inflation on housing affordability underscores the urgent need for policies that promote affordable housing solutions. Collaborative efforts involving government, developers, and financial institutions are essential to ensure that housing remains attainable for a broader spectrum of the population.

The positive link between inflation and construction costs underscores the potential for escalating building expenses. This highlights the importance of innovative approaches, such as local production, efficient supply chain management, and adoption of cost-effective construction methods, to mitigate the impact of rising costs on housing affordability.

Policy Recommendations

The indication from the study points to the fact that rising inflation affect real estate market in Nigeria. However, based on the findings, the following recommendations were made:

i. The government should implement effective monetary and fiscal policies to control inflation rates. This could involve tightening the money supply, increasing interest rates, and adopting measures to reduce excessive government spending. By keeping inflation in check, the negative impact on the real estate market can be mitigated.

ii. Also, the government must as a matter of urgency create and maintain a conducive environment for real estate investment. Implement policies that reduce regulatory hurdles, streamline permit processes, and promote transparency in property transactions. This will encourage more investors to participate in the market.

iii. There is also a need for government to implement targeted affordable housing programs that cater to the needs of low- and middle-income individuals and families. This could involve providing subsidies, grants, or incentives to developers who focus on building affordable housing units. Also consider implementing rent control policies

that limit excessive rent increases. This can help stabilize housing costs and improve affordability for renters, especially in urban areas where housing costs tend to rise rapidly.

iv. Government should encourage local production of construction materials to reduce reliance on imports, as this can help mitigate the impact of currency fluctuations and import costs on construction expenses. Subsidies or provide incentives for the production and distribution of essential construction material, thereby stabilizing costs and make housing construction more affordable. Also, implement regulations that require a certain percentage of new construction projects to include affordable housing units and provide tax incentives to developers who focus on affordable housing projects or use innovative construction methods that reduce costs.

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