IMPACT OF INFLATION ON RENTAL VALUE OF RESIDENTIAL PROPERTIES IN BENIN CITY

BY

BUZORME IFEANYI FIDELIS

ENV1905937

SUPERVISED BY

DR.(MRS) O. EDIONWE

THESIS PRESENTED TO THE

DEPARTMENT OF ESTATE MANAGEMENT

FACULTY OF ENVIRONMENTAL SCIENCE

UNIVERSITY OF BENIN

BENIN CITY.

IN PARTIAL FULFILMENT FOR THE REQUIREMENT OF AN AWARD OF

BACHELOR OF SCIENCE IN ESTATE MANAGEMENT.

FEBRUARY, 2025

CERTIFICATION

This is to certify that this research project "IMPACT OF INFLATION ON RENTAL VALUE OF RESIDENTIAL PROPERTIES IN BENIN CITY" was carried out by BUZORME IFEANYI FIDELIS of the Department of Estate Management, Faculty of Environmental Science, University of Benin, Benin City, Edo State, Nigeria under the supervision of Dr. Mrs. EDIONWE

_____

Dr. (Mrs). O. Edionwe **Date**

(Project Supervisor)

_____ **Date**

Dr. M. O. Komolafe

(Head of Department)

_____ **Date**

Prof. M.B. Ogunleye

(External supervisor)

DEDICATION

This work is dedicated to God almighty for His wisdom, guidance and ever abounding love towards me. And also to my little sister, Miss Buzorme Chineye Deborah. I love you now and will forever love and have you in mind.

ACKNOWLEDGMENT

Firstly, my gratitude goes to God who is most supreme, the author of knowledge and the giver of every good gift for this great gift of a B.sc degree in estate management which journey started years' back with an admission.

Secondly to the vice chancellor of this great and prestigious university for the honor of being tutored in this university and also to the dean of environmental science faculty and my very own head of department, Dr. Markson Komolafe (ESV), my course adviser, ESV Chima pius for being an amazing leader, and for all of his kind and advisory role all through this five years of learning. To my project supervisor, Dr. Mrs Edionwe (ESV) for her immense contributions and guidance throughout this research study. Also to all lectures of the department of estate management who has imparted knowledge to me all through my study in the university of Benin, and all staff of this great department.

My gratitude as well extends to all my friends who has been such an inspiration and a source of strength, to Ogbe ochombia Philip, Okholo Rebeccah, Obazee favour, Oladepo Damilola Esther, you all have been truly amazing. And to every member of the class.

To my parents Mr. and Mrs. Buzorme I say a big thank you for the trust you have had in me, for your prayers and guidance. To my uncles, Mr. Chibuzor Buzome, Mr. Isaac odili, I say thank you for your profound contributions in my academic journey. To Mr. chiwike Nwankwor, thank you sir for always believing in me and for your support as well. Lastly to my siblings Nneka, Hope, Favour, Miracle, onyekachukwu Emmanuel and chineye I love you all. And to my pastors and all those who has in one way or the other affected, imparted and transformed my life, therby making me a better version of who I am today I say God bless you all and thank you.

DECLARATION

I declare that this research work **titled "IMPACT OF INFLATION ON RENTAL VALUE OF RESIDENTIAL PROPERTIES IN BENIN CITY"** is an original work carried out by me, **BUZORMEIFEANYI FIDELIS** with Matriculation number **ENV1905937** in the Department of Estate Management, University of Benin, Benin city under the supervision of **Dr. Mrs. ENDIONWE**

BUZORME IFEANYI FIDELIS **signature…….**

ENV1905937 **Date…….**

TABLE OF CONTENT

ABSTRACT

This research investigates the Impact of inflation on rental value of residential properties, and the measures undertaken by estate surveyors and valuers in ensuring that residential real estate are adequately able to provide a hedging characteristic against inflation. The study examines the relationship between inflation and rental value of residential properties in Benin, and it also examines various other factors that influences rental value of residential real estate such as location, building material cost etc, and other inflation related factors which affect rental rate. The research adopts the survey research design method, thereby employing the use of questionnaire as means of primary data collection, it also adopts the secondary data collection model from the NBS(Nigeria Beareau of statistics). All data collected in this research were analyzed through the use of the multiple regression analysis and the pearson correlation model. The findings from this research study reveals that rental value over the years has been significantly increased to keep pace with inflation, thereby providing a hedge and also accounting for landlords income. The study also reveals that there is a significant relationship between various property type, inflation and non- inflation related factor in the determination of residential rental value as change in one variable factor is likely to cause a significant change in other factors.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Nigeria has grappled with high inflation rates for several years, driven by factors such as fluctuations in global oil prices, currency devaluation, and structural economic challenges (Ademola & Badiru, 2016; Akinbobola & Oregun, 2018). According to the National Bureau of Statistics (2023), Nigeria's inflation rate stood at 21.91% as of February 2023, one of the highest rates globally. This persistent inflation has eroded the purchasing power of individuals and households, potentially affecting their ability to afford housing costs (Chukwu et al., 2020). Inflation is a persistent and pervasive economic phenomenon that affects the overall performance of an economy. It is a sustained increase in the general price level of goods and services in an economy over a period of time. Inflation erodes the purchasing power of money, reducing the value of currency, and affecting the economy in various ways. In the context of residential property rental values, inflation can have a significant impact, as it can influence the rental income generated by properties. And tenant ability to occupy a befitting and more comfortable property or apartment. Theories of inflation have been developed by scholars to explain its causes and effects. Demand-pull inflation occurs when aggregate demand exceeds the available supply of goods and services (Krugman, 2015). Cost-push inflation occurs when there are increases in production costs, such as higher wages or raw materials (Sloman, 2017). Monetary inflation occurs when there is an increase in the money supply (Friedman, 1968).

Inflation can have both positive and negative effects on the economy. On the positive side, a moderate level of inflation can stimulate economic growth by encouraging spending and investment (Schumpeter, 1934). On the negative side, high inflation can lead to reduced

purchasing power, uncertainty for businesses and individuals, and inequality (Keynes, 1936). And this often result to fear of investment for investors and greater risk in return from investment. Nigeria, like many other developing countries, has struggled with high inflation rates over the years. According to the National Bureau of Statistics (NBS), Nigeria's inflation rate has fluctuated between 9.5% and 18.3% over the past decade (NBS, 2022). This high inflation rate has far-reaching implications for the economy, including the real estate sector.

The real estate sector in Nigeria and Benin City has experienced significant growth and challenges over the years, particularly in response to inflationary pressures. Nigeria's real estate sector has been impacted by inflation, with property values and rents increasing in response to rising costs (Akinbogun & Akinbogun, 2019). However, the sector has also shown resilience, with demand for housing and commercial spaces remaining strong despite economic challenges (Oladapo & Ajayi, 2020). In Benin City, the real estate market has experienced significant growth, driven by government investments in infrastructure and urban development (Ebhodaghe & Egbodaghe, 2018). However, the city has also faced challenges related to inflation, including increased construction costs and reduced purchasing power (Ibhadode & Oladapo, 2020). Studies have shown that real estate prices in Nigeria and Benin City are influenced by inflationary pressures, with property values increasing in response to rising costs (Akinbogun & Akinbogun, 2019; Ibhadode & Oladapo, 2020). However, the sector has also demonstrated adaptability, with developers and investors responding to changing market conditions. To mitigate the impacts of inflation, real estate developers in Nigeria and Benin City have adopted various strategies, including: Diversification of investments (Oladapo & Ajayi, 2020).Adoption of innovative technologies (Ebhodaghe & Egbodaghe, 2018). Focus on affordable housing (Akinbogun & Akinbogun, 2019). Development of mixed-use projects (Ibhadode & Oladapo, 2020)

Residential property is a vital component of the real estate market, providing shelter and housing for individuals and households. The concept of residential property encompasses various types of properties, including single-family homes, apartments, condominiums, and townhouses. The demand for residential property is driven by population growth, urbanization, and economic development (Kumar, 2019). The value of residential property is influenced by several factors, including location, size, condition, and amenities (Sloman, 2017). Location is a critical factor, as it affects the accessibility and desirability of the property (Fisher, 2017). The size and condition of the property also impact its value, as well as the presence of amenities such as schools, transportation, and shopping centers (Krugman, 2015). Residential property is a significant investment for individuals and households, providing a sense of security and stability (Schumpeter, 1934). However, it is also subject to market fluctuations, with prices and rental values influenced by economic conditions, government policies, and demographic trends (Friedman, 1968).

In Nigeria, the residential property market has experienced significant growth in recent years, driven by urbanization and economic development (NBS, 2022). However, the market faces challenges, including inadequate housing supply, high costs, and limited access to financing (World Bank, 2020). The city of Benin is a significant urban center in Nigeria, with a growing population and economy. The city has experienced significant growth in recent years, driven by its strategic location and economic development (NBS, 2022). However, the city faces challenges, including inadequate housing supply, high costs, and limited access to financing (World Bank, 2020).

The rental market in Benin is characterized by high demand and limited supply, leading to high rental values (Chukwu et al., 2020). The city has a mix of old and new properties, with varying levels of quality and amenities (Sloman, 2017). The rental market is also influenced by government policies, such as rent control measures, which can affect the supply and demand for rental properties (Fisher, 2017). The impact of inflation on residential property rental values is a significant concern in Nigeria. High inflation rates can lead to increased rental values, making it difficult for individuals and households to afford housing costs (Chukwu et al., 2020). This study aims to investigate the impact of inflation on residential property rental values in Nigeria, with a specific focus on the city of Benin.

1.2 Statement of the Problem

Rental value of residential property is affected by various factors, including inflation rate. However, the impact of inflation rate on rental value of residential property has not been fully explored, especially in developing countries like Nigeria Rental value of residential properties is also considered a critical component of the real estate market, and understanding how inflation affects it is essential for stakeholders. However, there is a significant knowledge gap in this area, particularly in the Nigerian economy. While some studies have examined the impact of inflation on property values, few have focused specifically on rental values of residential properties in urban cities.

Over the years in Nigeria, inflation remains a persistent issue in the Nigeria economy ranging between the rate of a single digits in 2015 to a double digit in 2022 which has continued until 2024 and has also exceeded the CBN predicted rate as of January 2024. In the past ten years Inflation has negatively affected the Nigeria economy with the real estate market not left out as

well. Inflation has over the years in the residential property market proven to provide an imperfect hedge (partial edge) to the real income of landlords because of the lag it provides in rental yield.

Inflation, remains a persistent economic challenge, having far-reaching consequences on various sectors, including the real estate industry (CBN, 2022). The rental market, a significant component of the residential property sector, is particularly vulnerable to inflationary pressures (Oladapo & Ajayi, 2020). As inflation rises, the purchasing power of renters decreases, leading to reduced demand and lower rental values (Akinbogun & Akinbogun, 2019). However, the impact of inflation on rental values of residential properties in Nigeria remains understudied, with limited research investigating this relationship (NPC, 2021).

Furthermore, the Nigerian economy has experienced a significant increase in inflation rate in recent years, which has led to a decrease in the purchasing power of consumers (CBN, 2022). This decrease in purchasing power has resulted in reduced demand for residential properties, leading to lower rental values (Akinbogun & Akinbogun, 2019). Additionally, the imperfections in the Nigerian rental market, such as inadequate housing supply and high transaction costs, have exacerbated the impact of inflation on rental values (Oladapo & Ajayi, 2020).

Moreover, the existing literature has highlighted the need for a comprehensive understanding of the relationship between inflation and rental values in Nigeria (NPC, 2021). This study aims to contribute to the existing literature by investigating the impact of inflation on rental values of residential properties in Nigeria. By examining the relationship between inflation and rental values, this study will provide valuable insights for property investors, policymakers, and other stakeholders in the real estate industry. The findings of this study will also have implications for

policy makers, as they will provide insights into the impact of inflation on the rental market (CBN, 2022). This will enable policy makers to develop effective policies to mitigate the impact of inflation on the rental market and ensure that the real estate industry continues to contribute to the growth of the Nigerian economy.

1.3 Research question

These research questions aim to explore the relationship between inflation and rental value, the extent of the impact, and the possible factors that influence this relationship. And these questions would focus on:

1. What is the Historical trends in inflation between ten years (2014-2023)

2. What are the relationship between inflation rates and Rental value in Benin city Nigeria

3. What are the factors responsible for changes in rental values of residential properties.

1.4 Aim of the study

The aim of the study is to investigate the impact of inflation on the rental value of residential properties in Benin city with a view of providing information to stakeholders on how inflation affects the real income of landlords and tenants within the region.

1.5 Objective of the study

The objectives of the study are to;

I. Analyze historical trend in inflation for a period of 10 years. (2014-2023)

II. Examine the relationship between inflation rate and rental value of residential properties.

III. Examine other factors that influence the rental value of residential property alongside inflation

1.6 Significance of the Study

The study on the impact of inflation on rental value of residential property in Benin is significant for several reasons. Firstly, it contributes to the existing body of knowledge on the topic, providing valuable insights for policymakers, investors, and other stakeholders in the real estate industry.

In terms of policy, the study's findings will inform decisions aimed at managing inflation and promoting economic stability. By understanding the impact of inflation on rental values, policymakers can develop policies that mitigate its negative effects on the rental market and the broader economy. For instance, the study's findings may suggest the need for policies that control rent increases, provide subsidies for low-income households, or promote affordable housing initiatives.

From an investment perspective, the study's findings will provide valuable information for potential real estate investors and developers. By understanding the impact of inflation on rental values, investors can make informed decisions about investment opportunities in the city. This may suggest that investing in rental properties in Benin is a viable option, despite the challenges posed by inflation generally in the Nigerian economy, knowing adequately that real estate investment serves as a hedge against inflation, and that real estate investment appreciate largely with time.

In terms of urban planning, the study's findings will contribute to efforts aimed at developing sustainable and resilient and smart cities. By understanding the impact of inflation on rental

values, urban planners can develop strategies that address the housing needs of the city's growing population. The findings may suggest the need for urban planning policies that prioritize affordable housing, public transportation, and community development.

Furthermore, the study's findings will have significant implications for households and individuals living in Benin. By understanding the impact of inflation on rental values, households can make informed decisions about their housing options. This suggest that households need to budget more for housing expenses, or explore alternative housing options such as shared accommodation or home ownership.

In addition, the findings will contribute to the development of the real estate industry in Benin. By understanding the impact of inflation on rental values, real estate developers and agents can develop strategies that address the needs of their clients.

Overall, the study on the impact of inflation on rental value of residential property in Benin is significant because it provides valuable insights for policymakers, investors, urban planners, households, and the stakeholders in the real estate industry. The study's findings will contribute to the development of more sustainable and resilient cities, and inform decisions aimed at promoting economic stability and affordable housing.

The study's significance extends beyond the academic community, as it has practical implications for stakeholders in the real estate industry. The findings of this study can be used to inform policy decisions, investment strategies, and urban planning initiatives. Moreover, the study's findings can be generalized to other cities in Nigeria and beyond, providing valuable insights for policymakers and stakeholders in the real estate industry

1.7 Motive of the study

Over the years in Nigeria, inflation has been on the rampage reducing the purchasing power of the real income of consumers within the nation there by causing increase in the standard of living and of citizens and also causing increase in the poverty and dependency ratio within the economy.

Inflation in Nigeria has grown over the past decades from a single digits to double digits and even surpassing the estimate digits or ratio as earlier or which are often estimate by the Central Bank of Nigeria and also the NBS. For instance inflation rate in Nigeria as at 2022 stood at 18.85% and is currently at 34.19% which has been the highest so far since 1966 (CBN and NBS)

Furthermore, inflation has gazetted all sector of the Nigeria economy with the real estate sector not been left out. Inflation in the real estate sector brought about an increase in cost of housing construction amd housing rental value, it has also increased lending rate and also a reduce demand in suitable housing conditions and this calls for a comprehensive study to ascertain the extent to which inflation has affect in particular residential housing demand and conditions.

This study was borne out of the concern of examining residential properties rental value response to inflation seeing that shelter is one of man's basic needs.

1.8 Description of the study area

Benin City, the capital of Edo State, is situated in southern Nigeria, on a branch of the Benin River, and lies along the main highways connecting Lagos to the eastern states.It is the former principal city of the Edo (Bini) kingdom of Benin, which flourished from the 13th to the 19th century, and latter was destroyed by the British in 1897.

Benin city is a culturally rich city and boasts of a royal heritage, intricate artworks, and vibrant festivals, making it a must-visit destination for curious explorers. Its warm hospitality and historical significance are enhanced by its connectivity to Sapele, Siluko, Okene, and Ubiaja via roads, as well as its access to air travel and the Niger River delta ports of Koko and Sapele.

Benin City has a long history of expertise in brass work, ivory, and wood carvings, with present-day artisans continuing to practice of the ancient method of cire perdue ("lost-wax") casting. The city's wood-carvers are organized into a cooperative craft society, and its reputation as the center of Nigeria's rubber production is reinforced by several processing plants and a crepe rubber factory. The city boasts of a population of over 1 million people, the majority of whom are the Edo people, Benin City is a vibrant and diverse metropolis.

Benin City is home to several reputable educational institutions, including the University of Benin, which is one of Nigeria's top universities.

The population is unevenly distributed across the city, with higher densities in the central business district and lower densities in the outskirts (CityFacts,n.d).The city's spatial arrangements are characterized by a mix of residential, commercial, and industrial areas, with a lack of proper planning and infrastructure in some areas (Edo State Government n.d.).

The high population density and rapid urbanization have led to challenges such as inadequate housing, traffic congestion, and strain on public services (World Bank, 2020). The city's infrastructure is often overwhelmed by the growing population, leading to issues such as flooding, poor sanitation, and inadequate waste management (Adeleke, 2020).

Despite these challenges, the Edo State government has initiated efforts to address them, including the development of new urban plans and the provision of affordable housing (Edo State Government, n.d.). The government has also invested in infrastructure development, including the construction of new roads and the upgrade of existing ones (Nigerian Government, 2020).

Benin City's population density and spatial arrangements have significant implications for the city's development and sustainability. The city's high population density and rapid urbanization require careful planning and management to ensure that the city's infrastructure and services can support the growing population.

CHAPTER TWO

LITERATURE REVIEW

IMPACT OF INFLATION ON RENTAL VALUE OF RESIDENTIAL PROPERTIES IN BENIN CITY.

Introduction

Inflation and its effects on various economic sectors have been a subject of extensive research globally. In the context of real estate, particularly residential property rentals, the relationship between inflation and rental values has garnered significant attention from scholars and practitioners alike.

2.1 Definition of terms:

Inflation: A sustained increase in the general price level of goods and services in an economy over a period of time. It is measured as an annual percentage increase in the Consumer Price Index (CPI).

Inflationary gap: The difference between the actual inflation rate and the target inflation rate set by a country's central bank or monetary authority.

Rent: A payment made by a tenant to a landlord for the temporary use of a property, usually monthly or annually.

Rental value: The amount of money that a property would command in the market if it were rented instead of sold.

Residential: Relating to housing or homes, as opposed to commercial or industrial properties.

Residential property: A type of property designed for human habitation, such as single-family homes, apartments, condominiums, and townhouses.

2.2.0 Inflation and Rental value

Inflation, defined as a sustained increase in the general price level of goods and services in an economy over time, has been widely recognized as a critical factor influencing real estate markets (Dabara et al., 2016). Inflation significantly impacts property values and rental rates across different Nigerian cities, including Benin City.

Several studies have explored the relationship between inflation and rental values in various contexts. Odu (2011) investigated the impact of inflation on residential property rents in Nigeria, finding a strong positive correlation between inflation rates and rental values across major cities, including Benin City. The study suggested that landlords often adjust rents upward in response to inflationary pressures to maintain the real value of their rental income. In a more specific study focused on Benin City, Emoh and Nwachukwu (2016) examined the factors influencing residential property values, including inflation. Their findings indicated that inflation was among the top three factors affecting both property prices and rental values in the city, alongside location and property condition

Real estate as a Hedge against Inflation

Some researchers argue that real estate, including rental properties, can serve as a hedge against inflation. Fang et al. (2016) conducted a comprehensive analysis of the inflation-hedging effectiveness of real estate across different countries. While their study didn't specifically focus on Benin City, it provided insights into how rental properties in developing economies often demonstrate strong inflation-hedging characteristics. However, the effectiveness of real estate as

an inflation hedge can vary depending on local market conditions. Ajayi and Ojo (2017) studied the Nigerian context and found that while real estate generally provides a good hedge against inflation, the relationship is not always consistent across all property types and locations. From the tenant's perspective, inflation can significantly impact affordability. Nwuba and Nuhu (2018) investigated the effects of inflation on housing affordability in Nigerian cities, including Benin City. They found that periods of high inflation often lead to a decrease in housing affordability, as rental increase typically outpace wage growth.

Policy Implications

The relationship between inflation and rental values has important policy implications. Okafor and Onwumere (2017) explored the role of monetary policy in managing inflation and its subsequent effects on the real estate market in Nigeria. They argued for more targeted policies to address the specific challenges faced by the housing sector during inflationary periods.

2.2.1 Inflation and Its Impact on Real Estate

Inflation is a fundamental economic concept that has far-reaching effects across various sectors, including real estate. As Dabara et al. (2016) point out that inflation significantly influences property markets, affecting both property values and rental rates. This relationship is complex and multifaceted, with several key aspects to consider:

Asset Appreciation: In inflationary periods, real estate often appreciates in value. As the general price level in an economy rises, the nominal value of real estate typically increases as well. This is because real estate is a tangible asset that tends to maintain its real value over time. Investors often view real estate as a hedge against inflation for this reason (Fang et al., 2016).

Rental Income: Inflation usually leads to increases in rental income. Landlords often adjust rents upward to keep pace with inflation, aiming to maintain the real value of their rental income. This is particularly relevant in markets with short-term lease agreements, where rents can be adjusted more frequently (Odu, 2011).

Construction Costs: Inflation affects the cost of construction materials and labor. As these costs rise, the replacement value of existing properties increases, which can drive up both property values and rents for new and existing properties (Emoh & Nwachukwu, 2016).

Demand Dynamics: During periods of high inflation, people may view real estate as a more stable investment compared to cash or bonds, potentially increasing demand for property. This increased demand can drive up both property prices and rental rates.

In the Nigerian context, including Benin City, the relationship between inflation and real estate has some unique characteristics:

Economic Volatility: Nigeria, as an emerging economy, often experiences more significant inflationary pressures compared to developed economies. This volatility can lead to more pronounced effects on the real estate market (Ajayi & Ojo, 2017).

Currency Devaluation: High inflation in Nigeria is often accompanied by currency devaluation. This can make real estate, particularly in urban centers like Benin City, an attractive investment for both local and international investors looking to preserve wealth (Okafor & Onwumere, 2017).

Urbanization and Market inefficiencies: Rapid urbanization in Nigerian cities, including Benin City, has led to increased demand for housing. This demographic pressure, combined with

inflationary trends, can result in significant increases in both property values and rental rates (Omofonmwan & Odia, 2009). The Nigerian real estate market, including Benin City, may not always respond efficiently to inflationary pressures due to factors such as information asymmetry, informal market practices, and regulatory challenges. This can lead to market distortions and potential opportunities for informed investors (Dabara et al., 2016).

Income Disparity: While inflation tends to drive up property values and rents, it doesn't always correspond with increases in income for the general population. This can lead to affordability issues, particularly for lower and middle-income renters in cities like Benin City (Nwuba & Nuhu, 2018).

Regional Variations: While Dabara et al. (2016) found that inflation impacts property values and rental rates across different Nigerian cities, including Benin City, it's important to note that the magnitude of this impact can vary. Local factors such as economic conditions, population growth, and infrastructure development can influence how strongly inflation affects the real estate market in specific areas.

The relationship between inflation and real estate in Nigeria, and specifically in Benin City, is significant and multifaceted. Understanding this relationship is crucial for property investors, developers, policymakers, and tenants alike. It underscores the need for ongoing research to better understand local market dynamics and to develop strategies for managing the impacts of inflation on the real estate sector.ll

2.2.2 Rental Value Determination

The determination of rental values in the real estate market is a complex process influenced by a multitude of factors, ranging from microeconomic considerations to broader macroeconomic

variables. At its core, rental value determination is fundamentally driven by the interplay of supply and demand in the housing market. However, this seemingly simple economic principle is complicated by various factors that affect both the supply of rental properties and the demand for housing.

The seminal work of DiPasquale and Wheaton (1992) provided a comprehensive framework for understanding the interconnectedness of the asset and property markets in real estate. Their four-quadrant model illustrates how rental rates, property prices, construction, and housing stock are interrelated, offering valuable insights into the mechanisms of rental value determination. This model has become a cornerstone in real estate economics, providing a theoretical foundation for understanding how various economic factors, including inflation, impact rental values.

Supply-side factors play a crucial role in rental value determination. The available stock of rental properties in a given market is a primary consideration. Glaeser and Gyourko (2005) demonstrated that the elasticity of housing supply significantly influences how rental markets respond to demand shocks. In areas with inelastic supply, such as densely populated urban centers with strict zoning laws, increases in demand tend to result in more substantial rent increases compared to areas with more elastic supply.

The cost of new construction and property maintenance also affects rental values. Somerville (1999) found that construction costs have a significant impact on the supply of new rental units, which in turn affects rental rates. During periods of high inflation, these costs typically increase, potentially leading to higher rents as property owners attempt to maintain their profit margins (Feldstein, 1992).

On the demand side, numerous factors influence rental values. Population growth and demographic shifts are key drivers of housing demand. Mankiw and Weil (1989) famously argued that demographic changes, particularly the aging of the baby boomer generation, had significant impacts on housing demand and, by extension, on housing prices and rents. While their specific predictions have been debated, the importance of demographic factors in shaping housing markets is widely accepted.

Income levels and employment rates in a given area also play a crucial role in determining rental values. Quigley and Raphael (2004) found a strong correlation between income levels and rental rates, with higher-income areas generally commanding higher rents. Furthermore, areas with robust job markets tend to experience stronger demand for rental housing, potentially driving up rental values (Roback, 1982).

Macroeconomic factors, including inflation and interest rates, have significant impacts on rental value determination. Inflation, in particular, can affect rental values through multiple channels. As noted by Arnott (1995), inflation can lead to increased construction and maintenance costs, which property owners may attempt to pass on to renters. Additionally, in inflationary environments, real estate is often viewed as a hedge against inflation, potentially increasing demand for property ownership and, by extension, affecting the rental market. Interest rates, closely linked to inflation expectations, also play a role in rental value determination. Lower interest rates can make homeownership more attractive, potentially reducing demand for rental properties. Conversely, higher interest rates may push more people towards renting, increasing demand and potentially driving up rental values (Himmelberg et al., 2005).

The relationship between house prices and rents is another crucial aspect of rental value determination. The price-to-rent ratio, a common metric used in real estate analysis, provides insights into the relative affordability of buying versus renting. Gallin (2008) found that house prices and rents are cointegrated in the long run, suggesting that significant deviations from the long-term price-to-rent ratio may lead to adjustments in both house prices and rental values. Local market conditions and neighborhood characteristics also play a significant role in rental value determination. Amenities such as proximity to public transportation, quality of local schools, and access to green spaces can significantly impact rental values. For instance, Bowes and Ihlanfeldt (2001) found that proximity to rail transit stations had a positive effect on property values in Atlanta, which could translate to higher rental values as well.

Government policies and regulations can have profound effects on rental markets and, consequently, on rental value determination. Rent control policies, for example, can significantly impact how rental values are determined in regulated markets. While intended to maintain affordability, studies such as Glaeser and Luttmer (2003) have shown that rent control can lead to misallocation of housing resources and potentially distort market signals.

The rise of short-term rental platforms like Airbnb has introduced new dynamics into rental markets, potentially affecting long-term rental values. Horn and Merante (2017) found that the growth of Airbnb listings was associated with increasing rents in Boston, suggesting that the sharing economy can have significant impacts on traditional rental markets.

Technological advancements and changing work patterns are also beginning to influence rental value determination. The COVID-19 pandemic, for instance, has accelerated trends towards remote work, potentially shifting demand patterns in rental markets. While the long-term impacts

are still unfolding, early studies suggest that these changes could lead to significant reconfigurations of rental markets, particularly in urban areas (Gupta et al., 2021).

Rental value determination is a complex process influenced by a wide array of factors. While the basic principle of supply and demand remains at the core of this process, the multitude of variables affecting both supply and demand makes rental value determination a nuanced and often challenging task. From macroeconomic factors like inflation and interest rates to local market conditions and government policies, a comprehensive understanding of these various influences is crucial for accurately assessing and predicting rental values in the dynamic real estate market.

2.3.1 Inflation and Rental Values: Global Perspectives

The relationship between inflation and rental values is a critical area of study in real estate economics, with significant implications for investors, policymakers, and households alike. This relationship, however, is not uniform across the globe, with notable differences observed between developed and emerging economies. These variations can be attributed to differences in economic structures, monetary policies, regulatory environments, and demographic trends.

In developed economies, the relationship between inflation and rental values has been the subject of extensive research, yielding mixed results that highlight the complexity of this economic interaction. The seminal work of Fama and Schwert (1977) laid the groundwork for understanding real estate as an inflation hedge. Their study, focusing on the United States from 1953 to 1971, found that residential real estate provided a complete hedge against both expected and unexpected inflation. This finding suggested that real estate investments, including rental properties, could maintain their real value in the face of inflationary pressures. However,

subsequent research has revealed a more nuanced picture. Anari and Kolari (2002) examined the long-term relationship between housing prices and goods prices in the United States from 1968 to 2000. They found that while housing prices do adjust to inflation in the long run, there can be significant short-term deviations. This suggests that the inflation-hedging ability of real estate, including rental properties, may vary over time and may not provide immediate protection against inflationary shocks.

Bond and Seiler (1998) studied the inflation-hedging properties of residential real estate in the United Kingdom from 1983 to 1996. They found that housing provided a hedge against expected inflation but not against unexpected inflation. This distinction is crucial for understanding how rental values might respond to different types of inflationary pressures. In a comprehensive study of international real estate markets, Hoesli et al. (2008) examined the inflation-hedging characteristics of real estate investments in the United States, the United Kingdom, and Switzerland. They found that real estate provides a partial hedge against inflation in these countries, but the effectiveness varies across different time horizons and inflation measures. Notably, they observed that real estate tends to provide better inflation protection over longer time horizons.

The relationship between inflation and rental values can also vary across different property types within developed economies. Hartzell et al. (1987) found that in the United States, commercial real estate provided a better hedge against expected inflation compared to residential real estate. This suggests that the inflation-hedging properties of rental values may differ between residential and commercial properties.

MacGregor and Nanthakumaran (1992) studied the UK property market and found that while real estate generally provided a hedge against inflation, the effectiveness varied across different property sectors. Retail properties, for instance, showed stronger inflation-hedging characteristics compared to office properties. More recent research has highlighted the importance of considering both direct and indirect effects of inflation on rental values. Deng et al. (2009) studied the Singapore real estate market and found that while inflation had a positive direct effect on house prices (which can influence rental values), it also had negative indirect effects through its impact on interest rates and income growth. This underscores the complexity of the relationship between inflation and rental values, even in developed economies.

The global financial crisis of 2008 and its aftermath have provided new insights into the inflation-rental value relationship in developed economies. Washer et al. (2016) examined the post-crisis period in the United States and found that the relationship between inflation and housing returns (including rental income) had weakened compared to previous periods. This suggests that major economic shocks can alter the established relationships between economic variables and real estate markets.

2.3.2 Emerging Economies

In emerging economies, the relationship between inflation and rental values often appears stronger and more direct compared to developed economies. This can be attributed to several factors, including higher and more volatile inflation rates, rapid urbanization, and less developed financial markets.

The study by Lim and Cheng (2010) on the Malaysian property market provides valuable insights into this relationship in an emerging economy context. They found that inflation had a

significant positive impact on house prices and rental values, particularly in urban areas. This strong relationship could be attributed to the rapid economic growth and urbanization experienced by Malaysia during the study period, which created strong demand for housing in urban centers. Similarly, Bork and Møller (2018) examined the housing markets of 18 OECD countries, including several emerging economies. They found that inflation was a significant predictor of house prices, especially in countries with higher average inflation rates. This suggests that in emerging economies, where inflation rates are often higher and more volatile, the impact on real estate markets, including rental values, may be more pronounced.

In the context of another emerging economy, Lee (2014) studied the South Korean real estate market and found a strong long-run relationship between inflation and housing prices. Given the close relationship between housing prices and rental values, this suggests that inflation likely has a significant impact on rental markets in South Korea as well. The case of Turkey, an emerging economy that has experienced periods of high inflation, provides further insights. Coskun et al. (2020) found that housing in Turkey provided a hedge against inflation, particularly during periods of high inflation. This suggests that in emerging economies with high inflation rates, real estate investments, including rental properties, may be seen as a valuable store of wealth.

In Brazil, another major emerging economy, Bonizio et al. (2022) examined the relationship between macroeconomic variables and real estate returns. They found that inflation had a significant positive impact on real estate returns, including rental income, highlighting the importance of inflationary pressures in shaping real estate markets in emerging economies.

The impact of inflation on rental values in emerging economies can also be influenced by government policies and regulations. For instance, Gu et al. (2019) studied the Chinese housing

market and found that while inflation generally had a positive impact on housing prices, this relationship was moderated by government cooling measures aimed at controlling property speculation. This highlights the importance of considering policy interventions when analyzing the inflation-rental value relationship in emerging economies.

2.4.1 Inflation Trends in Nigeria

Nigeria, as Africa's largest economy, has experienced significant macroeconomic challenges over the past decades, with inflation being a persistent concern. The country's inflation trends provide a unique backdrop for studying the impact of price instability on various sectors of the economy, including the real estate market.

According to data from the Central Bank of Nigeria (CBN), Nigeria has experienced prolonged periods of high inflation rates, often reaching double digits (Central Bank of Nigeria, 2021). Omotosho and Doguwa (2012) analyzed Nigeria's inflationary trends from 1996 to 2011 and found that the country experienced several episodes of high inflation, including periods of hyperinflation. They noted that these inflationary pressures were often driven by a combination of factors, including monetary expansion, exchange rate depreciation, and structural rigidities in the economy. The persistence of high inflation in Nigeria has been a subject of extensive research. Adu and Marbuah (2011) examined the determinants of inflation in Nigeria from 1960 to 2009 and found that both monetary and structural factors played significant roles. They highlighted the importance of money supply growth, exchange rate depreciation, and real GDP growth in explaining inflationary trends.

More recent studies have continued to highlight the challenges of inflation in Nigeria. Ojapinwa and Esan (2013) investigated the determinants of inflation in Nigeria from 1970 to 2010 and

found that money supply, exchange rate, and oil prices were significant factors. They also noted the role of fiscal deficits in driving inflationary pressures. The impact of inflation on the Nigerian economy has been substantial. Umaru and Zubairu (2012) studied the effect of inflation on the growth and development of the Nigerian economy from 1970 to 2010. They found that inflation had a negative impact on economic growth, highlighting the importance of price stability for sustainable economic development.

In recent years, Nigeria has continued to grapple with high inflation rates. According to the National Bureau of Statistics (2021), the country's inflation rate reached 18.17% in March 2021, the highest level in four years. This persistent high inflation has significant implications for various sectors of the economy, including the real estate market.

2.4.2 Nigeria Real Estate Market

The Nigerian real estate market has shown significant growth and volatility over the past decades, influenced by various factors including rapid urbanization, population growth, and macroeconomic instability. These factors create a complex environment for analyzing the specific impact of inflation on rental values and property prices.

Oladapo and Ige (2014) provided a comprehensive overview of the Nigerian real estate sector, noting its significant contribution to the country's GDP and employment. They highlighted the sector's potential for growth but also pointed out challenges such as inadequate infrastructure, limited access to finance, and regulatory issues.

The rapid urbanization in Nigeria has been a major driver of the real estate market. Adedire et al. (2016) studied urban growth and housing development in Lagos, Nigeria's largest city. They

found that rapid population growth and rural-urban migration have led to increased demand for housing in urban areas, putting pressure on both property prices and rental values.

The Nigerian real estate market is characterized by significant regional variations. Dabara et al. (2014) examined the performance of residential property investments in Gombe, Nigeria, from 2001 to 2012. They found that despite high inflation rates during this period, residential property investments in the city provided positive real returns, suggesting that real estate could serve as an inflation hedge in certain Nigerian markets.

However, the relationship between inflation and real estate returns in Nigeria is not straightforward. Okunev and Wilson (1997) studied the relationship between inflation and real estate returns in Nigeria and found evidence of both short-term and long-term relationships. They noted that while real estate could provide an inflation hedge in the long run, short-term deviations from this relationship were common.

The volatility of the Nigerian real estate market has been a subject of concern. Olaleye (2008) examined the risk and returns dynamics of the Nigerian property market from 1998 to 2004. He found that the market exhibited high levels of volatility, which he attributed to factors such as economic instability, political uncertainty, and inadequate market information.

The impact of macroeconomic factors on the Nigerian real estate market has been studied by several researchers. Ojetunde et al. (2011) investigated the impact of macroeconomic variables on the returns of residential property investments in Lagos. They found that inflation, along with other factors such as GDP growth and exchange rates, had significant impacts on property returns.

More recently, Nwuba and Kalu (2018) examined the relationship between inflation and house prices in Kaduna, Nigeria, from 2004 to 2016. They found a positive long-run relationship between inflation and house prices, suggesting that real estate could serve as an inflation hedge in the Nigerian context. However, they also noted that this relationship was not perfect, and other factors also influenced house price movements.

The Nigerian real estate market faces several challenges that complicate the analysis of inflation impacts. Babawale and Oyalowo (2011) highlighted issues such as inadequate property rights protection, limited access to housing finance, and inefficient land administration systems as key challenges facing the Nigerian real estate sector. These structural issues can influence how inflation impacts property values and rental rates.

It is important to note that the relationship between inflation and property value in Nigeria especially that of residential property is not straight forward because of certain factors and the high volatility of the Nigerian economy. Market inefficiencies often impedes this relationship as well.

2.5. Inflation and Rental Values in Benin City

Research specific to Benin City has indicated a strong relationship between inflation rates and rental values, aligning with broader trends observed in the Nigerian real estate market. Osagie et al. (2012) conducted a study examining the impact of macroeconomic variables on property values in the city. They found a positive correlation between inflation rates and both property prices and rental values. This suggests that as inflation increases, there is a tendency for rental values to rise as well.

The work of Akpan and Ogunba (2015) provided further insights into this relationship. Their investigation into the inflation-hedging characteristics of residential properties in selected Nigerian cities, including Benin City, yielded interesting results. They found that residential properties in Benin City provided a partial hedge against inflation, with rental values increasing during inflationary periods. However, it's important to note that this increase in rental values did not always match the rate of general price level increases, indicating an imperfect hedge.

This partial hedging characteristic aligns with findings from other Nigerian cities. For instance, Dabara et al. (2016) found similar results in their study of residential properties in Gombe, Nigeria. They observed that while real estate investments provided some protection against inflation, the relationship was not perfect and varied over time.

The rental market in Benin City has shown significant dynamism in recent years, reflecting broader trends in the Nigerian real estate sector. Emoh and Nwachukwu (2011) found that rental values in the city have generally trended upwards, but with notable variations across different neighborhoods and property types. This upward trend in rental values can be attributed to several factors, including population growth, urbanization, and broader economic conditions.

Osagie and Okafor (2019) provided a more recent analysis of the rental market in Benin City. They observed that the city's rental market is characterized by a mix of formal and informal arrangements, with a significant portion of rental transactions occurring in the informal sector. This duality in the market can complicate efforts to accurately track rental values and their relationship to macroeconomic variables such as inflation.

The structure of the rental market in Benin City is also worth noting. Oladapo and Odunlade (2018) found that the majority of rental properties in the city are owned by individual landlords rather than corporate entities. This ownership structure can influence how rental values respond to inflationary pressures, as individual landlords may have different motivations and constraints compared to institutional property owners.

The relationship between inflation and rental values in Benin City is likely influenced by several factors. Ezema et al. (2016) noted that in Nigerian cities, including Benin City, construction costs play a significant role in determining property values and, by extension, rental values. As inflation increases construction costs, there may be upward pressure on rental values as property owners seek to maintain their returns on investment.

Moreover, the impact of inflation on rental values in Benin City should be considered within the broader context of housing affordability. Nwuba and Kalu (2018), in their study of Nigerian cities, found that rising inflation often outpaced increases in income, leading to affordability challenges in the housing market. This dynamic could potentially constrain the extent to which landlords can increase rents in response to inflation, particularly in lower-income neighborhoods.

LITERARY GAP

Lack of Longitudinal Studies: Most studies on inflation and rental values in Benin City appear to be cross-sectional, providing a snapshot at a particular time. There's a lack of long-term studies tracking the relationship over extended periods.

Limited Focus on Different Property Types: Existing literature seems to focus more on residential property value rather than rental value residential properties command when put out

for let in the market considering market characteristic and neighborhood factors relevant to such property.

Insufficient Analysis of Neighborhood-Specific Effects: While some studies mention variations across neighborhoods, there's limited in-depth analysis of how inflation impacts rental values differently in various areas of Benin City.

Inadequate Examination of Lag Effects: The current research doesn't sufficiently explore potential lag effects between inflation and changes in rental values..

Limited Comparative Analysis: There's a lack of comparative studies between Benin City and other Nigerian cities or international markets with similar economic conditions.

Limited Analysis of Tenant Perspectives: Most studies focus on property values and landlord perspectives, with limited research on how tenants perceive and respond to inflation-driven rent increases

By addressing these gaps researchers can develop a more comprehensive understanding of how inflation impacts rental values in Benin City. This enhanced knowledge would be valuable for policymakers, investors, and residents alike, potentially leading to more informed decision-making in the local real estate market.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Research methodology is a structured framework or procedure in which researchers follow to carry out or conduct a study, achieve research aim and objectives, gather relevant data, analyze data and draw a constructive conclusion on the subject study. Research methodology involves various strategies adopted by researchers in a quest to answering questions and solve a given problem. According to Olakunori (2000) it is defined as the systematic process or procedure designed for generating, collecting, and analyzing the data required for solving a specified problem.

This chapter outlines the procedure adopted to investigate the impact of inflation on rental value of residential properties in Benin city, Nigeria. It describes the research design, study population, method of data selection or collection, sampling techniques and sample size, sampling size and method of data analysis.

3.2 Research Design

This refers to the general structure and strategy employed in a research study in order to systematically investigate a specific problem, answer research question and achieve research aim and objectives. The study will employ a mixed-methods research approach, integrating both quantitative and qualitative data to provide a comprehensive understanding of the topic. This methodology allows for the collection of statistical data while also exploring the perceptions and experiences of Estate surveyor and valuers, landlords and tenants.

3.3. Study Population

A research population is defined based on specific criteria relevant to the research question and objectives. Mugenda and Mugenda (1999) define population as an entire group of individuals, event or objective having a common observable characteristic. Furthermore, a population could refer to count of individuals within a specific location, or region. Generally, population is described as the totality of all elements, subjects, or members that possess a specified set of one or more common characteristics. In inferential statistics, it is the group to which inference are made. A research population is distinct from every population. Research population refers to the target audience with distinct characteristic that distinguishes them from a broader population.

The target population includes residential properties in Benin selected randomly across different local government such as Egor local government, Oredo and Ikpoba oka Local government area to ensure representation of different subgroup and socioeconomic class within the city. Selected group across this areas will include Uselu, Airport road and Upper mission districts. And also all registered Estate surveyor and valuers within Benin city

3.4. Sampling techniques:

A stratified random sampling technique will be employed to ensure representation across different socioeconomic classes and geographic locations. This allows for the division of the study population into various stratas or subgroup before selection is made. Generally, a stratified random sampling techniques is used when there is need for comparison between various subgroup. This method will be used to select residential properties across the aforementioned areas.

3.5. Sampling frame:

Kothari (1990) define sampling frame as the process of choosing a small number of people (a sample) from a larger population (sample population) as the foundation for establishing or predicting the prevalence of an unidentified piece of information or outcome with relation to the larger population. Mella (2012) stated that choosing a sample from a bigger population is necessary to ensure reliability and validity of a piece of study. This is because of time and financial constraints that makes the consideration of the whole population impossible. Therefore, sampling allows for more accurate measurement within a reasonable time and budget.

For the purpose of this research study, the directory of the Nigeria institution of Estate surveyor and valuers (NIESV 2024) will be used to determine the population of Estate surveyor and valuers in Benin city and residential properties selected randomly across various aforementioned areas.

3.6. Data Collection Method

Questionnaires are used to collect primary data from the respondents in this research. This provides a close end questions with questions on a five point Likert scale which is a standard method used by researchers to quantify their findings (Joshi et al., 2015). By using questionnaire, multiple questions were asked to the respondent including demographic questions and location of apartment etc.

Questionnaires are fundamental instrument for almost all research effort and can be distributed using various means such as directly (using paper questionnaire or polls) or indirectly through the use of online platform such as WhatsApp, emails or various distributing website.

3.6.1 Quantitative Data: well structure survey questionnaires will be distributed to collect primary data on rental prices, property characteristics, and inflation perceptions from Estate surveyors and valuers in Benin city. The questionnaire will consist of closed-ended questions using a Likert scale to gauge the impact of inflation on rental prices. Secondary Data on inflation rates will be sourced from governmental databases (CBN and NBS), real estate reports, and economic journals to analyze trends over time.

3.7. Data Analysis

This describes the model used to summarize and analyze research data or finding in order to come up with a constructive response for the research study. For this study data collected will be analyzed using both descriptive and inferential statistics in order to determine the extent to which inflation rate affects both tenants ability to pay rent and landlord real income.

3.7.1 Quantitative Analysis

Descriptive Statistics will be used to summarize the demographic characteristics of the respondents and the overall rental market trends. Inferential Statistics: Multiple Regression analysis will be employed to assess the relationship between inflation rates and rental values, controlling for other variables such as property size, location, and amenities. While time series data analysis will be employed to analyze Inflation trend over the past year.

Method of data analysis

S/n	Objectives	Research question	Method of data analysis
1	Analyze the historical trend of inflation in the past ten years (2014-2023)	What is the historical trend in inflation	Inferential statistics such as time series and trend analysis will be used to examine inflation trend for the past ten years.
2	Examine the relationship between inflation and rental value of residential properties in Benin city.	What has been the relationship between inflation and rental value of residential properties in Benin city	Multiple regression analysis will be used to analyze the relationship between inflation and rental value.
3.	Examine other factors that influences the rental value of residential properties in Benin city alongside inflation.	What are the factors responsible for changes in rental value of residential properties	Correlation analysis will be used to examine the factors affecting rental value changes in Benin city (such as locational factors)

CHAPTER FOUR

DATA PRESENTATION AND DISCUSSION OF RESULTS

4.1 Introduction

This chapter presents the analysis, findings and interpretations of the various data collected for this study. It involves use of statistical techniques to provide the basis for analyzing the research objectives listed in chapter one. Therefore, it is an important part of this study since it forms the basis for conclusion and recommendations.

4.2 Data Presentation

The data analysis were based on the data collected from the field and have been fully analyzed using the percentage table, mean regression and correlation analysis The analyses were based on questions contained in section A-D in the questionnaire. A total number of sixty (60) copies of the questionnaire were administered retrieved from the respondents and used for the analyses. Tables and percentages were used for the demographic data; the use of table is most appropriate means of interpreting information for easy understanding

4.3. Objective 1: The historical trend of inflation over the past ten years in Nigeria.

Year	Inflation	Annual change
2023	24.66%	5.81%
2022	18.85%	1.89%
2021	16.95%	3.71%
2020	13.25%	1.85%

2019	11.40%	-0.70%
2018	12.10%	-4.41%
2017	16.50%	0.81%
2016	15.70%	6.69%
2015	9.01%	0.96%
2014	8.05%	-0.45%

Source; NBS website 2023.

Table 4.3 shows the historical trend and change in inflation rate over the past ten years in Nigeria, there by answering the research question 1 which seeks to analyze the historical trend in inflation rate

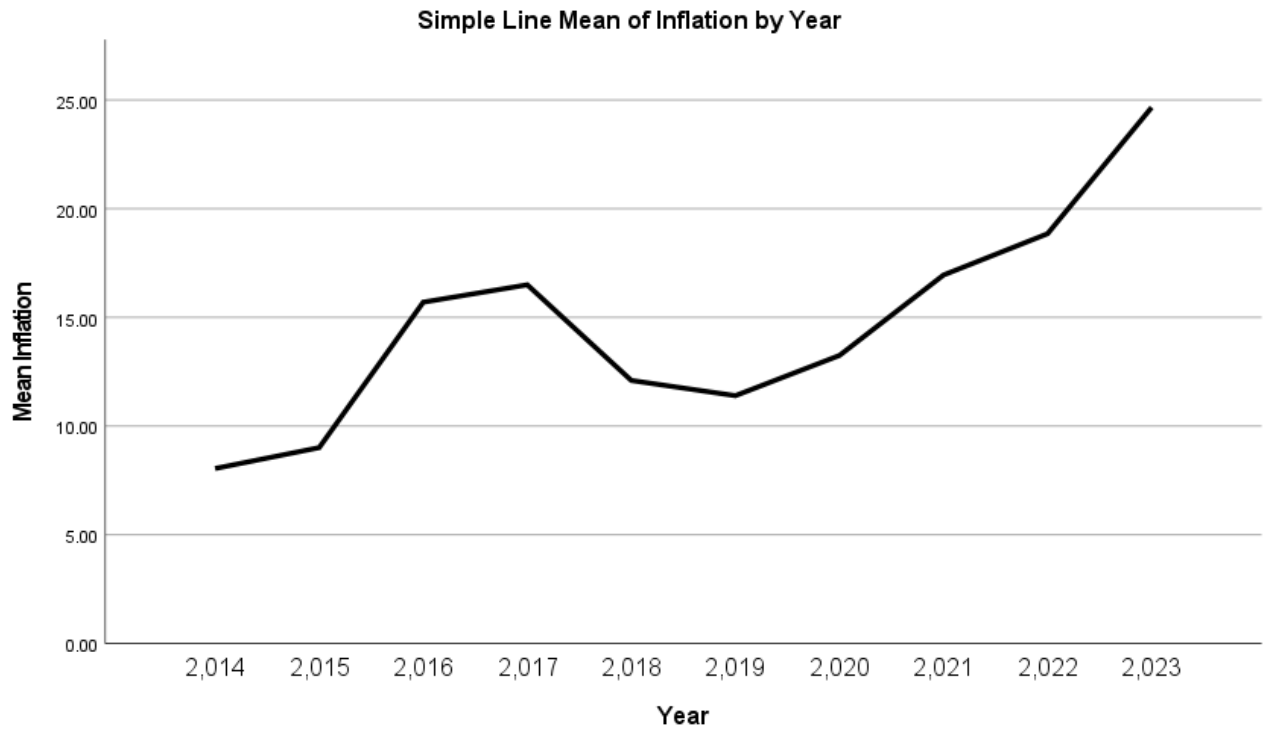

Figure 4.3.1.

Interpretation: The graph shows the trend in inflation over time.The X-axis (Year) spans from around 2014 to 2023. The Y-axis (Mean Inflation) starts slightly above 5% and rises beyond 25% in 2023. The inflation trend is not stable—there are sharp increases, drops, and a steady rise in recent years. From 2014 to 2015: Inflation was relatively low and stable. From 2015 to 2017: There was a sharp increase in inflation, peaking around 2017. From 2017 to 2019: Inflation declined but did not return to the initial low levels. From 2019 to 2021: A gradual increase started again. And from 2021 to 2023: The sharpest and highest increase happened, pushing inflation to its highest point in the period.

Also, the 2015–2017 spike might be linked to economic policies, currency depreciation, or external shocks (such as a recession). The 2017–2019 decline suggests temporary stabilization,

possibly due to government interventions or economic adjustments. The 2019–2023 rise can be linked to global inflationary pressures, supply chain disruptions, or internal economic instability.

In conclusion, Inflation fluctuates due to both domestic and international influences, such as government actions and global market conditions. The recent period from 2021 to 2023 witnessed exceptionally high inflation. This surge significantly impacted housing costs and consumers' ability to afford goods and services. The text highlights the cyclical nature of inflation and its substantial effects on everyday life.

4.4 Demographic Characteristics of the Respondents

Table 4.4.1: academic qualification

Academic qualification	frequency	Percentage
ND	-	-
HND	16	36.36
B.SC	21	47.72
M.SC	5	11.36
PHD	2	4.54
TOTAL	44	100

Source; field work 2025.

Table 4.4.1 shows the academic qualification of the respondent. The table shows that none of the respondent are ND holders, it also shows that 36.36% of the respondent are HND holders, while 47.72% are B.sc holders, 11.36% are M.sc holders, and 4.54% are Phd.

Table4.4.2: Professional qualifications

Professional qualification	**frequency**	**Percentage**
Graduate/probationer	**15**	**34.09**
Associate	**25**	**56.81**
Fellow	**4**	**9.09**
Total	**44**	**100**

Source; field work 2025

Table 4.4.2 shows that 34.09% are probationer/graduate members of the institution, 56.81% are associate, while 9.09% are fellows of the institution

Table 4.4.3: work experience

Years of Experience	**Frequency**	**Percentages %**
0-5 years	5	11.36
6 - 10 years	10	22.72
11-15 years	17	38.63

16-20 years	9	20.45
21 and above	3	6.82
Total	44	100

Source: Fieldwork Survey, 2025

Table 4.4.3 shows the years of work experience of the respondent. It shows that 11.36% of the respondent belong to 0-5 years of work experience, 22.72% has 6-10 experience in the practice of estate management, 38.63% belong to 11-15 years of experience, 20.45% has16-20 years of experience , while 6.82% has 21 years and above experience of practice in estate management

SECTION B: Inflation and rental value

Table 4.4.4

Research question	Frequency	Percentage
How often do you adjust rental value in order to account for inflation		
Every year	-	-
Every 2 years	14	31.81
Every 3 years	21	47.72
Every 4 years	9	20.25

Every 5 years	-	-
What percentage increase in rental value have you implemented in the last ten year		
10% 20% 30% 40% 50% and above	6 14 16 18 0	13.64 31.81 36.36 40.90 0
Do you consider inflation when determining rental rates/value. Yes No	44 0	100 0

How strongly do you agree that inflation affect rental value		
Strongly disagree	0	0
Disagree	0	0
Neutral	4	9.09
Agree	16	36.36
Strongly agree	22	50

4.4 OBJECTIVE 2: Examine the relationship between inflation and rental value of residential properties.

Section D: Research question 2; which areas in Benin city experienced the highest/lowest rental growth rate?

Table: 4.4.1

Descriptive Statistics

	Mean	Std. Deviation	N
Airport.rd	3.4545	1.37172	44
Upper.Sk	1.8409	.68005	44
Old.GRA	4.0682	.78940	44
Uselu.ugbowo	3.3409	.96311	44

Table 4.4.2 Correlations

		Airport.rd	Upper.Sk	Old.GRA	Uselu.ugbowo
Airport.rd	Pearson Correlation	1	.827**	.937**	.919**
	Sig. (2-tailed)		.000	.000	.000
	N	44	44	44	44
Upper.Sk	Pearson Correlation	.827**	1	.844**	.866**
	Sig. (2-tailed)	.000		.000	.000
	N	44	44	44	44
Old.GRA	Pearson Correlation	.937**	.844**	1	.886**
	Sig. (2-tailed)	.000	.000		.000
	N	44	44	44	44
Uselu.ugbowo	Pearson Correlation	.919**	.866**	.886**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	44	44	44	44

Source: student research work 2025

Strong Interconnections Amongst All Locations

- Since all correlations are greater than 0.82, the locations are highly dependent on each other.
- A change in perception or development in one location is likely to affect others.

Old GRA is the Most Positively Rated Location

- Old GRA has the highest mean rating (4.0682), indicating it is the most preferred area.

- It also has strong correlations with all other locations, suggesting that factors affecting Old GRA influence others.

SECTION D:Research question 3; what type of residential properties have been most/least affected by inflation in benin city

Table 4.4.3

Descriptive Statistics

	Mean	Std. Deviation	N
BA.1	3.2727	1.35310	44
BA.2	3.4545	.97538	44
BA.3	3.8864	1.01651	44
Bungalow	3.6136	1.06128	44
Duplex	3.9545	.88802	44

Source: student research work 2025

Table 4.4.4 Correlations

		BA.1	BA.2	BA.3	Bungalow	Duplex
BA.1	Pearson Correlation	1	.873**	.936**	.917**	.862**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	44	44	44	44	44
BA.2	Pearson Correlation	.873**	1	.874**	.937**	.857**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	44	44	44	44	44

BA.3	Pearson Correlation	.936**	.874**	1	.907**	.896**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	44	44	44	44	44
Bungalow	Pearson Correlation	.917**	.937**	.907**	1	.894**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	44	44	44	44	44
Duplex	Pearson Correlation	.862**	.857**	.896**	.894**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	44	44	44	44	44

Source: student research work 2025

Where BA1=1 bedroom apartment, BA2=2bedroom apartment, BA3= 3 bedroom apartment

- All correlations are significant at the 0.01 level (p-value = 0.000).
- Correlation values range from 0.857 to 0.937, indicating strong positive relationships between all variables..

Since all correlations are greater than 0.85, the variables are highly dependent on each other.

- A change in perception of one category is likely to affect others.

SECTION D: Research question 4; what is the average rent you have charged in the last ten years across Old GRA, Uselu-Ugbowo and Sakponba.

Table 4.4.5: A regression analysis across the rental value of 3 BEDROOM across various location.

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	SAPKONBA, OLD.GRA, USELU.UGBOWO [b]	.	Enter

Source: student research work 2025

a. Dependent Variable: Inflation

b. All requested variables entered.

Table 4.4.6 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.911[a]	.829	.744	2.51399

Source: student research work 2025

Predictors: (Constant), SAPKONBA, OLD.GRA, USELU.UGBOWO

R (0.911): This is the correlation between the observed and predicted values of Inflation a high value (close to 1) indicates a strong relationship between the predictors and Inflation

R Square (0.829): This means that 82.9% of the variability in Inflation can be explained by SAPKONBA, OLD.GRA, and USELU.UGBOWO

Adjusted R Square (0.744): Adjusted R^2 accounts for the number of predictors in the model. It suggests that after adjusting for sample size, 74.4% of the variability in INF is still explained by the predictors.

Std. Error of the Estimate (2.51399): This represents the standard deviation of the residuals (errors). The lower this value, the better the model's predictions.

Table 4.4.7 ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	184.129	3	61.376	9.711	.010[b]
	Residual	37.921	6	6.320		
	Total	222.050	9			

Source: student research work 2025

a. Dependent Variable: Inflation

b. Predictors: (Constant), SAPKONBA, OLD.GRA, USELU.UGBOWO

F-value (9.711): This tests if the model is statistically significant. A higher F-value suggests that at least one predictor significantly affects Inflation.

p-value (0.010): Since $p < 0.05$, the model is statistically significant at the 5% level, meaning that SAPKONBA, OLD.GRA, and USELU.UGBOWO together have a significant impact on Inflation

Table 4.4.8 Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	.555	2.822		.197	.851
	OLD.GRA	7.911E-6	.000	.398	.881	.412
	USELU.UGBOWO	8.089E-5	.000	2.074	1.670	.146
	SAPKONBA	-6.081E-5	.000	-1.653	-1.639	.152

Source: student research work 2025

Dependent Variable: Inflation

Table 4.5.1: correlation across rental value of residential properties across various locations

Correlations

		OLD.GRA	USELU.UGBOWO	SAPKONBA
OLD.GRA	Pearson Correlation	1	.908**	.857**
	Sig. (2-tailed)		.000	.002
	N	10	10	10
USELU.UGBOWO	Pearson Correlation	.908**	1	.982**
	Sig. (2-tailed)	.000		.000
	N	10	10	10
SAPKONBA	Pearson Correlation	.857**	.982**	1
	Sig. (2-tailed)	.002	.000	
	N	10	10	10

Source: student research work 2025

Table 4.5.2: A regression on inflation across Bungalow, 2 bedroom and 1 bedroom apartment across various location

Variables Entered

Model	Variables Entered	Variables Removed	Method
1	SAPKONBA, OLD.GRA, USELU.UGBOWO [b]	.	Enter

Source: student research work 2025

a. Dependent Variable: Inflation

b. All requested variables entered.

Table 4.5.3 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.820[a]	.673	.509	3.48009

Source: student research work 2025

a. Predictors: (Constant), SAPKONBA, OLD.GRA, USELU.UGBOWO

R (0.820): Represents the correlation between observed and predicted Inflation values.

Since R is close to 1, the model has a strong relationship between the independent variables and Inflation

R-Square (0.673): Explains 67.3% of the variation in INF using SAPKONBA, OLD.GRA, and USELU.UGBOWO.

- This suggests a moderate-to-good explanatory power.

Adjusted R-Square (0.509): Adjusts for the number of predictors.

- 50.9% of the variation in INF is explained after adjusting for sample size.
- There may be unnecessary predictors affecting the model.

Standard Error of Estimate (3.48009): Measures the accuracy of the model.

- Higher values indicate lower precision.

Table 4.5.4 ANOVAa

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	149.383	3	49.794	4.111	.067
	Residual	72.666	6	12.111		
	Total	222.050	9			

Source: student research work 2025

a. Dependent Variable: Inflation

b. Predictors: (Constant), SAPKONBA, OLD.GRA, USELU.UGBOWO

F-Statistic (4.111):

- This tests whether the predictors together significantly explain Inflation
- Moderate F-value suggests that the model has some explanatory power.

p-value (0.067):

- Since p > 0.05, the overall model is NOT statistically significant.
- This means the predictors do not strongly influence Inflation

Table 4.5.5 Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.313	19.010		-.016	.987
	OLD.GRA	1.201E-5	.000	.601	.694	.514
	USELU.UGBOWO	1.400E-5	.000	.270	.193	.853
	SAPKONBA	-5.281E-6	.000	-.047	-.056	.957

a. Dependent Variable: Inflation

Source: student research work 2025

Table 4.5.6 Correlations

		OLD.GRA	USELU.UGBOWO	SAPKONBA
OLD.GRA	Pearson Correlation	1	.953**	.864**
	Sig. (2-tailed)		.000	.001
	N	10	10	10
USELU.UGBOWO	Pearson Correlation	.953**	1	.950**
	Sig. (2-tailed)	.000		.000
	N	10	10	10
SAPKONBA	Pearson Correlation	.864**	.950**	1
	Sig. (2-tailed)	.001	.000	
	N	10	10	10

Source: student research work 2025

4.6 OBJECTIVE 3: Examine other factors that influence the rental of residential properties alongside inflation.

SECTION B: Research question 5; what specific inflation related factor influences rental value decision.

Table 4.6.1

Descriptive Statistics

	Mean	Std. Deviation	N
Food	2.7955	1.42371	44
TC	3.0909	1.36089	44
BMC	3.7045	1.30437	44
FP	3.3409	1.29297	44

Table 4.6.2 Correlations

Food	Pearson Correlation	1	.946**	.881**	.898**
	Sig. (2-tailed)		.000	.000	.000
	N	44	44	44	44
TC	Pearson Correlation	.946**	1	.893**	.947**
	Sig. (2-tailed)	.000		.000	.000
	N	44	44	44	44
BMC	Pearson Correlation	.881**	.893**	1	.930**
	Sig. (2-tailed)	.000	.000		.000
	N	44	44	44	44
FP	Pearson Correlation	.898**	.947**	.930**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	44	44	44	44

Source: student research work 2025

Correlation Analysis interpretation

Where TC= transportation cost, BMC= building material cost, FP= fuel price, Food= food price

- The Pearson correlation coefficient (r) measures the strength and direction of relationships.
- Significance Level (Sig.): A p-value of 0.000 indicates that all correlations are statistically significant at the 0.01 level (i.e., very strong relationships).

- Key Observations:
    - Food and TC have a very strong positive correlation (r = 0.946).
    - Food and BMC also show a strong positive relationship (r = 0.881).
    - Food and FP are highly correlated (r = 0.898).
    - The strongest correlation is between TC and FP (r = 0.947), while the weakest is between BMC and Food (r = 0.881).

Implications

- Since all correlations are above 0.88, the variables are highly related.
- A high correlation (close to 1) suggests that changes in one variable are strongly associated with changes in another.

SECTION C: Factors affecting rental value

Table 4.6.3 Descriptive Statistics

	Mean	Std. Deviation	N
Location	4.0227	1.06724	44
prp.condition	3.9091	1.00737	44
Amenities	3.6818	1.15683	44
Proximity.to.amenities	3.3409	1.29297	44

Inflation.highest	3.8182	.86998	44

Source: student research work 2025

Table 4.6.4 Correlations analysis

		Location	prp.condition	Amenities	Proximity.to.amenities	Inflation
Location	Pearson Correlation	1	.932**	.910**	.921**	.806**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	44	44	44	44	44
prp.condition	Pearson Correlation	.932**	1	.932**	.917**	.856**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	44	44	44	44	44
Amenities	Pearson Correlation	.910**	.932**	1	.929**	.889**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	44	44	44	44	44
Proximity.to.amenities	Pearson Correlation	.921**	.917**	.929**	1	.863**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	44	44	44	44	44
Inflation.highest	Pearson Correlation	.806**	.856**	.889**	.863**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	44	44	44	44	44

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

Source: student field work 2025

All Variables Are Strongly Related

- Since all correlations are greater than 0.80, the variables are highly interconnected.
- Changes in one variable are very likely to be associated with changes in the other. Location, Property Condition, and Amenities Are Closely Linked
- The strong relationships between Location, Property Condition, and Amenities suggest that better locations tend to have well-maintained properties and good amenities.

Inflation Has a Weaker (But Still Strong) Relationship with Location (r = 0.806)

- While inflation impacts all variables, its relationship with location is weaker than with other factors.
- This suggests that inflation affects property-related factors indirectly.Proximity to Amenities is a Key Factor
- The high correlation between Proximity to Amenities & Amenities (r = 0.929) suggests that closer access to essential services is associated with better overall living condition

Section c: Research question 2: which non inflation factor has increased/decreased rental value decision

Table 4.6.5 Descriptive Statistics

	Mean	Std. Deviation	N
GP	2.8864	1.40126	44
EG	3.7727	1.05354	44
PG	3.7045	1.06922	44
ID	3.8636	1.13283	44

Table 4.6.6 Correlations

		GP	EG	PG	ID
GP	Pearson Correlation	1	.927**	.908**	.898**
	Sig. (2-tailed)		.000	.000	.000
	N	44	44	44	44
EG	Pearson Correlation	.927**	1	.971**	.928**
	Sig. (2-tailed)	.000		.000	.000
	N	44	44	44	44
PG	Pearson Correlation	.908**	.971**	1	.907**
	Sig. (2-tailed)	.000	.000		.000
	N	44	44	44	44
ID	Pearson Correlation	.898**	.928**	.907**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	44	44	44	44

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

Source: student research work 2025.

Where GP= government policies, EG=economic growth, PG= population growth and ID= infrastructural development.

Correlation values range from 0.898 to 0.971, indicating very strong positive relationships

- Since all correlations are greater than 0.89, the variables are highly interconnected.
- Changes in one variable are very likely to be associated with changes in the others.

- The strongest correlation is between Population growth and Economic Growth (r = 0.971).

This suggests that effective population growth plays the most crucial role in driving economic growth. Government policies is Influenced by Multiple Factors

- Government policies has strong correlations with Economic Growth, Population growth, and Infrastructure development. This implies that improving these three factors can significantly enhance the public's perception.

Economic Growth and Infrastructure Development are Inter-connected

The strong relationship between Economic Growth and Infrastructure (r = 0.928) suggests that investments in infrastructure contribute significantly to economic progress

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

5.1. Summary of findings

Generally, this research seeks to examine the impact of inflation on rental value of residential properties in Benin, and it is evident from the research that 36.36% of the total respondent are HND holder, 47.72% are B.sc, 11.36% are M.sc and 4.54% are PHD holder. It also shows the professional qualification and membership categories of the total respondent which consist of 34.09% who are probationer/graduate members of the institution, 56.81% are associates while 9.09% are fellows of the institution. The work of experience of the respondent shows that 11.36% has 0-5 years of experience in estate management, 22.72% has 6-10 years of work experience, 38.63% has 11-15 years 0f work experience, 20.45% has 16-20 years of experience while 6.82% has 21 years and above of work experience in estate management profession.

This reviews that a majority of estate surveyors from the study population are B.sc holders, and a large majority as well belong to associate membership category of the institution. The study also reviews that majority of estate surveyors and valuer strongly agree that inflation has had a great impact on rental value charged in the past ten years in Benin city considering other inflation and non- inflation related factors which has brought about this rapid increment in rental value with specific area being affected such as Airport road, old GRA, being the most affected. It also shows that certain residential property type has also being greatly affected as well across these locations such as 3 bedroom apartments, bungalows etc.

The study also shows that in the past ten years, rental rate has been significantly increased so as to account for landlord income and to also serve as a hedging factor for land-lord's stream of income while considering the perculiarities of the real estate market in Benin city. This shows

that 40.90% of estate surveyors and valuers has implemented a 40% increase in rental rates, while considering other factors such as building material cost, maintenance cost, location

It also shows from respondent's information that the average percentage increase in rental value has been between 30% - 70% in the last 10 years.

The study suggest from the response of various respondent that changes in interest rate has negatively affected rental value decision, building material cost, maintenance cost and general real estate development as well as every other aspect of the economy. It also shows that over the last 10 years, government policies has played little or no role in affecting rental value decision and in interest rate stabilization as inflation continues to gazette every sector of the economy, thereby causing a sustained increase in residential properties rental value while ensuring that landlords real income is sustained.

Generally, the study proves that there is a high degree of correlation between inflation and rental value of residential properties, as relatively all adjustment in rental rates aims to account for the current level of inflation. This also proves the hedging characteristic of residential real estate. The study adequately suggest that inflation and locations are the main basis of rental rate determination, and it also shows the correlation between other factors like property conditions, amenities and proximity to amenities, alongside inflation in rental value determination.

5.2 Conclusion

This study reveals that in the past ten years rental value increase has being a result of various factors such as property condition, building material cost infrastructure development, economic growth, with inflation and property location been a major factor which influences rental value decision. It shows the percentage increase which estate surveyors and valuers has implemented

in order to account for the real income of the landlord, whilst ensuring good and adequate property sustainability and client satisfaction. The research also shows that government policies has had little impact on rental value decisions, while economic growth has moderately influenced rental rate decisions.

5.3 Recommendations

Governments should implement strategies which will aim to provide interest rate regularization, in order to improve economic activities, infrastructural development and reduction in inflation rate, for better efficiency in the real estate sector in order to promote housing affordability. Employ strategic measure in order to regulate the growing inflationary trend. Also government and various stakeholders should employ rent control policies across various property type and locations.

REFERENCES

Ademola, A. S., & Badiru, A. (2016). The impact of unemployment and inflation on economic growth in Nigeria (1981-2014). International Journal of Business and Economic Sciences Applied Research, 9(1), 47-55.

Adu, G., & Marbuah, G. (2011). Determinants of inflation in Ghana: An empirical investigation. South African Journal of Economics, 79(3), 251-269.

Ajayi, M. A., & Ojo, O. (2017). Inflation hedging in the Nigerian real estate market: A co-integration analysis. Journal of Property Investment & Finance, 35(5), 472-485.

Akinbobola, T. O., & Oregun, K. N. (2018). Inflation and its impact on economic growth in Nigeria. Applied Economics and Finance, 5(5), 100-109. https://doi.org/10.11114/aef.v5i5.3551

Akinbogun, I. P., & Akinbogun, O. S. (2019). Inflation and housing market performance in Nigeria. Journal of Housing and the Built Environment, 34(3), 657-671.

Akinbogun, O. O., & Akinbogun, I. O. (2019). Inflation and housing market in Nigeria. Journal of Housing and the Built Environment, 34(2), 257-271.

Akpan, U. E., & Ogunba, O. A. (2015). Inflation hedging characteristics of residential properties in Nigeria. Journal of Property Investment & Finance, 33(1), 19-34.

Anari, A., & Kolari, J. (2002). House prices and inflation. Real Estate Economics, 30(1), 67-84.

Aribigbola, A. (2008). Improving urban land use planning and management in Nigeria: The case of Akure. Theoretical and Empirical Researches in Urban Management, 3(9), 1-14.

Arnott, R. (1995). Time for revisionism on rent control? Journal of Economic Perspectives, 9(1), 99-120.

Babawale, G. K., & Oyalowo, B. A. (2011). Incorporating sustainability into real estate valuation: the perception of Nigerian valuers. Journal of Sustainable Development, 4(4), 236-248.

Bhaduri, A. (2020). *Inflation and Real Estate: A Comparative Study*. Journal of Economic Perspectives, 34(2), 25-44.

Bond, M. T., & Seiler, M. J. (1998). Real estate returns and inflation: An added variable approach. Journal of Real Estate Research, 15(3), 327-338.

Bonizio, R. C., Palmeira, P. L., & Mendes-Da-Silva, W. (2022). Real Estate Investment and Macroeconomic Factors: Evidence from Brazil. Journal of Real Estate Portfolio Management, 27(1), 1-18.

Bork, L., & Møller, S. V. (2018). Housing price forecastability: A factor analysis. Real Estate Economics, 46(3), 582-611.

Bowes, D. R., & Ihlanfeldt, K. R. (2001). Identifying the impacts of rail transit stations on residential property values. Journal of Urban Economics, 50(1), 1-25.

Bryman, A., & Bell, E. (2015). Business Research Methods. Oxford University Press.

CBN (2022). Inflation Report. Central Bank of Nigeria.

Central Bank of Nigeria (CBN). (2022). Inflation Report. Retrieved from <(link unavailable) inflation-report/>

Central Bank of Nigeria. (2021). Statistical Bulletin. Retrieved from https://www.cbn.gov.ng/documents/Statbulletin.asp

Central Bank of Nigeria. (2022). *Consumer Price Index Report*. Retrieved from [CBN website].

Coskun, Y., Seven, U., Ertugrul, H. M., & Alp, A. (2020). Housing price dynamics and bubble risk: the case of Turkey. Housing Studies, 35(1), 50-86.

Creswell, J. W. (2014). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. Sage Publications.

Dabara, D. I., Ogunba, O. A., Araloyin, F. M., & Ojo, O. (2016). The inflation-hedging characteristics of housing in a developing economy: Evidence from Nigeria. International Journal of Housing Markets and Analysis, 9(4), 502-521.

Dabara, I. D., Ankeli, I. A., Odewande, A. G., Guyimu, J., & Adeleke, M. A. (2014). Comparative analysis of the risk-return characteristics of office and shop property investments in Osogbo, Nigeria. European Journal of Business and Management, 6(29), 177-186.

Deng, Y., McMillen, D. P., & Sing, T. F. (2009). Private residential price indices in Singapore: A matching approach. Regional Science and Urban Economics, 39(6), 739-753.

DiPasquale, D., & Wheaton, W. C. (1992). The markets for real estate assets and space: A conceptual framework. Real Estate Economics, 20(2), 181-198.

Edo State Government. (2021). About Edo State. Retrieved from https://edostate.gov.ng/about-edo-state/

Emoh, F. I., & Nwachukwu, C. C. (2011). Critical issues in real estate finance as an index in building construction project management success in Nigeria. American Journal of Social and Management Sciences, 2(1), 76-90.

Ezema, I. C., Opoko, A. P., & Oluwatayo, A. A. (2016). Urban renewal in Nigeria: A slash and burn approach? Journal of Environment and Earth Science, 6(1), 239-248.

Fama, E. F., & Schwert, G. W. (1977). Asset returns and inflation. Journal of Financial Economics, 5(2), 115-146

Fang, H., Gu, Q., Xiong, W., & Zhou, L. A. (2016). Demystifying the Chinese housing boom. NBER Macroeconomics Annual, 30(1), 105-166.

Feldstein, M. (1992). Comment on James M. Poterba's paper, tax reform and the housing market in the late 1980s: Who knew what, and when did they know it? In L. Browne & E. S. Rosengren (Eds.), Real Estate and the Credit Crunch (pp. 252-257). Federal Reserve Bank of Boston.

Friedman, M. (1968). The role of monetary policy. American Economic Review, 58(1), 1-17.

Gallin, J. (2008). The long-run relationship between house prices and rents. Real Estate Economics, 36(4), 635-658.

Glaeser, E. L., & Gyourko, J. (2005). Urban decline and durable housing. Journal of Political Economy, 113(2), 345-375.

Glaeser, E. L., & Luttmer, E. F. (2003). The misallocation of housing under rent control. American Economic Review, 93(4), 1027-1046.

Gu, C., Shen, J., & Wong, K. K. (2019). Inflation hedging and macroeconomic determinants of housing prices in China. Journal of Real Estate Literature, 27(1), 127-146.

Gupta, A., Mittal, V., Peeters, J., & Van Nieuwerburgh, S. (2021). Flattening the curve: Pandemic-induced revaluation of urban real estate. Journal of Financial Economics.

Hartzell, D., Hekman, J. S., & Miles, M. E. (1987). Real estate returns and inflation. Real Estate Economics, 15(1), 617-637.

Himmelberg, C., Mayer, C., & Sinai, T. (2005). Assessing high house prices: Bubbles, fundamentals and misperceptions. Journal of Economic Perspectives, 19(4), 67-92.

Hoesli, M., Lizieri, C., & MacGregor, B. (2008). The inflation hedging characteristics of US and UK investments: A multi-factor error correction approach. The Journal of Real Estate Finance and Economics, 36(2), 183-206.

Horn, K., & Merante, M. (2017). Is home sharing driving up rents? Evidence from Airbnb in Boston. Journal of Housing Economics, 38, 14-24.

Iroham, C. O., Oluwunmi, A. O., Simon, R. F., & Akerele, E. (2014). Factors affecting rental values of residential properties in Abeokuta, Nigeria. Journal of Economics and Sustainable Development, 5(11), 58-67.

Joshi, A., et al. (2015). "Research Methodology: A Review." International Journal of Research in Management, Science & Technology, 3(1), 1-14

Krugman, P. (2015). Macroeconomics. 12th ed. New York: Worth Publishers.

Kumar, R. (2019). Real Estate Investment: A Guide. New Delhi: Springer.

Lee, C. L. (2014). The inflation-hedging characteristics of Malaysian residential property. International Journal of Housing Markets and Analysis, 7(1), 61-75.

Lim, L. C., & Cheng, M. Y. (2010). Inflation hedging characteristics of Malaysian residential property. Malaysian Journal of Real Estate, 5(1), 1-13.

MacGregor, B. D., & Nanthakumaran, N. (1992). The allocation to property in the multi-asset portfolio: The evidence and theory reconsidered. Journal of Property Research, 9(1), 5-32.

Mankiw, N. G., & Weil, D. N. (1989). The baby boom, the baby bust, and the housing market. Regional Science and Urban Economics, 19(2), 235-258.

National Bureau of Statistics (NBS). (2022). Nigerian Gross Domestic Product Report. Retrieved from (link unavailable)

National Bureau of Statistics. (2021). Consumer Price Index March 2021. Retrieved from https://nigerianstat.gov.ng/elibrary/read/1241

National Bureau of Statistics. (2023). *Real Estate Market Report*. Retrieved from [NBS website].

National Bureau of Statistics. (2023). Consumer price index March 2023. https://nigerianstat.gov.ng/download/1184

National Population Commission (NPC). (2021). Nigeria Demographic and Health Survey. Retrieved from (link unavailable)

NPC (2021). Annual Abstract of Statistics. National Population Commission.

Nwuba, C. C., & Kalu, I. U. (2018). Determinants of motivation for home ownership in Nigeria. Property Management, 36(2), 187-202.

Nwuba, C. C., Egbo, O. P., & Mbah, C. (2015). Impact of inflation on housing prices in Nigeria. Journal of Policy and Development Studies, 9(3), 143-153. https://doi.org/10.12816/0011207

Odu, T. (2011). An analysis of relative inflation hedging capacities of prime commercial properties in Lagos. Global Journal of Human-Social Science Research, 11(10).

Ogu, V. I., & Ogbuozobe, J. E. (2001). Housing policy in Nigeria: Towards the benefit of the masses. Behaviour & Information Technology, 20(5), 345-355. https://doi.org/10.1080/01449290110083221

Ojapinwa, T. V., & Esan, F. (2013). Does Philips curve hold in Nigeria? An empirical analysis. International Journal of Economics and Finance, 5(9), 123-133.

Ojetunde, I., Popoola, N. I., & Kemiki, O. A. (2011). On the interaction between the Nigerian residential property market and the macroeconomy. Journal of Geography and Regional Planning, 4(13), 642-648.

Okafor, B. O., & Onwumere, J. U. J. (2017). The impact of monetary policy on the performance of the Nigerian stock market. African Journal of Business and Economic Research, 12(2-3), 23-42.

Okunev, J., & Wilson, P. J. (1997). Using nonlinear tests to examine integration between real estate and stock markets. Real Estate Economics, 25(3), 487-503.

Oladapo, A. A., & Ajayi, O. A. (2020). Inflation and rental value of residential properties in Nigeria. Journal of Real Estate and Construction, 22(1), 1-15.

Oladapo, M. O., & Ajayi, K. A. (2020). Inflation and residential property values in Nigeria. Journal of Property Research, 37(2), 147-162.

Oladapo, R. A., & Ige, V. O. (2014). Assessment of the Nigerian real estate market. International Journal of Science and Research, 3(6), 2387-2393.

Oladapo, R. A., & Odunlade, B. A. (2018). Rental value determinants of residential properties in Ibadan metropolis, Oyo State, Nigeria. Property Management, 36(5), 539-553.

Olakunori, O. O. (2000). Research Methods in Education. Ibadan: Heinemann Educational Books.

Olaleye, A. (2008). Property market nature and the choice of property portfolio diversification strategies: The Nigeria experience. International Journal of Strategic Property Management, 12(1), 35-51.

Olayonwa, G. O., & Soyingbe, A. A. (2019). Inflation and housing market in Nigeria: Issues and prospects. International Journal of Civil Engineering and Technology, 10(3), 1235-1244.

Omofonmwan, S. I., & Odia, L. O. (2009). Oil exploitation and conflict in the Niger-Delta region of Nigeria. Journal of Human Ecology, 26(1), 25-30.

Omotosho, B. S., & Doguwa, S. I. (2012). Understanding the dynamics of inflation volatility in Nigeria: A GARCH perspective. CBN Journal of Applied Statistics, 3(2), 51-74.

Osagie, J. U., & Okafor, K. (2019). Rental value determinants of residential properties in Benin City, Nigeria. Journal of Land Management and Appraisal, 6(2), 20-29.

Osagie, J. U., Gambo, Y. L., & Anyasi, F. I. (2012). Impact of Macroeconomic Variables on Property Values in Nigeria: The Case of Benin City. Journal of Nigerian Institution of Estate Surveyors and Valuers, 37(1), 20-31.

Oyebanji, A. O., Lifu, F. L., & Akintoye, I. R. (2017). An analysis of the determinants of rental values of residential properties in Ikorodu, Lagos State. Mediterranean Journal of Social Sciences, 8(5), 63-73. https://doi.org/10.1515/mjss-2017-0033

Pomeroy, J., & Robinson, M. (2021). *Understanding Inflation and Housing Markets*. Housing Studies, 36(5), 789-804.

Quigley, J. M., & Raphael, S. (2004). Is housing unaffordable? Why isn't it more affordable? Journal of Economic Perspectives, 18(1), 191-214.

Roback, J. (1982). Wages, rents, and the quality of life. Journal of Political Economy, 90(6), 1257-1278.

Somerville, C. T. (1999). Residential construction costs and the supply of new housing: Endogeneity and bias in construction cost indexes. The Journal of Real Estate Finance and Economics, 18(1), 43-62.

Udoekanem, N. B., Edem, I. K., & Bassey, N. E. (2020). Impact of inflation on housing rental values in Uyo, Nigeria. Journal of Physics: Conference Series, 1572(1), 012035. https://doi.org/10.1088/1742-6596/1572/1/012035

Umaru, A., & Zubairu, A. A. (2012). Effect of inflation on the growth and development of the Nigerian economy (An empirical analysis). International Journal of Business and Social Science, 3(10), 183-191.

United Nations. (2018). World urbanization prospects: The 2018 revision. https://population.un.org/wup/

Washer, K. M., Nippani, S., & Wingender, J. R. (2016). Day of the week effect in the post financial crisis period: International evidence. Journal of Economics and Finance, 40(3), 421-439.

World Bank. (2020). Nigeria Housing Profile.

APPENDIX

Dear Respondent,

My name is Buzorme Ifeanyi Fidelis a final year student of the Department of Estate Management, University of Benin, currently working on the research topic "IMPACT OF INFLATION ON RENTAL VALUE OF RESIDENTIAL PROPERTIES IN BENIN CITY". Your response will be highly appreciated as it would help in the enhancement of this research.

Thanks

Yours faithfully,

BUZORME IFEANYI FIDELIS

Researcher

Section A: Respondent's Demography

Academic qualification: ND ( ) HND ( ) B.SC ( ) M.SC ( ) PHD ( )

NIESV Membership category ANIVS ( ) FNIVS ( )

Years of experience in real estate: 0-5 ( ) 6-10 ( ) 11-15 ( ) 16-20 ( ) 21 and above ( )

Firm Location: _____

Section B: Inflation and Rental Value

1. How often do you review and adjust rental rates in order to account for inflation?

a) Every year

b) Every 2 year

c) Every 3 year

d) Every 4 year

e) Every 5 year

2. What percentage increase in rental rates have you implemented in the last 10 years

(a) 10% (b) 20% (c) 30% (d) 40% (e) 50% and above

3. Do you consider inflation when determining rental rates?

a) Yes

b) No

4. How strongly do you agree that inflation affects rental values?

(a) strongly disagree (b) disagree (c) neutral (d) Agree (e) strongly agree

5. What specific inflation-related factors influence your rental rate decisions? (Select all that apply on a scale of 1-5 with 5 being the highest)

a) Food prices: one ( ) two ( ) three ( ) four ( ) five ( )

b) Transportation costs: one ( ) two ( ) three ( ) four ( ) five ( )

c) Building materials costs: one ( ) two ( ) three ( ) four ( ) five ( )

d) Fuel prices: one ( ) two ( ) three ( ) four ( ) five ( )

e) Other (please specify) _____

Section C: Factors Affecting Rental Value

1. Rank the following factors by their impact on rental values (1-5, 1=Highest, 5=Lowest):

a) Location- Highest ( ) High ( ) moderate ( ) low ( ) lowest ( )

b) Property condition- Highest ( ) High ( ) moderate ( ) low ( ) lowest ( )

c) Amenities (e.g., security, parking) - Highest ( ) High ( ) moderate ( ) low ( ) lowest ( )

d) Proximity to amenities (e.g., schools, markets) - Highest ( ) High ( ) moderate ( ) low ( ) lowest ( )

e) Inflation- Highest ( ) High ( ) moderate ( ) low ( ) lowest ( )

f) Other (specify) _____

2. Which non-inflation factors have increased/decreased rental values in Benin City? (Select all that apply on a scale of one to five with 5 being the highest)

a) Government policies: one ( ) two ( ) three ( ) four ( ) five ( )

b) Economic growth: one ( ) two ( ) three ( ) four ( ) five ( )

c) Population growth: one ( ) two ( ) three ( ) four ( ) five ( )

d) Infrastructure development: one ( ) two ( ) three ( ) four ( ) five ( )

e) Other (specify) _____

3. How do changes in interest rate affect rental values? Please specify

Section D: Rental Value Trends

1. What has been the average annual increase in rental value for residential properties in Benin City over the last 10 years? _____%

2. Which areas in Benin City have experienced the highest/lowest rental growth rates? (Please indicate on a scale of 1-5 with 5 being the highest)

a) Airport road: one ( ) two ( ) three ( ) four ( ) five ( )

b) Upper sakponba: one ( ) two ( ) three ( ) four ( ) five ( )

c) Old GRA: one ( ) two ( ) three ( ) four ( ) five ( )

d) Uselu-ugbowo: one ( ) two ( ) three ( ) four ( ) five ( )

3. What types of residential properties have been most/least affected by inflation across in benin city. (Select all that apply on a scale of 1-5 with 5 being the highest)

a) 1-bedroom apartments: one ( ) two ( ) three ( ) four ( ) five ( )

b) 2-bedroom apartments: one ( ) two ( ) three ( ) four ( ) five ( )

c) 3 bedroom apartment: one ( ) two ( ) three ( ) four ( ) five ( )

d) Bungalow: one ( ) two ( ) three ( ) four ( ) five ( )

e) Duplex: one ( ) two ( ) three ( ) four ( ) five ( )

4. What is the average rent you have charged in the last ten year in various areas

Year	Old GRA (amount of rent charged)	USELU-UGBOWO(amount of rent charged)	SAPKONBA (amount of charged)
2023			
2022			
2021			
2020			
2019			
2018			
2017			
2016			
2015			
2014			