

**SELECTED FACTORS AND PRICES OF COMMERCIAL REAL ESTATE IN
NAKURU TOWN EAST SUB COUNTY, KENYA**

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**A Research Project Submitted to the Institute of Postgraduate Studies of Kabarak
University in Partial Fulfillment of the Requirement for the Award of Master's
Degree of Science in Finance (Finance and Investment Analysis) Degree**

KABARAK UNIVERSITY

NOVEMBER, 2024

DECLARATION

1. I do hereby declare that:

- i. This project is my work and to the best of my knowledge, it has not been presented for the award of a degree in any university or college.
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Mike Kibor Tanui

GMF/NE/0881/05/19

RECOMMENDATION

To the Institute of Postgraduate Studies:

The research project entitled "**Selected Factors And Prices Of Commercial Real Estate In Nakuru Town East Sub County, Kenya**" and written by **Mike Kibor Tanui** is presented to the Institute of Postgraduate Studies of Kabarak University. We have reviewed the research project and recommend it be accepted in partial fulfillment of the requirements for award of the degree of Master of Science in Finance (Finance and Investment Analysis)

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DEDICATION

I dedicate this project to my beloved family and friends for their overwhelming support, understanding, and encouragement.

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First and foremost, I would like to express my profound gratitude to the Almighty God for the gift of life and for giving me the strength and good health to pursue this demanding but rewarding program. Special and sincere thanks to my supervisors Dr. Nehemiah Kiplagat and Dr. Stephene Oloo Magadi for patiently guiding me through all aspects of this study.

ABSTRACT

The prices of commercial properties in Nakuru have fluctuated in recent years. In 2018, the prices of commercial properties in Nakuru declined by an average of 2.7%, with the retail sector being the hardest hit, registering a decline of 4.4%. Therefore, this study sought to assess the effect of selected factors on the prices of commercial real estate in Nakuru Town East Sub County. Specifically, the study focused on the effect of interest rates on the prices of commercial real estate, the effect of employment rates, demographics, and availability of credit on the prices of commercial real estate in Nakuru Town East Sub County. The study was anchored on the classical theory, credit channel theory, and life cycle theory. The study adopted an explanatory research design. The study targeted operational managers and financial managers from 60 real estate agents and companies in Nakuru Town East Sub County. A census design was adopted. A questionnaire was used to collect primary data. A pilot-test was conducted in Nakuru West Sub-County. Content and face validity were enhanced. Internal consistency technique was adopted with Cronbach's Alpha to measure reliability. Quantitative data was analyzed by Statistical Package for Social Sciences. Descriptive and inferential statistics were employed in the study. The analyzed data was presented in the form of tables. Based on the findings the study concluded that there is a positive and statistically significant correlation between interest rates on prices of commercial real estate in Nakuru Town East Sub County ($r=0.607$; $p<0.05$). In addition, the study concluded that there is a positive and statistically significant correlation between employment rate on prices of commercial real estate in Nakuru Town East Sub County ($r=0.712$; $p<0.05$). Furthermore, the study concluded that there is a strong positive correlation between demographics on prices of commercial real estate in Nakuru Town East Sub County ($r=0.828$; $p<0.05$). Finally, the study concluded that a strong positive correlation existed between the availability of credit on prices of commercial real estate in Nakuru Town East Sub County ($r=0.800$; $p<0.05$). Regarding the effect of interest rates on prices of commercial real estate, the researcher recommended that commercial real estate should monitor central bank rate decisions to stay informed about central bank rate decisions as they can influence overall market sentiment and risk appetite. Based on the effect of the employment rate of commercial real estate, the researcher recommended that commercial real estate should assess labor force participation rates. Moreover, regarding the effect of demographics on the prices of commercial real estate, the researcher recommended that commercial real estate should adapt to changing housing demands. Further, regarding the effect of the availability of credit on the prices of commercial real estate, the researcher recommended that commercial real estate should stay informed on credit spreads.

Keywords: *Interest Rates, Employment Rate, Demographics, Availability of Credit, Prices of Commercial Real Estate*

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LIST OF ABBREVIATION

SLS	Three Stage Least Squares
AUD	Australian Dollar
CAD	Canadian Dollar
CBD	Central Business District
CNY	Chinese Yuan Renminbi
COVID	Coronavirus Disease
CPI	Consumer Price Index
CRE	Commercial Real Estate
FDI	Foreign Direct Investments
FRED	Federal Reserve Economic Database
GDP	Gross Domestic Product
KES	Kenyan Shillings
KNBS	Kenya National Bureau of Statistics
MAD	Moroccan Dirham
NACOSTI	National Council of Science, Technology, and Innovation
NSE	Nairobi Security Exchange
NSE	Nigerian Stock Exchange
ROI	Return of Interest
SPSS	Statistical Package for Social Sciences
UK	United Kingdom
US	United States
USD	United States Dollar
VIF	Variance Inflation Factor
ZAR	The South African Rand
3SLS	Three Stage Least Squares
AUD	Australian Dollar
CAD	Canadian Dollar
CBD	Central Business District
CNY	Chinese Yuan Renminbi
COVID	Coronavirus Disease
CRE	Commercial Real Estate
FDI	Foreign Direct Investments

FRED	Federal Reserve Economic Database
GDP	Gross Domestic Product
KES	Kenyan Shillings
KNBS	Kenya National Bureau of Statistics
MAD	Moroccan Dirham
NACOSTI	National Council of Science, Technology, and Innovation
NSE	Nairobi Security Exchange
NSE	Nigerian Stock Exchange
ROI	Return of Interest
SPSS	Statistical Package for Social Sciences
UK	United Kingdom
US	United States
ZAR	The South African Rand

CONCEPTUAL OPERATIONAL DEFINITION OF TERMS

Availability of Credit: Refers to the availability of financing options for real estate transactions, such as mortgages, loans, and lines of credit (Arman, & Hamid, 2018). In this study availability of credit is measured by indicators such as credit spreads, loan approval rate and consumer credit score.

Commercial Real Estate: Refers to any type of real estate property that is primarily used for business or commercial purposes, rather than residential purposes. This can include properties such as office buildings, retail spaces, hotels, warehouses, industrial parks, and other commercial properties (Paravisini, 2020).

Demographics: Refers to the characteristics of a population that can influence the demand for real estate in each area (Zhcnquo, 2021). In this study demographics is measured by age distribution, birth rate and household income.

Employment Rate: Refers to the percentage of the population that is employed in each area (Malizia, 2021). In this study the employment rate is measured by labour force participation, employment by industry and job creation.

Interest Rates: Refers to the rate at which a lender charges a borrower for the use of money borrowed for a real estate transaction, such as a mortgage loan (Agava & Dairo, 2021).

Prices of Real Estate: Refers to the market value or the amount of money that a buyer is willing to pay for a property in a particular real estate market (Jahanian, & Sirmans, 2018). In these study prices of commercial real estate is measured by housing affordability index, occupancy rates and rental rates.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The commercial real estate industry is a significant contributor to the economy, with millions of people employed in various roles related to the buying, selling, leasing, and management of commercial properties (Seidman, 2021). This industry is driven by a range of factors, including economic trends, population growth, and changes in consumer behavior. One of the primary benefits of investing in commercial real estate is the potential for high returns. Commercial properties typically generate more income than residential properties, and investors can benefit from long-term leases that provide a steady stream of rental income.

According to Ping et al. (2019), economic factors, transport, land use, quality design requirements and energy efficiency have an impact on the price of commercial real estate. In order to do these, market changes are needed to have an impact on the value of commercial properties and require further action to overcome and accommodate them. A study conducted by Amatete (2019) revealed that construction cost, financial market dynamics, macroeconomic determinants and structural characteristics were the major determinants of acquisition and ownership of real estate among the low- income earners. Pricing and subsequent ownership of real estate is dynamic and occasionally economically volatile while experiencing strong market forces driven by factors such as demand, supply, fiscal environment, cost of land, cost of capital, and other salient factors such as consumer tastes and preferences (Amatete, 2019).

Commercial real estate offers the potential for appreciation in value, particularly in growing markets where demand for space is high (Malizia, 2020). Another benefit of commercial real estate is the potential for tax advantages. Investors can deduct expenses

related to the property, such as mortgage interest, property taxes, and depreciation, from their taxable income. In addition, the sale of a commercial property can qualify for favorable capital gains tax treatment (Giussani, &Tsolacos, 2019). Commercial real estate is a crucial component of the US economy and has contributed significantly to its growth and development. The industry encompasses a wide range of activities, from construction and development to property management and brokerage (Glascock, Jahanian, &Sirmans, 2020). According to a report by the National Association of Realtors, (2020) the commercial real estate sector directly contributed \$730 billion to the US GDP in 2019, accounting for 3.6% of the total Gross Domestic Product (GDP). When indirect contributions were factored in, the industry's total contribution to the economy was estimated to be \$1.14 trillion, or 5.6% of GDP. In addition to its direct economic impact, the commercial real estate sector has been a driver of job creation in the US. The industry supported over 8 million jobs in 2019, according to the same report. These jobs spanned a wide range of occupations, including construction workers, architects, engineers, property managers, and real estate brokers.

The United Arab Emirates real estate sector, including both commercial and residential properties, contributed approximately 13% of the country's GDP in 2019 (Dobson, & Goddard, 2020). The commercial real estate sector has played a significant role in this, with large-scale projects such as office towers, shopping malls, and hotels contributing to the industry's growth and development. According to a report by the Dubai Land Department, (2021) the real estate sector employed approximately 47,000 people in Dubai alone in 2020. These jobs span a wide range of occupations, including construction workers, architects, engineers, property managers, and real estate brokers. In Dubai, the average price for commercial properties in premium locations like

Downtown Dubai reached AED 1,850 per square foot in 2021, representing a significant recovery from the 2020 pandemic dip.

South Africa's commercial real estate sector has been a significant contributor to the country's economy, accounting for over 10% of the country's GDP (Glascock & Abdullah, 2020). The retail sector has been particularly active in South Africa, with several large-scale shopping centers and malls developed in recent years. These developments have not only created jobs in construction but have also provided employment opportunities in retail and hospitality sectors. The office sector has also seen significant growth, with multinational companies establishing their headquarters in South Africa, attracted by the country's relatively stable political and economic environment. This has resulted in increased demand for modern office space, leading to the development of new commercial properties (Azasu & Shapiro, 2019). Due to economic uncertainty and rising vacancy rates, the growth of commercial real estate prices slowed, with some areas experiencing price declines by 3-5% in 2020.

Egypt's commercial real estate sector has been a significant contributor to the country's economy, accounting for over 8% of the country's GDP. The sector has been driven by increased foreign investment, particularly in the office and retail sectors (Bond, & Dungey, 2021). Egypt's strategic location, large population, and growing middle class have made it an attractive destination for foreign investors looking to develop commercial real estate. The country has experienced significant growth in shopping malls, office buildings, and mixed-use developments in recent years (Giussani, 2022). In 2021, prime office space prices in areas like New Cairo averaged EGP 30,000 per square meter. However, significant disparities remain between Cairo and other parts of the country, reflecting uneven investment distribution.

Kenya's commercial real estate sector has been a critical contributor to the country's economy, accounting for over 7% of the country's GDP, (Kenya National Bureau of Statistics 2021). Kenya's growing population, increasing urbanization, and expanding middle class have made it an attractive destination for foreign investors looking to develop commercial real estate. The country has seen significant growth in shopping malls, hotels, and other commercial properties in recent years. The growth of the commercial real estate sector in Kenya has contributed to job creation, particularly in construction and property management. The sector has also generated revenue for the government through property taxes and business licenses. According to Hass Consult (2022), commercial property prices in Nairobi rose by 4.2% in 2021, while office space in central business districts ranged from KES 100 to KES 150 per square foot. However, in Nakuru, commercial real estate prices have lagged much behind Nairobi due to slower infrastructure development and lower levels of foreign investment.

1.1.1 Selected Factors Affecting Prices of Commercial Real Estate

The prices of commercial real estate are affected by several factors, such as location, demand, and supply, economic conditions, government policies, micro-economic and macro-economic factors such as interest rates, income levels, demographic changes, and consumer preferences and availability of credit, (Stojanovski, &Petrevska, 2019). The macroeconomic factors, however, greatly impact the commercial. The choice of microeconomics is to bring concepts such as how prices are determined what factors impact the decision to purchase goods, and how commercial real estate allocates its resources to increase efficiency. According to Arman and Hamid, (2019), the prices of commercial real estate can vary greatly depending on various factors such as location, size, type of property, and demand in the market. Commercial real estate prices are typically higher in urban areas, particularly in prime locations with high foot traffic or

visibility. On the other hand, prices may be lower in less desirable areas or locations with less demand, (Harris, & Kohli, 2019). The state of the local economy and the level of demand in the market can also impact commercial real estate prices. High demand in a particular market can lead to increased prices, while a weak economy or low demand can lead to lower prices, (Paravisini, 2020).

Commercial real estate is a rapidly growing market that is influenced by a wide range of micro-economic factors such as interest rates, employment rates, demographics, availability of credit and income levels, and consumer preferences, (Potepan, 2020). Interest rates are a significant factor that affects the prices of real estate. When interest rates are low, it becomes easier for people to obtain mortgages and other forms of financing, which lead to an increase in demand for real estate. On the other hand, when interest rates are high, the cost of borrowing increases, leading to a decrease in demand for real estate, (Yuanhin, 2019). According to a report by the National Association of Realtors (2021), interest rates have been at historic lows in recent years, which has led to an increase in demand for real estate. The report notes that low-interest rates have made it more affordable for people to buy homes, which has led to a surge in home sales.

Income levels also play a significant role in determining the prices of real estate. When income levels are high, people tend to have more disposable income, which leads to an increase in demand for real estate. On the other hand, when income levels are low, people may not have the financial means to purchase real estate, leading to a decrease in demand, (Zhenguo, 2021). According to a study by Diewert and Shimizu (2018), income levels have a significant impact on the prices of real estate. They found that higher-income levels lead to higher real estate prices, while lower-income levels lead to lower real estate prices.

Demographic changes can also have a significant impact on the prices of real estate. For example, as the baby boomer generation ages and enters retirement, there is an increasing demand for housing that is suitable for older adults, such as senior living communities. This can lead to an increase in demand for these types of properties and an increase in their prices, (Schmidt & Shin, 2020). According to a report by the Urban Land Institute (2021), demographic changes are driving the demand for different types of real estate. The report notes that there is a growing demand for affordable housing, particularly among millennials and low-income households.

Consumer preferences is another micro-economic factor that affects the prices of real estate. For example, as consumers become more environmentally conscious, there is an increasing demand for properties that are energy-efficient and environmentally sustainable. This can lead to an increase in demand for these types of properties and an increase in their prices, (Müller & Righi, 2022). According to a report by the National Association of Home Builders (2021), consumer preferences are driving the demand for energy-efficient homes. The report notes that there is an increasing demand for homes that are equipped with energy-efficient appliances, windows, and lighting.

Employment rates also play a significant role in the prices of commercial real estate. When employment rates are high, businesses tend to expand, leading to an increase in demand for office space and other commercial properties. On the other hand, when employment rates are low, businesses may be hesitant to invest in new office space, leading to a decrease in demand for commercial real estate, (National Bureau of Economic Research, 2019). According to a report by the Urban Land Institute (2021), employment rates have a significant impact on the prices of commercial real estate. The report notes that during periods of high employment, there is an increase in demand for office space, which can lead to an increase in prices.

According to the National Association of Realtors, (2021) the availability of credit is an important factor that affects the prices of real estate. When credit is easily available, people can borrow money to purchase homes, which can lead to an increase in demand for real estate and an increase in prices. On the other hand, when credit is not easily available, people may be hesitant to invest in real estate, leading to a decrease in demand and a decrease in prices. According to a report by the International Monetary Fund (2020), the availability of credit has a significant impact on the prices of commercial real estate. The report notes that during periods of easy credit, there is an increase in demand for commercial real estate, which can lead to an increase in prices.

1.1.2 Prices of Commercial Real Estate

Real estate prices refer to the market value of a property or piece of real estate, which is determined by various factors such as location, size, condition, and demand. Real estate prices are influenced by supply and demand dynamics in the market, as well as by economic conditions and government policies, (Lin, & Chang, 2021). Real estate prices can vary significantly depending on the location and type of property and can fluctuate over time based on changes in the market and broader economic trends. According to Lizieri and Ward (2019) factors such as the state of the economy, the level of demand, interest rates, and government policies can all impact the prices of commercial real estate in different countries.

In China, the average price per square meter for office space in major cities like Beijing and Shanghai was around Chinese Yuan Renminbi (CNY)70,000 to CNY 100,000, which is approximately \$10,800 to \$15,400 USD, (Ling, &Naranjo, 2021). The prices in China's commercial real estate market have been rising rapidly due to a combination of factors, including strong demand from both domestic and international investors, low interest rates, and government policies aimed at promoting economic growth. Despite the

COVID-19 pandemic, China's commercial real estate market has remained robust, with many investors seeing it as a haven for their money, (Hongyu, Park & Siqu, 2021).

According to Malizia, (2021) commercial real estate prices in Australia, particularly in Sydney and Melbourne, have been increasing steadily in recent years, driven by strong demand from both domestic and international investors. In 2021, the average price per square meter for prime office space in Sydney was around Australian Dollar (AUD) 11,000 to AUD 14,000, while in Melbourne, it was around AUD 8,000 to AUD 12,000. These prices are influenced by various factors, such as the state of the economy, interest rates, and government policies, (Carlino, & Mills, 2021). Despite the economic impact of the COVID-19 pandemic, the commercial real estate market in Australia has remained resilient, with many investors still showing interest in the sector. However, there are also concerns about the potential for oversupply and the impact of remote working on demand for office space in the long term, (Zellner, & Arnold, 2020).

Commercial real estate prices in Canada can vary significantly depending on the region and city. Toronto and Vancouver are two of the largest commercial real estate markets in the country, and prices for office space in these cities are relatively high compared to other cities in Canada (Delle&Liedo, 2019). According to Agava and Dairo, (2021) the average price per square foot for office space in Toronto was around CAD 30 to CAD 40, while in Vancouver, it was around Canadian Dollar (CAD) 35 to CAD 45. However, prices can be much lower in smaller cities and towns across Canada. Factors that can influence commercial real estate prices in Canada include the state of the economy, interest rates, and government policies. However, there are also concerns about the impact of remote work on demand for office space in the long term, particularly in cities where prices are relatively high.

Commercial real estate prices in Africa can vary greatly depending on the country and region within the country. Factors such as the state of the economy, political stability, infrastructure development, and foreign investment can all impact the prices of commercial real estate (Jahanian, & Sirmans, 2021). While some African countries have seen stable prices in recent years, others have experienced rapid growth, particularly in major cities like Johannesburg, Lagos, and Cairo (Centre for Affordable Housing Finance in Africa, 2021). However, there are also challenges and risks associated with investing in commercial real estate in Africa, including political instability, infrastructure deficits, and lack of liquidity. It is important for investors to carefully research and analyze market conditions before making any investment decisions.

The prices of commercial real estate in South Africa vary greatly depending on the region. Johannesburg and Cape Town are two of the largest commercial real estate markets in the country, and prices for office space in these cities are relatively high compared to other cities in South Africa (Morrison & Wood, 2021). In 2021, the average price per square meter for prime office space in Johannesburg was around ZAR 200 to ZAR 250, while in Cape Town, it was around ZAR 200 to ZAR 300. Factors that can influence commercial real estate prices in South Africa include the state of the economy, interest rates, and government policies. However, there are also challenges and risks associated with investing in commercial real estate in South Africa, including political instability, infrastructure deficits, and lack of liquidity (Gatakaa & Mbae, 2022).

According to Mundlak, Yair, & Crego, (2018) prices of commercial real estate in Morocco have been on the rise in recent years, driven by a combination of government policies aimed at promoting economic growth, foreign investment, and increasing demand from both domestic and international companies. Casablanca, as the economic capital of the country, is the largest and most important commercial real estate market in

Morocco, with a relatively high demand for office space. According to Garino, &Sarno, (2021) the average price per square meter for prime office space in Casablanca was around Moroccan Dirham (MAD) 15,000 to MAD 20,000. However, prices can vary significantly depending on the location, quality, and age of the building, as well as market conditions at the time of purchase. While the commercial real estate market in Morocco has shown resilience in recent years, there are also challenges and risks associated with investing in this sector, including political instability, bureaucratic hurdles, and regulatory uncertainties.

In Kenya, Olima and Omwenga, (2020) noted that prices of real estates have been relatively stable in recent years, with some fluctuations due to market conditions and economic factors. Nairobi, as the capital city of Kenya and the largest commercial hub, is the most important commercial real estate market in the country. In 2021, the average price per square meter for prime office space in Nairobi was around Kenyan Shillings (KES) 150,000 to KES 200,000. However, prices can vary depending on factors such as the location, quality, age, and accessibility of the property. The commercial real estate market in Kenya is driven by various factors, including the state of the economy, political stability, and foreign investment (Sirma & Mongel, 2021).

Several Nairobi suburbs registered nominal house price rises. Nyari Estate, one of the most secured upmarket neighborhoods in Kenya and near many diplomatic establishments, saw the biggest rise in house prices of 12.4% during the year 2019. It was followed by Ridgeways (10.6%), Loresho (9.5%), Muthaiga (8.6%), Karen (6.2%), and Gigiri (5.2%). In Westlands (4.8%), Runda, (4.8%) Spring Valley, (4.7%), Donholm (4.3%) Kitisuru (4.1%), Lavington, (3.7%), Kileleshwa, (3.1%) Kilimani, (0.9%) and Eastleigh (0.5%). Langata, home to many housing developments and known for its gardens and parks, was the only Nairobi suburb which registered a nominal house price

decline of 3.8% during the year to 2019. However, when the 4.7% inflation rate in Nairobi 2019 is taken into consideration, real house prices have declined in half of Nairobi's suburbs during the year to 2019, (Africa Housing Finance Yearbook 2019).

According to a report given by the Kenya Real Estate Retail Sector (2023), real estate and construction sectors contributed 15.9% to GDP in FY'2022, a 0.1% point down from the 16.0% that was registered in FY'2021, attributable to decreased property transaction volumes in the market, coupled with; rising construction costs on the back of elevated inflation pressures, with the average construction cost so far in 2023 coming at Kshs 41,600 per SQM, a 20.1% increase from Kshs 34,650 per SQM in 2022, and, delays in processing construction permits owing to backlogs in registry systems, leading to an overall decrease in construction activities.

1.1.3 Commercial Real Estate in Nakuru County

Nakuru County is in the Rift Valley region of Kenya and is home to several key economic activities, including agriculture, manufacturing, and tourism. As a result, there is a demand for commercial real estate in the county, particularly in areas such as Nakuru City and Naivasha. In recent years, the prices of commercial real estate in Nakuru County have been on an upward trend due to increased demand from investors and businesses (Gubta & Kabundi, 2021).

The prices of prime commercial properties in Nakuru town and Naivasha have increased significantly, while the prices of secondary properties have also been on the rise. Factors such as location, size, and condition of the property also play a significant role in determining the price of commercial real estate in Nakuru County. Generally, commercial properties located in prime locations such as central business districts tend to be more expensive than those in other areas (National Housing Corporation, 2020). The

real estate sector undergoes a cycle of booms and busts. For instance, Eveready East Africa, a battery manufacturing company located in Nakuru town, closed shop owing to stiff competition from cheap imports. The company shelved its plan to build a shopping mall on its prime land that was to be a mix use development comprising of apartments and a shopping mall. Instead, it would convince shareholders to sell off the land to offset a costly debt and provide free cash flows for investing in other sectors (Muhoro, 2019).

Upcoming gated community estates that are meant for middle and upper classes include the Italian luxury court five kilometers from Naivasha town. The demand for houses has also pushed up land prices especially by developers of holiday homes who have increased their activities in Naivasha, (Gitonga, 2020). It is therefore important to find out what these factors are and how they are influencing real estate property prices as it is a very important asset class (Bao, 2018). Li, (2019) find out that closeness to CBD increases the value of real estate as the transport cost is lower. The distance from the urban center where the land is located is a major independent factor where readiness to purchase a specific piece of land at a certain price level depends. Consequently, a tenant can bid a higher rent when economic activities depend a lot on meeting the customers as first and as frequently as possible owing to the closeness to the city center.

The Kenyan government has implemented several policies in recent years to boost the real estate sector, including tax incentives for developers and initiatives to make it easier to obtain construction permits. However, the government has also introduced policies that have had a negative impact on the sector, such as the 2017 cap on interest rates, which led to a slowdown in lending to the real estate sector (Muthee, 2021). The real estate market in Kenya has been undergoing significant changes in recent years, with a shift towards the construction of mixed-use developments and a growing demand for

high-end properties. However, the market has also been affected by oversupply in some areas, particularly in the residential sector.

Nakuru being Kenya's third largest residential city after Nairobi and Mombasa was rated the fastest developing town in sub-Saharan Africa in 2011 by the UN habitat. Prices for commercial space have more than doubled in the last four years with office space costing up to Sh90 per square foot from about Sh30 in 2008. The high demand has been triggered by large corporate institutions such as banks, supermarkets, universities and colleges in town which normally require huge space. Therefore, the study sought to assess the effect of selected factors on prices of commercial real estate in Nakuru Town East Sub County.

1.2 Statement of the Problem

Real estate is among the top contributing source of revenue for high-income earners and the government. It is also among the industries working excellently to bridge the youth's unemployment gaps. Property prices are of great interest to real estate developers, banks, and policy makers or, in short, the public as well as to actual and potential homeowners. However, the prices of commercial real estate in Nakuru County have been fluctuating in recent years due to several factors, including macro-economic conditions, government policies, and changes in the real estate market. For instance, Nakuru County economy has been growing at a moderate pace in recent years, with an average annual growth rate of 5.6% from 2016 to 2019. However, the COVID-19 pandemic has had a significant impact on the economy, with growth slowing down to 0.6% in 2020. The pandemic also led to a decline in demand for commercial real estate, particularly in the hospitality and retail sectors which has in turn affected the pricing of commercial real estate properties. According to data from Hass Consult, (2021) a real estate consultancy firm in Kenya, the prices of commercial properties in Nakuru have fluctuated in recent years. For instance,

between 2016 and 2017, the prices of office space in Nakuru rose by an average of 5.6%, while retail space prices increased by 3.9%. However, in 2018, the prices of commercial properties in Nakuru declined by an average of 2.7%, with the retail sector being the hardest hit, registering a decline of 4.4%. According to a report by Nakuru Metropolitan Area Land (2021), in 2022, high land prices particularly within Naka area and 58 section in Nakuru town and other surrounding commercial zones which is also scarce, continue to be a challenge for commercial real estate developers looking for development land.

Several studies have been conducted on the commercial prices in Nakuru County for instance; Wachira, (2018) conducted a study on the factors influencing the price of land in Nakuru County. The study findings revealed that investment demand, interest rates, proximity to urban center and Real GDP influenced the price of land in Nakuru County. Koech, (2019) did a study on the effect of real estate development on the growth of estate agents in Nakuru municipality. The study findings revealed that on the first year of business most agents managed less than thirty properties, however the numbers shot up drastically and now most agents on average manage more than thirty-one properties. The study also indicated that majority of agents in their first year managed less than thirty tenants. This number increased significantly and currently majority of agents manage over thirty-one tenants of which nine of the respondents manage over ninety-one tenants. However, from the reviewed literature, studies focused on growth of real estates within Nakuru County while the current study focused on the effect of selected factors on prices of commercial real estate in Nakuru County, a survey of Nakuru City East Sub County.

1.3 Objectives of the Study

1.3.1 General Objective of the Study

The general objective of the study was to assess the effect of selected factors on prices of commercial real estate in Nakuru Town East Sub County.

1.3.2 Specific Objectives of the Study

The specific objectives of the study were:

- i. To assess the effect of interest rates on prices of commercial real estate in Nakuru Town East Sub County.
- ii. To establish the effect of employment rate on prices of commercial real estate in Nakuru Town East Sub County.
- iii. To determine the effect of demographics on prices of commercial real estate in Nakuru Town East Sub County.
- iv. To examine the effect of the availability of credit on prices of commercial real estate in Nakuru Town East Sub County.

1.4 Hypotheses of the Study

H0₁: Interest rate has no statistically significant effect on prices of commercial real estate in Nakuru Town East Sub County.

H0₂: Employment rate has no statistically significant effect on prices of commercial real estate in Nakuru Town East Sub County.

H0₃: Demographics have no statistically significant effect on prices of commercial real estate in Nakuru Town East Sub County.

H0₄: Availability of credit has no statistically significant effect of credit on prices of commercial real estate in Nakuru Town East Sub County.

1.5 Significance of the Study

The findings of this study were highly significant for policymakers, particularly in the context of formulating policies to regulate and promote the commercial real estate sector.

By providing insights into the factors that influence real estate prices, such as interest

rates, employment rates, demographics, and availability of credit, the research guided the government in developing policies that foster sustainable growth within the sector. Policymakers used these insights to address market inefficiencies, regulate pricing, and promote fair competition. Moreover, understanding the key determinants of real estate prices can help the government devise measures to mitigate risks, enhance the affordability of credit, and stabilize the real estate market during economic fluctuations.

For practitioners, such as real estate developers, investors, and real estate agencies, the study offered valuable insights into market dynamics that can inform business strategies. Investors and developers made more informed decisions about project locations, timing of investments, and financial planning based on the findings regarding interest rates, employment levels, demographic trends, and credit access. By understanding these factors, real estate practitioners better anticipated market shifts, identify potential opportunities, and adapt to emerging trends. Additionally, the study provided risk management strategies by identifying potential threats such as unfavorable government policies, enabling stakeholders to develop contingency plans to mitigate those risks and optimize their investment portfolios.

Academically, the study contributed to the growing body of knowledge on commercial real estate pricing, particularly within the Kenyan context. The findings offered empirical data that can be used to support further research, advancing theories and models that explain the behavior of real estate markets. By focusing on the specific factors that influence commercial real estate prices in Nakuru City East Sub County, the study provided a foundation for future research in similar urban settings. It also opened the door for comparative studies with other regions, enhancing the understanding of real estate market dynamics in both local and international contexts.

1.6 Scope of the Study

The study was limited to the effect of selected factors on prices of commercial real estate. The study was conducted in Nakuru East Sub- County, Nakuru County. The independent variables of the study were interest rates, employment rates, demographics, and availability of credit. The dependent variable of the study was the prices of commercial real estate. The study was anchored on the classical theory, credit channel theory, and life cycle theory. The target population of the study was operational managers and financial managers of 60 targeted real estate agents and companies from Nakuru East sub County. Therefore, the total target population was 120 respondents. Nakuru East Sub-County was selected because it is a significant economic hub within Nakuru County, showcasing a concentration of commercial activities, business districts, and industrial zones, hence the need to assess the prices of commercial real estate. The study used primary data only. The study was conducted for a period of twelve months that is from May 2023 to May 2024. A 12-month period allowed the study to capture the effects of seasonal changes and fluctuations in interest rates, employment rates, demographics, and credit availability. Real estate prices are often influenced by cyclical factors such as economic trends, inflation, and policy changes, which could have become visible only over a longer period.

1.7 Limitations of the Study

The study encountered limitations like difficulties in obtaining information from the potential respondents since some may be reluctant to give information for fear of victimization. To address this, the researcher persuaded and convinced the real estate companies and the potential respondents that the information provided from them was vital in compiling the research and was purposely used for academic purpose. The researcher also produced an introduction letter from the University and National Council

of Science and Technology and Innovation (NACOSTI) indicating that the data collected was used for academic purposes only. The respondents were assured that confidentiality of the information was observed.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this section, the study reviews both the theoretical and empirical literature considered relevant to the study. The chapter provided information extracted from selected literature materials and articles on interest rates, consumer income, and demographics on prices of commercial real estate. The chapter also reviewed theoretical literature and conceptual framework.

2.2 Theoretical Review

The study was anchored on the classical theory of interest, credit channel theory and life cycle theory.

2.2.1 Classical Theory of Interest

The Classical theory of interest was developed by Mill, Marshall and Pigou in 1877. The theory is an economic theory that explains the relationship between interest rates, savings, and investment. According to the Classical Theory, the interest rate is determined by the interaction of the supply and demand for loanable funds. The supply of loanable funds comes from savings, while the demand for loanable funds comes from investment. (Landau & Lifshitz, 2005). The classical theory of interest asserts that the rate of interest is determined by the rate of profit. This is achieved by arbitrage between the rate of profit on production and the rate of profit in banking (Toporowski, 2022).

The theory is based on various assumptions. For instance, it assumes that individuals save a portion of their income, which provides the funds for investment. Investment, in turn, creates jobs, income, and output. The theory also assumes that people save money for future consumption. The amount of saving depends on the interest rate. When the

interest rate is high, people are more willing to save their money because they can earn a higher return on their savings, (Kleppner & Kolenkow, 2011). Conversely, when the interest rate is low, people are less willing to save because they can earn a lower return on their savings. On the other hand, investment is motivated by the expected return on investment. When interest rates are low, the cost of borrowing is low, and it is cheaper for businesses to borrow money for investment projects. Conversely, when interest rates are high, the cost of borrowing is high, and businesses are less likely to invest because the cost of borrowing is too expensive, (Mason, 2013).

The classical theory of interest also explains how changes in interest rates can affect the supply of commercial real estate. Higher interest rates can make it more expensive for developers to finance construction projects, leading to a decrease in the supply of commercial real estate. Conversely, lower interest rates can make it cheaper for developers to finance construction projects, leading to an increase in the supply of commercial real estate, (Samuelson, 2015). When interest rates are low, it becomes cheaper for businesses to borrow money for investment projects, including the purchase of commercial real estate. This can lead to an increase in demand for commercial real estate, as businesses are more willing to invest in property. On the other hand, when interest rates are high, the cost of borrowing is high, and businesses may be less likely to invest in commercial real estate due to the high cost of borrowing, (Luigi, 2013).

The classical theory of interest was applicable in this study in order to explain how interest rates affect savings and investment, which in turn, impacts the demand and supply of commercial real estate. Specifically, changes in interest rates affect the cost of borrowing, which in turn impacts the demand for and supply of commercial real estate. Therefore, the theory helps in explaining interest rates and its effect on prices of commercial real estate.

2.2.2 Life Cycle Theory

The life-cycle theory was first developed by economists Franco Modigliani and Richard Brumberg in 1954, who argued that individuals save and spend over their lifetimes to achieve a desired level of consumption, (Wheaton, 1990). The life-cycle theory is a well-known theory that explains how demographic changes can affect the demand and prices of real estate. This theory proposes that individuals go through various stages in life, each of which is associated with different housing needs and preferences. According to Wheaton, (1990) these different stages are typically associated with different age groups, which can be characterized by varying household sizes, incomes, and lifestyle preferences.

One of the key insights of the life-cycle theory is that the demand for different types of housing changes over time as individuals move through different stages of life, (Case, &Shiller, 2012). For example, young adults who are just starting out in their careers and may not yet have children may prefer smaller, more affordable homes that are located near urban centers, as they get older and start to have families, they may require larger homes with more space for their children to grow and play. Later in life, as their children leave home and they enter retirement, they may prefer to downsize to smaller, more manageable homes that require less maintenance and upkeep, (Case, &Shiller, 2012).

According to DiPasquale, (2014) these changes in housing preferences and demand can have a significant impact on the prices of real estate. For example, if there is an increase in the number of young adults entering the housing market, there may be increased demand for smaller, more affordable homes, leading to an increase in prices in these areas. On the other hand, if there is a significant increase in the number of older adults, there may be increased demand for larger, more spacious homes, leading to an increase in prices in these areas.

One of the key assumptions of the life-cycle theory is that it assumes that individuals have perfect foresight and can accurately predict their future income and housing needs. Individuals may not have a clear idea of their future income or housing needs and may be influenced by a wide range of factors that are difficult to predict, such as changes in job opportunities, family dynamics, or health (Blandon, & Argiles, 2020). Another criticism of the life-cycle theory is that it assumes that individuals have access to credit and can borrow against future income to finance their housing needs. Access to credit may be limited for certain groups of individuals, such as low-income households or those with poor credit histories.

Despite these critiques, the life-cycle theory remains a useful framework for understanding how demographic changes can affect housing demand and prices. By recognizing the different stages of life and the associated changes in housing preferences, real estate investors and developers can make more informed investment decisions. Therefore, the theory was used in explaining demographics and its effect on prices of commercial real estate.

2.2.3 Credit Channel Theory

The theory was developed by Bernanke and Gertler in 1995. The theory focuses on how monetary policy is transmitted. This mechanism is explained by two channels namely the bank lending channel and the balance sheet channel. Thornton (1994) argues that lending problems arising from information asymmetry form the basis of these two channels. The costs associated with obtaining information as well as controlling borrowers' behavior create disparity between the cost of internally generated and externally obtained finance. According to this theory, external changes in external finance premium intensify the impact of monetary policy on interest rates. This premium is the difference in costs between internal and external finance. These could be retained earnings and debt/ equity

respectively (Borio, & Claudio, 2008). The magnitude of the premium indicates imperfections that exist in the credit market which causes disparity between expected returns by lenders and costs that potential borrowers are faced with. Any change in monetary policy which lowers or raises interest rates in the open market tends to be in tandem with the change in the finance premium of external finance. Therefore, monetary policy impacts cost of borrowing, real activity, and real spending significantly (Bernanke & Gertler, 1995).

The theory emphasizes on four underlying realities on how the economy responds to monetary policy shocks. First: Tightening of the monetary policy that is not anticipated has effects on the rates of interest; a monetary tightening is typically accompanied by continuous decline in real GDP and price levels, (Borio, & Claudio, 2008). Second: The impact of a monetary tightening is initially absorbed by final demand which falls rather quickly after the policy change. Production is downward sloping just like final demand, however with a lag only. This implies that in the short run inventory stocks rise, (Wayne & Passmore, 2009). Eventually, inventories decline. This disinvestment of inventory explains a significant percentage of the decline in real GDP. Third: Most advance and sharpest reductions in final demand happen in residential investment. Spending on consumer goods (non-durables and durables) close behind. Fourth: There is an eventual decline in fixed investment in response to monetary tightening. However, this fall lags those of consumer durables, housing and certainly, behind much of the decline in interest rates and production, (Graeve & Ferre 2011).

The theory is relevant to the current study as it helps in the understanding of how changes in interest rates impact the demand for real estate. When interest rates are low, the cost of borrowing for real estate financing is cheaper, which can increase demand for real estate purchases and investments. On the other hand, when interest rates rise, the

cost of borrowing increases, which can dampen demand for real estate investments and purchases. Additionally, credit channel theory can help explain how changes in bank lending standards and credit availability can impact the real estate market. When banks tighten their lending standards, it can become more difficult for individuals and businesses to access credit for real estate purchases and investments, which can reduce demand for real estate and slow down the market. Conversely, when banks loosen their lending standards, it can increase the availability of credit for real estate financing, which can increase demand for real estate. Thus, the theory helped in explaining the availability of credit and the effects it has on prices of commercial real estate.

2.3 Empirical Review

2.3.1 Interest Rates on Prices of Commercial Real Estate

Kirungu, (2019) did a study on the effect of interest rate volatility on real estate prices in Kenya. A descriptive study was undertaken. The study adapted a census study of all the properties in the Hass Property Index. A secondary data collection technique was employed and was done through the analysis of data from the Hass Property Index and from the Central Bank of Kenya Monetary Policy Committee data base, all of which are publicly available. A simple regression model analysis was used. The study concluded that interest rates do influence real estate price in the Kenyan market. Average house prices had been on the rise for the 8-year period to 2012 and the lowest value for house prices was 15,070,019.00 in years 2009 and 2006 while the highest was 27,132,758.8767 in 2012.

Ombati, (2019) focused on the effect of interest rates on commercial real estate prices: the case of commercial leases in Nairobi County. To establish the relationship, data on commercial rent was collected using 50 commercial leases (within the commercial zones of Nairobi County) between January 2007 and December 2013. The research used Toda

and Yamamoto (1995) method to determine the relationship between commercial rent and interest rates. The results therefore indicated that there was causal relationship between interest rate and commercial rent albeit in one direction share price i.e movement in commercial rent causes changes in interest. There was however no evidence suggesting that movement in interest causes changes in commercial rent. As regards the sign of causality, positive causality exists in one direction

Njoroge, Muturi and Oluoch, (2019) did a study on the effect of commercial bank lending interest rate on the performance of the residential property market in Kenya. This study adopted a positivist philosophical attitude using causal research design. The study conducted several test statistics and diagnostic tests to achieve the most optimal solution. Vector error correction model and auto-regressive distributed lag model were employed to test the hypothesis in the short run and long run respectively. The study used secondary data from first quarter of 2005 to fourth quarter of 2018. The results found out that commercial bank lending interest rate had a negative effect on performance of residential properties in Kenya in both the short run and long run-in line with loanable fund theory.

Obondy, (2019) focused on the effect of interest rates on the supply of real estate finance in Nairobi County. The research adopted a descriptive method where the units of study sought to establish the effect of interest rates on the supply of real estate finance in Nairobi County. This method was preferred because it allowed for the prudent comparison of the research findings. The study concluded that the interest factor plays a major role in determining the supply of real estate finance but with different weight and direction. This comes into play when the research is done in the short term or the long term. The study found that there was a strong positive relationship between the lending

rate and the total sales of real estate in the short term. The implication of the finding is that interest rates have significant impact on the mortgage sales.

Onyango, (2019) did a study on the effect of real estate financing on performance of commercial properties in Kenya. The data was obtained through the desk review of mortgage interest rates and savings rate from banks, examination of Return of Interest, (ROI) of commercial properties and their shareholding equity. The results of the analysis are presented in tables, percentages, graphs, and charts. The descriptive results obtained from the study show that the dependent variable, “return on investment as a measure of performance for the commercial property” has been considerable. The independent variables also supported the performance of commercial property.

Haoyu, Chengliang, Zhang, (2022) did an experimental research on the impact of interest rate on real estate market transactions in China using the experimental economics method to simulate real estate transactions in the real market and control the irrelevant variables to study the movements of housing prices, transaction volumes, consumer transaction intentions and bubble indices under different deposit and lending rates. The study findings revealed that the level of deposit interest rate has a significant inhibitory effect on housing price and a significant promoting effect on real estate market transaction volume and traders’ house-buying behavior. The study findings also revealed that higher the level of deposit interest rate is, the better the degree of regulating house prices deviating from the theoretical price is and the better the effect of inhibiting market bubbles.

2.3.2 Employment Rate on Prices of Commercial Real Estate

Agnew, Kerri, and Lyons, (2019) did a study on the impact of employment on housing prices: detailed evidence from Foreign Direct Investments, (FDI) in Ireland. The study

presented the first causal estimates of employment changes on housing prices, both sales and rental. It did this by using a purpose-built spatially granular dataset of 1.4 million housing prices and FDI employment, covering Ireland 2007-2013. Identification rests on a combination of rich spatiotemporal variation due to the abundance of FDI in Ireland, a rich set of location controls and an inelastic housing supply in the period covered. The main results show that 1-2 years after 1,000 extra jobs have been created, monthly rents in nearby properties are between 0.5% and 1% higher. The effect on prices is at least 2% but less consistent across specifications. On average, net job creation in export oriented FDI firms 2009-2013 added roughly €48 million to the stock of wealth of owner-occupied real estate and €8 million to the stock of wealth of the rental sector.

Yonguo and McIntosh, (2019) did a study on the employment growth and real estate return in Japan: Are they linked? The study conducted a literature review over 2013-2018 period. The study findings revealed that real estate returns and employment growth rates for forty-six major MSAs are used to examine the relationship between employment growth and real estate return. The results suggest: Employment growth contributes to real estate return only in the short term. There is no relationship between expected return and employment growth over the long term. Employment growth, however, tends to reduce return beta and return volatility. Employment beta and volatility are positively linked, respectively, to return beta and volatility. Both employment beta and return beta are priced in the marketplace, that is, a larger beta is likely to be associated with a higher expected return.

Wasihun, Schaeffer and Gebremedhin, (2019) did an analysis of the role of commercial real estate in the economic development of the Northeastern United States. A three Stage Least Squares (3SLS) simultaneous equations model derived from is used to analyze the role of “small” and “large” retail establishments in the economic development of the

Northeast region of the United States. The study concluded that growth in retail establishments indeed plays a significant role in the economic growth process in the study region. Counties' government expenditure and housing values play a strong role in attracting retail businesses. Population density has different effects on "small" and "large" retail establishments; high population density areas are found to be attractive, particularly to "small" retail establishments, whereas "large establishments" prefer areas with low population densities.

Dogan and Topuz (2020) did a study on real effects of real estate: evidence from unemployment rates in Mexico. The study used a long time-series of MSA-level quarterly data from 1990 to 2018. The study used an instrumental variable approach to estimate the effects of residential real estate prices on unemployment rates using the geography-based land constraints measure of Saiz (2010) as the instrument. The results of the study showed that changes in residential real estate prices do not have a causal effect on unemployment rates in the same quarter.

Geerolf and Grjebine (2020) sought a study on assessing house price effects on unemployment dynamics in African Countries. Using a dataset of 34 countries over the last 40 years, the study showed the large and significant impact of house prices on unemployment fluctuations using property taxes as an instrument for house prices. The study found that (instrumented) appreciation in house prices yields to a 3.4% decrease in the unemployment rate.

Nan (2021) sought a study on the effects of housing price on unemployment rate and stock market in China. The study analyzed from theoretical perspective based on macroeconomics, financial market, mass psychology and national conditions by combining some data basis, try to find the common ground of these existing conclusions and study the real impact from housing price on unemployment and stock market in

China. The results showed that the effect of housing price to unemployment rate is positively correlated in the long run and negatively correlated in the short run; the effects of house price on stock price tends to be positively correlated in China.

Villegas (2023) did a study on employment fluctuations, real estate prices, and property taxes in Italy. The study used empirical evidence from Italian municipality data and feature a quantitative model with financial frictions to quantify each channel. First, the study exploited municipal-level variation in property tax changes to estimate its effect on labor, consumption, and real estate prices during Italy's 2012 property tax reform. Then, the study used the estimates to calibrate a quantitative model that includes houses and commercial real estate charged with different property tax rates. The study found that both channels explain more than 50% of the employment decline due to higher property taxes.

2.3.3 Demographics on Prices of Commercial Real Estate

Lodha and Baser, (2019) did a study on the demographic changes and the housing market in Singapore. Specifically, the study focused on the changes in life expectancy, international immigration, urbanization, and fertility. The existing literature focused on explanations related to the financial market. Adopting a supply-demand framework, the study found that changing fertility, rising life expectancy, urbanization, and international immigration can account for increase of real estate prices.

Zheng (2019) did a study on the impact of population age structure on real estate prices in China provincial panel. The article used 2004-2014 provincial panel data of 31 provinces, cities and autonomous regions, in the control of variable. The study found that total dependency ratio and elderly dependency ratio are on an inverse relationship towards ordinary residence price. The study concluded that elderly dependency ratio is

negatively related to high-grade residential property prices. The study found that the eastern region real estate price is most sensitive to the changes in the dependency ratio.

Gao and Xinran, (2019) focused on the influence of demographic structure on housing price in Chongqing. Based on the relevant data of Chongqing's reports from 2003 to 2012, this paper studied the influence of population structure on residential housing price from the perspective of demand comprehensively. It came up with a report that the population bring-up ratio and sex ratio have a negative influence on housing price, while sex ratio's influence is much bigger than the population bring-up ratio. In a word, the demographic structure causes certain influence on the residential housing price of Chongqing.

Li, and Coi (2018) conducted a study on the effects of demographics on the real estate market in the United States and China. The study used data from the United States Federal Bank of St. Louis' Federal Reserve Economic Database (FRED). The factors used are GDP, CPI, supply of homes, real median income, age group "15-64", unemployment rate, mortgage debt outstanding, and higher education (bachelor's degree or higher). The results showed that working age population of "15-64" was statistically significant in the change of housing prices. Using the model, the study forecasted the housing prices in the year 2030 and 2050. The study concluded that demographics affects the real estate market in the United States and China

Kosgei and Tenai, (2018) conducted a study on the effect of selected demographic and macro-economic variables on house prices in Nairobi County, Kenya. The study adopted an explanatory research design and covered the periods 2004 to 2016. The House Price Index was obtained from the Hass Property Consult limited while those of the other variables were obtained from the Kenya National Bureau of Statistics. The results revealed that the short run effect of exchange rate and inflation rate on house prices were

negative and significant. The long run results showed that, mortgage rate and new houses had a negative and highly significant effect on house prices while exchange rate had a positive and significant effect on the house prices in Kenya.

Majid, Nasir, and Rosli, (2019) did a study on the impact of buyers' demography on property purchasing in state of Selangor, Malaysia. This study examined the impact of buyers' demography on property purchasing using Chisquare Test. A questionnaire survey was used for collecting primary data in the state of Selangor with reference to buyers' demography and housing attributes. The outcome showed that elements of the demography especially employment, marital status and gender have significantly affected property criteria which become main aspects that have always been considered by the buyer prior to purchasing a housing unit.

Wasihun, Schaeffer and Gebremedhin (2019) did an analysis of the role of commercial real estate in the economic development of the Northeastern United States. A 3SLS simultaneous equations model derived from was used to analyze the role of small and large retail establishments in the economic development of the Northeast region of the United States. The study concluded that growth in retail establishments indeed plays a significant role in the economic growth process in the study region.

Bensdorp (2020) did a study on the influence of population demographics on real estate prices in Zuid-Holland. Data from the Dutch national real estate broker association (NVM) was used, enriched with publicly available neighborhood statistics. Analyses have been performed for each year, for both models. The results showed the relations of structural, locational, and neighborhood variables on the recorded transaction price per square meter. The study showed that the inclusion of age dynamics added a very slight value to the adjusted R-squared, however this variable was not consistently significant.

Dorel, (2021) focused on the demographic and economic factors influencing the real-estate market in Romania. The study targeted data for Romania between April 2009 and September 2016. The study adopted a path analysis approach, the study tested proposed model and, after making several adjustments to it in order to increase its power, the study found a way to relate the demographic indicators, prices and transactions that could aid both in explaining the dynamics of the real-estate market and aid in making forecasts that related to these indicators. The study findings revealed a point to a negative relationship between prices and transactions. The study also found that income has a positive relationship with the number of transactions and a negative one with home prices.

2.3.4 Availability of credit on Prices of Commercial Real Estate

Onyango, (2019) conducted a study on the effect of real estate financing on performance of commercial properties in Kenya. The study employed secondary sources to collect data. Some of the information that was relied on include the data from published and audited annual reports of investments for the target group, Kenya National Bureau of Statistics (KNBS) and Central Bank of Kenya, (CBK), property indices from the property consultants. The data was obtained through the desk review of mortgage interest rates and savings rate from banks, examination of ROI of commercial properties and their shareholding equity. The study findings revealed that the mortgage interest rate accounted for return on investment of commercial properties by 52.2%, savings rate alone is responsible for 11.06% of commercial property growth and equity shareholding accounts for 35.69% of the growth in commercial properties as per the ROI.

Naranjo and Scheick, (2019) did a study on the credit availability and asset pricing dynamics in illiquid markets: Evidence from commercial real estate markets in Canada. The study found that a tightening in credit availability is negatively related to subsequent price movements in private and public commercial real estate markets. Assets trading in

illiquid segments of these markets are also susceptible to a feedback effect whereby changes in asset prices predict subsequent changes in credit availability. Controlling for investor demand, our findings suggest credit constraints play an economically significant asset pricing role in markets that are both highly levered and relatively illiquid.

Fipma and Nweze, (2019) did a study on the impact of real estate financing on financial performance of commercial banks listed on the Nigerian Stock Exchange, (NSE). The study adopted a descriptive research design. The population of this study was all the 11 listed commercial banks in Nigeria as at the time of the study. For the purposes of this study, only secondary data was used. The secondary data was sourced from the annual reports that are available from their websites, the NSE and the Central bank of Nigeria website. Data was collected for a period of 5 years from 2013-2017. The results showed that mortgage finance had a strong negative effect on the financial performance of listed commercial banks in Nigeria. Further, liquidity and cost of operations also had a strong effect on the financial performance of commercial banks. The study concluded that real estate finance influences the financial performance of listed commercial banks in Nigeria.

Akinyi, (2019) conducted a study on the determinants of demand for credit by the real estate sector in Kenya. The results indicated that GDP and inflation have a positive effect on the credit demanded by the real sector. Their impact was however found not to be significant. Real short- term and long-term interest rates depicted a negative and positive impact respectively whereas increase in the exchange rate was found to negatively impact the credit to the real estate. The growth in the real estate sector has a positive and significant impact on the credit demanded by sector. However, credit to other sectors (households) has a negative effect which was also found to be significant. Domestic debt exhibited a negative and significant effect on the credit to the real estate sector whereas

interest capping was found to have a positive effect on the credit demanded though the effect was insignificant. The study established that the macroeconomic environment plays a vital role in the determination of credit demand by the real estate sector in the country.

Ojiambo, (2020) conducted a study on the effect of real estate finance on financial performance of commercial banks listed on the Nairobi securities exchange. The study sought to evaluate the effects of real estate finance on the financial performance of listed commercial banks in Kenya. The study adopted a descriptive research design. The population of this study was all the 11 listed commercial banks in Kenya. Only secondary data was used. The secondary data was sourced from the annual reports that are available from their websites, the Nairobi Security Exchange (NSE) and the Central bank of Kenya website. Data was collected for a period of 5 years from 2009-2013 since most of the other studies have used a similar period. The study established a positive relationship between the availability of credit and financial performance of commercial.

Alex (2022) did a study on the effect of credit supply on prices of real estate in Cape Town. The study utilized the financial theory. The study did a cross-sectional analysis. The study utilized two research designs: firm-wide lender credit suspensions and historical concentration of depository locations. The study revealed that properties in markets with greater credit supply have significantly higher valuations; exogenous exit of a local lender predicts decreased property values of 5.5%. The study concluded that on the intensive margin, variation in average originator underwriting standards explains economically important differences in property cap rates and valuations across markets.

2.3.5 Economic Development on Prices of Commercial Real Estate

Carlos Rodriguez (2021) conducted a cross-national comparative study over five years to assess the impact of market liberalization policies on commercial real estate prices in Peru. The study used a sample of 400 properties across major cities. The study employed surveys, interviews, and analysis of economic policy documents. The results revealed mixed outcomes, with some countries experiencing positive impacts on commercial real estate prices following market liberalization.

Emily Johnson (2022) conducted a longitudinal study spanning five years to investigate the impact of economic development on commercial real estate prices in United States and Canada. This research, which included both qualitative and quantitative methods, focused on zoning regulations, tax incentives, and other policy measures across major cities in the United States and Canada. The study revealed a significant correlation between specific government policies and fluctuations in commercial real estate prices, highlighting the pivotal role of regulatory frameworks.

Li Wei (2022) delved into the consequences of economic development specifically rapid urbanization on commercial real estate prices, with a particular focus on Tokyo, Japan. Using a longitudinal case study spanning a decade, Wei employed qualitative research methods. The study, which included in-depth interviews with stakeholders and analysis of historical property transaction data, revealed significant increases in commercial real estate prices in specific districts of Tokyo due to rapid urbanization, highlighting the pivotal role of urban planning.

Antonio Rossi (2023) explored the intricate relationship between market dynamics, economic development indicators, and commercial real estate prices in Nepal. Using a cross-sectional approach over a three-year period, Rossi employed a mixed-methods

strategy. The study, which included a sample of 300 commercial properties in major European cities, identified nuanced relationships between economic development indicators and commercial real estate prices, emphasizing the importance of understanding regional economic contexts.

Fatima Nkosi (2023) examined the impact of infrastructure development on commercial real estate prices, choosing Nairobi, Kenya, as a case study. Employing a mixed-methods approach over five years, the study utilized surveys, interviews, and property transaction data analysis. Findings indicated a positive correlation between infrastructure development and commercial real estate price appreciation, underscoring the potential benefits of strategic infrastructure investments in emerging markets.

Olivia Harper (2023) investigated the influence of environmental sustainability initiatives on commercial real estate prices in Sydney, Australia. The study adopted a longitudinal case study spanning a decade. The study also utilized a mixed-methods approach. The study found a positive association between higher levels of environmental sustainability and increased commercial real estate prices, signaling a growing market preference for eco-friendly properties.

2.4 Summary of the Research Gaps

Table 1

Summary of the Review Gaps

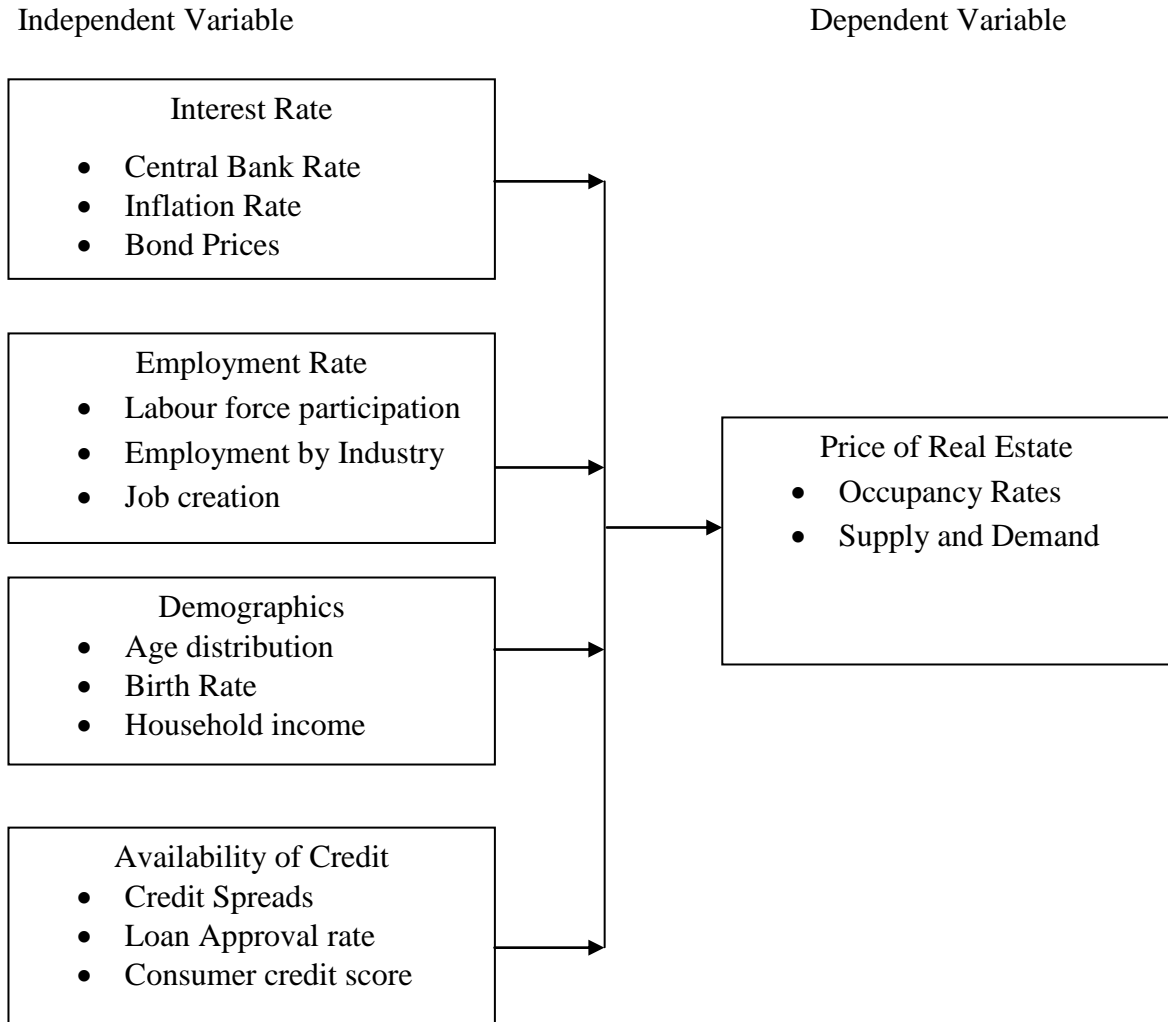
Author	Focus	Findings	Gaps	How the Current Study Address the Gaps
Kirungu (2019)	Effect of interest rate volatility on real estate prices in Kenya.	The study found that interest rates do influence real estate price in the Kenyan market	The study was conducted in the Central Bank of Kenya	The current study was conducted among commercial real estates in Nakuru County
Ombati (2015)	Effect of interest rates on commercial real estate prices: the case of commercial leases in Nairobi County	The study indicated a causal relationship between interest rate and commercial rent albeit in one direction share	The study was focused on commercial leases in Nairobi County	The current study focused on commercial real estates in Nakuru County
Haoyu, Chengliang and Zhang (2022)	Experimental research on the impact of interest rate on real estate market transactions	The level of lending rate has a significant inhibiting effect on the volume of real estate transactions	The study was focused on the impact of interest rates on real estate market transactions	The current study focused on the effect of interest rate on general performance of commercial real estates in Nakuru County
Agnew, Kerri and Lyons (2019)	The impact of employment on housing prices	The study found that net job creation in export oriented FDI firms positively affected the stock of wealth of owner-occupied real estate and rental sector	The gap in this study is that it was conducted in Foreign Direct Investments, (FDI) in Ireland	The current study was based on the commercial real estates in Nakuru County, Kenya
Wasihun, Schaeffer and	The role of commercial real estate in	The study found that growth in retail	The gap in this study is that it was	The study was conducted in Nakuru County,

Gebremedhin, (2019)	the economic development of the Northeastern United States.	establishments indeed plays a significant role in the economic growth process in the study region	conducted in Northeastern United States. Also, the study focused on the role of commercial real estates in the economic development	Kenya. Additionally, the study focused on the effect on employment rate on commercial real estates
Ojiambo, (2014)	Effect of real estate finance on financial performance of commercial banks listed on the Nairobi securities exchange	The study found a significant positive relationship between real estate finance and financial performance of listed commercial banks in Kenya	The gap in this study is that it was conducted among commercial banks in Kenya	The current study was conducted in commercial real estates in Nakuru County
Onyango (2019)	Effect of real estate financing on performance of commercial properties in Kenya	The study findings revealed that the mortgage interest rate significantly affect the for return on investment of commercial properties	The gap in this study is that its scope was large. It included all the commercial properties in Kenya	The current study narrowed down the scope to focus on commercial real estates in Nakuru County
Fipma and Nweze, (2019)	The impact of real estate financing on financial performance of commercial banks listed on the Nigerian Stock Exchange, (NSE	The study concluded that real estate finance influences the financial performance of listed commercial banks in Nigeria	The gap in this study is that it was conducted in Nigeria	The current study was conducted in commercial real estates in Nakuru County

2.5 Conceptual Framework

Figure 1

Conceptual Framework



Source: Author, (2024)

Interest rates have a significant impact on real estate prices. As interest rates increase, the cost of borrowing money to purchase a home also increases. This can lead to a decrease in demand for real estate, as potential buyers may find it more difficult to obtain financing. Conversely, when interest rates are low, borrowing money becomes more affordable, and demand for real estate may increase. This can lead to an increase in real estate prices as buyers are more willing and able to make purchases.

Employment rates also play a role in real estate prices. When employment rates are high, people are more likely to have stable incomes and feel confident in their ability to make mortgage payments. This can lead to an increase in demand for real estate, which can drive up prices. On the other hand, when employment rates are low, people may have less income or be concerned about job security. This can lead to a decrease in demand for real estate, which can result in lower prices.

Demographics are another important factor in real estate prices. The age, income, and family status of potential buyers can all influence demand for real estate. For example, if a particular area has a large number of young families, there may be more demand for larger homes with multiple bedrooms and outdoor space. This can drive up prices in that area. Additionally, changes in demographics can have a significant impact on real estate prices. For instance, if an area experiences an influx of retirees, demand for smaller homes or homes with accessible features may increase, leading to a corresponding increase in prices.

Availability of credit also affects real estate prices. When credit is easily available, more people may be able to obtain financing to purchase real estate, leading to an increase in demand and higher prices. Conversely, when credit is tight, it may be more difficult for potential buyers to obtain financing, leading to a decrease in demand and lower prices. Additionally, changes in lending standards can have an impact on real estate prices. For example, if lenders tighten their standards and require higher down payments or better credit scores, it may become more difficult for some people to purchase homes, leading to a decrease in demand and lower prices.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter covers the description of the research design and the methodology, the study location, target population, sampling procedure and use of research instruments. It also includes reliability and validity of the instruments, data collection procedures, analysis, and interpretation. According to Kothari (2012) research methodology does not mean research methods only but also the logic behind the methods employed in the event of the research study, hence there is a need to explain why a particular method or technique was used to enable the researcher to evaluate the results.

3.2 Research Design

This study adopted explanatory research design. Explanatory research design is a type of research design that seeks to identify the relationships between variables and explain the reasons for those relationships. In the case of real estate prices, researchers can identify the factors that have a significant impact on real estate prices and explain the reasons for those relationships (Kombo & Tromp, 2015). The choice of an explanatory research design was because it involves collecting and analyzing quantitative data, which was well suited for the study of real estate prices. Real estate prices are typically measured using numerical values, such as sale prices or rental rates, which can be analyzed using statistical methods. The study adopted an explanatory research design to allow researchers to generalize their findings to a larger population. In the case of real estate prices, researchers used their findings to make predictions about real estate prices in other markets or at other points in time. The study by Kosgei and Tenai, (2018) adopted an explanatory research design to study the effect of selected demographic and macro-economic variables on house prices in Nairobi County, Kenya.

3.3 Target Population

Target population is a whole group of individuals or elements sharing similar resources or have one thing in common (Kombo& Tromp, 2015). According to a report by Nakuru Metropolitan Area Land (2022), there are approximately 60 real estate agents and companies in Nakuru Town East Sub-County. Therefore, the unit of analysis was 60 real estate agents and companies in Nakuru East Sub-County while the unit of observation was operational managers and financial managers of the targeted real estate agents and companies. Therefore, the total target population was 120 respondents.

3.4 Sampling Procedures

Since the study population was small, a census design was adopted. According to Mugenda and Mugenda (2012), a census design is a study of every unit, everyone, or everything in a population. Census designs increase reliability because there is no point in sampling allowing all the respondents to participate in the study.

3.5 Data Collection Instruments

The questionnaire was used to collect the primary data desirable for the study. According to Jankowicz, (2015), questionnaires are written tools that present respondents with questions or statements to which they are expected to respond in writing or selected from the answers given (Jankowicz, 2015). The questionnaire contained structured questions which are the questions that the researcher has given the respondents the choices of the answers that the respondents can answer. The design of the questionnaire was based on a multiple-item measurement scale. A five-point Likert Data was employed, using a list of response categories ranging from strongly agree to strongly disagree where 5=Strongly Agree, 4=Agree, 3=Undecided, 2=Disagree and 1=Strongly Disagree

The questionnaire was divided into four sections: Part A which had the background information and parts B, C D which had the research variables. There are several advantages associated with the use of the questionnaire which informs its usage in this study. These advantages include ease of distribution and data collection, ease of data analysis, standardization of the questions, and cost efficiency.

3.5.1 Pilot Test

A pilot survey is a small-scale trial of the actual study. It helps to determine the suitability and effectiveness of the research tools, as well as the practical aspects of administering the questionnaires. The purpose of a pilot test is to identify potential weaknesses, inadequacies, ambiguities, or difficulties in any part of the research process (Mugenda & Mugenda, 2012). A pilot-test was conducted in Nakuru West Sub-County, where 12 questionnaires were issued to the managers of the real estate agents. This represented 10% of the sample size. Data collected from the pilot study was not incorporated into the main study. The choice of conducting a pilot study at Nakuru West Sub County was because Nakuru West shares similar socio-economic characteristics with Nakuru Town East Sub-County, making it a suitable location to test the research instruments.

3.5.1 Validity of Research Instruments

According to Orodho, (2015), validity is the extent to which research findings after analysis represent the phenomenon under study. There are two types of validity of the questionnaire, which are face validity and content validity. Face validity refers to the probability that a question is misunderstood or misread. On the other hand, content validity refers to the degree to which a measure represents all facets of a given social construct. The content validity of this study was enhanced by the search of views of

experts in the field of study, especially the supervisors. According to Cooper and Schindler (2015) pre-testing is a good way to better the probability of face validity.

3.5.3 Reliability of Research Instruments

Reliability is a measure of the extent to which a research instrument yields consistent results or data after repeated trials (Kothari, 2012). Reliability allows the researcher to estimate errors and make necessary corrections, if any. This is because the higher the reliability, the smaller the margin of error, and conversely, the larger the error, the lower the reliability. In this study, reliability was enhanced by pre-testing the questionnaire with a selected sample that was not included in the main study. An internal consistency technique was adopted using Cronbach's Alpha. Internal consistency reliability is a measure used to assess how well various test items that examine the same construct produce similar results. Higher values of Cronbach's Alpha indicate better reliability. Kothari (2014) noted that, as a rule of thumb, a reliability coefficient of 0.70 or higher (obtained from a substantial sample) is considered acceptable

3.6 Data Collection Procedures

The data collection process began by getting a formal letter from the university authorizing the field study. The researcher then proceeded to seek a research permit from the National Council of Science, Technology, and Innovation (NACOSTI). The letter together with the research permit was then presented to the real estate agents as a means of seeking authority to gather data from the organizations. The researcher assured the respondent that there were no risks associated with the study since it just sought to inform the public domain of the factors that affect housing prices. Data was gathered using the drop-and-pick-later method which was collected after two weeks. In this method, the consent statement was issued and then the questionnaire was administered.

The respondents were assured of the confidentiality of any information that they provided which improved the response rate. The arrangement was made to collect the questionnaire later at a pre-agreed time.

3.7 Data Analysis and Presentation

Data analysis is the process of organizing, structuring, and interpreting the information gathered (Cooper & Schindler, 2015). It involves breaking down the collected data into manageable parts, summarizing the information, identifying patterns, and applying statistical techniques. In this study, the data collected was quantitative in nature. Quantitative data was analyzed using the Statistical Package for Social Sciences (SPSS) version 24. The study used both descriptive and inferential statistics. Descriptive statistics included percentages, frequencies, measures of central tendency (mean), and measures of dispersion (standard deviation). Inferential statistics involved correlation analysis to determine the relationship between variables. In addition, multiple regression analysis was used to examine the relationship between one dependent variable and several independent variables (Johnson & Christensen, 2012). The analyzed data was presented in tables.

The multivariate regression model was.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where:

Y = Prices of Commercial Real Estate

β_0 = Constant Term.

$\beta_1, \beta_2, \beta_3$ and β_4 = Beta coefficients.

X_1 = Interest Rates

X_2 = Employment Rate

X_3 = Demographics

X_4 = Availability of Credit

ε = Error Term

Diagnostic tests were conducted to check for normality, multicollinearity, and linearity. These preliminary tests were done to ensure that it was appropriate to use parametric statistics like correlation and multiple linear regression. Normality tests help to determine if the data follows a normal distribution and assess the likelihood that a random variable in the data collection is normally distributed. If data did not meet diagnostic test thresholds, corrective measures such as variable transformation, robust techniques, or model specification were applied to address issues like non-normality, multicollinearity, heteroscedasticity, or autocorrelation.

Normality means that the data follows a normal distribution. This assumption is important, especially when creating reference intervals for variables. There are two main ways to assess normality: graphically and numerically. The Shapiro-Wilk test is considered the best numerical method for testing normality. Graphical methods include using a histogram and a normality plot.

Multicollinearity occurs when predictor variables are highly correlated with each other. This assumption is important only for multiple linear regression, which uses several predictor variables. You can check for multicollinearity in two ways: using correlation coefficients (correlation matrix) and variance inflation factor (VIF) values. If the predictor variables show multicollinearity, it means they are strongly correlated. For VIF values, they should be below 10.00, with the ideal situation being values below 5.00. In this study, multicollinearity was assessed by calculating the VIF values.

Finally, the study conducted an autocorrelation test. Autocorrelation occurs when a variable is correlated with itself over time. When autocorrelation is present, it means that

the current value of the variable is influenced by its past values. This can lead to biased estimates of the regression coefficients because the impact of the independent variables may be incorrectly attributed to the auto correlated error term instead of the actual relationship between the variables.

3.9 Ethical Considerations

Before starting the data collection process, respondents were assured of their confidentiality and well-being, and they were informed about the purpose of the study. The study's only academic goal was to ensure that the information they provided would not be used against them. Participants were asked for their informed consent and were made aware that they could opt out of the study at any time before it concluded. The research was approved by the Kabarak University Scientific and Ethics Review Committee, and permission was granted by NACOSTI to collect data and issue an investigation approval license.

To ensure the completeness and integrity of the data during collection, the researcher employed several strategies. First, clear data collection procedures and comprehensive instruments were developed. Data collectors received thorough training, and pilot testing was conducted to identify and address any issues. Monitoring and supervision mechanisms were implemented, procedures were standardized across data collectors, and clear instructions were provided to respondents. Validation checks were incorporated into data collection instruments, protocols for data entry were established, and secure data storage and access measures were put in place.

Through these efforts, the researcher was able to maintain the accuracy, consistency, and reliability of the collected data, which enhanced the validity and credibility of the study findings. To ensure confidentiality, respondents were required to consent before filling

out the questionnaire. All information was kept confidential by the Principal Investigator (PI) and protected from exposure before and after analysis. Results were disseminated to interested parties upon request, and data materials were destroyed upon completion and information dissemination.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND DISCUSSION

4.1 Introduction

The chapter focuses on data analysis, presentation of the results and the discussion of the findings. The general objective of the study was to assess the effect of selected factors on prices of commercial real estate in Nakuru Town East Sub County.

4.2 Response Rate

Response rate equals the number of people with whom semi-structured questionnaires were properly completed divided by the total number of people in the entire sample (Fowler, 2014). The study administered 120 questionnaires for data collection. However, 97 questionnaires were properly filled and returned. This represented 81% overall successful response rates. Respondents were also assured of confidentiality of the information provided.

Table 2

Response Rate

Question Issued	Question Correctly Filled	Response Rate (%)
120	97	81

4.3 Reliability Test Results

A pilot-test was conducted in Nakuru West Sub-County, where 12 questionnaires were issued out to the managers of the real estate agents. Statistical Package for Social Sciences (SPSS) software was used to analyze the data. The result of the findings is shown in Table 3.

Table 3*Reliability Test Results*

Variable	No. of Items	Cronbach's Alpha Value
Interest Rates	5	.787
Employment Rate	6	.876
Demographics	7	.791
Availability of Credit	6	.819
Prices of Commercial Real Estate	6	.834

The questionnaires were coded and Cronbach's Alpha Test was then conducted. All the 5 variables gave Cronbach's Alpha threshold values greater than 0.7 as shown in Table 4.2. From the pilot study the Cronbach Alpha values were 0.787, 0.876, 0.791, 0.819 and 0.834 for interest rates, employment rate, demographics, availability of credit and prices of commercial real estate respectively. All the variables had Cronbach values which were greater than 0.7. This implies that the instruments were reliable.

4.4 Demographic Information

The demographic information presented is on the gender of the respondents, age of the respondents, education level and duration the respondents had been working in the real estate

4.4.1 Gender of the Respondents

The respondents were also asked to indicate the gender representation of the study subjects. The findings were as presented in Table 4.

Table 4*Gender Representation of the Study Subjects*

Gender	Frequency	Percentage
Female	32	33
Male	65	67
Total	97	100

According to the findings, (67%) of the respondents were male while (33%) were female. This implies that majority of the respondents were male. Gender plays a significant role in shaping the operations and performance of real estate companies, influencing various aspects from professional dynamics to market strategies. In the professional realm, gender representation and leadership within real estate firms are crucial factors. Although women comprise a substantial majority of real estate agents, men still dominate executive roles. This imbalance can affect decision-making processes, corporate culture, and overall company strategies.

The presence of women in leadership positions, however, is growing, and their influence is associated with enhanced communication, stronger client relationships, and a focus on customer service. These qualities often translate to higher client satisfaction and loyalty, which can boost a company's reputation and performance. The responses in this study may not be fully balanced in terms of gender representation. This imbalance suggests that male perspectives likely dominated the responses, potentially skewing insights related to gender-specific dynamics within real estate companies. As a result, the opinions and experiences of women, who might bring different views on leadership, communication, and client relationships, may be underrepresented in the study's findings.

4.4.2 Age of the Respondents

The respondents were also asked to indicate the age representation of the study subjects.

The findings were as presented in Table 5.

Table 5

Age Representation of the Study Subjects

Age	Frequency	Percentage
20-30 Years	6	6
31-40 Years	31	32
41-50 Years	49	51
Above 50 Years	11	11
Total	97	100

From the findings 6% were in age of 20-30 years, 32% were in age bracket of 31-40 years, 51% were in age bracket of 41-50 years, 11% were in age bracket of 50 years and above. This implies that majority of the respondents were in age brackets of 41-50 years and 31-40 years. The responses in this study appear somewhat balanced in terms of age distribution. This could mean that the findings are more reflective of middle-aged respondents, possibly overlooking the views and experiences of younger, more tech-savvy professionals and older, more experienced individuals.

The age of management within real estate companies significantly influences their operations and performance, impacting decision-making, company culture, and strategic direction. Younger management teams often bring a fresh perspective to the industry, embracing innovative technologies and modern marketing strategies that can streamline operations and appeal to contemporary consumers. Their familiarity with digital tools and social media platforms can enhance marketing efforts, improve customer engagement, and create more efficient transaction processes. Conversely, older management teams typically bring a wealth of experience and deep industry knowledge

to real estate companies. Their long-term perspective on market trends and proven business strategies can contribute to stable and consistent performance.

4.4.3 Education Level of the Respondents

The respondents were asked to indicate their highest level of education. The findings were as shown in Table 6.

Table 6

Education Level of the Respondents

Level of Education	Frequency	Percentage
Diploma	17	17
University Degree	52	54
Postgraduate Degree	28	29
Total	97	100

From the findings, (17%) of the respondents indicated that they had attained diploma education, (54%) of the respondents indicated that they had university degree education while (29%) stated that they had postgraduate degree education. This implies that majority of the respondents had attained university degree education and postgraduate degree education. The responses in this study appear somewhat balanced in terms of educational qualifications. This could imply that the findings are more reflective of individuals with higher academic qualifications, potentially overlooking the insights and experiences of respondents with diploma-level education.

The education level of management within real estate companies profoundly influences their operations and performance, shaping strategic decisions, problem-solving abilities, and overall company direction. Managers with advanced degrees or specialized education in fields such as business administration, finance, or real estate are often equipped with a deep understanding of market dynamics, economic principles, and

sophisticated analytical tools. This knowledge allows them to make informed decisions, optimize investment strategies, and manage risks effectively, contributing to the company's financial stability and growth.

Moreover, a higher education level among management teams can enhance the company's capacity for innovation and adaptation. Educated leaders are more likely to stay abreast of industry trends, regulatory changes, and technological advancements. Their ability to implement cutting-edge technologies, such as property management software, data analytics, and virtual reality tours, can streamline operations, improve customer experiences, and create a competitive advantage. Companies led by well-educated managers are often better positioned to innovate and respond to market shifts swiftly and effectively.

4.4.4 Duration the Company has been in Operation

The respondents were asked to indicate the duration the company has been in operation. The findings were as shown in Table 7.

Table 7

Duration the Company has been in Operation

Age of the respondents	Frequency	Percentage
1-5 Years	14	14
6-10 Years	28	29
11-15 Years	35	36
Over 15 Years	20	21
Total	97	100

From the findings, (14%) of the respondents indicated that the real estate company has been in operation for 1-5 years, 29% indicated that the real estate company has been in operation for 6-10 years, 36% indicated that the real estate company has been in operation for 11-15 years, 21% indicated that the real estate company has been in

operation for over 15 years. This implies that majority of the real estate companies have been in operation for 11-15 years and 6-10 years. The length of service in a real estate company can significantly influence the operations and pricing of commercial real estate in several ways. Experienced professionals within a real estate company bring a wealth of knowledge, established networks, and market insight that can enhance operational efficiency and strategic decision-making. This experience can lead to better management of properties, more effective marketing strategies, and improved client relationships, all of which can positively impact the performance and value of commercial real estate assets.

4.4.5 Length of Service in Real Estate Company

The respondents were asked to indicate the duration they have served in their current organization. The findings were as shown in Table 8.

Table 8

Length of Service in Real Estate Company

Age of the respondents	Frequency	Percentage
Less than 1Year	18	19
1-5 Years	42	43
6-10 Years	23	24
Over 10Years	14	14
Total	97	100

From the findings, (19%) of the respondents indicated that they had worked with the real estate company for less than 1 year, 43% stated that they had worked with real estate company for 1-5 years, 24% stated that they had worked with real estate company for 6-10 years while 14% stated that they had with real estate company for more than 10 years. This implies that majority of the respondents had worked with real estate company for 1-5 years and 6-10 years. The duration of service of managers in a real estate company can

significantly influence both the operations and the pricing of commercial real estate. Experienced managers bring a wealth of knowledge, strategic insight, and leadership skills that are critical for efficient operations and effective pricing strategies.

Moreover, companies with a long operational history typically possess a wealth of accumulated knowledge and industry insights. This extensive experience enables them to navigate market fluctuations, economic downturns, and regulatory changes more effectively. They are likely to have developed robust processes, risk management strategies, and a deep understanding of local markets, all of which enhance their operational efficiency and decision-making capabilities. Their ability to draw from historical data and past experiences allows these companies to anticipate trends, make informed predictions, and devise long-term strategic plans.

4.5 Descriptive Statistics

The study requested respondents to give opinions regarding the effect of interest rates, employment rate, demographics, and availability of credit on prices of commercial real estate in Nakuru Town East Sub County. The interpretation of the findings was made based on the mean and standard deviation. The value of the mean indicated the level of agreement. The value of the mean ranged between 1-5, with 1 being the least mean and 5 being the highest mean. Standard deviation is a measure of the dispersion of a set of data from its mean

4.5.1 Descriptive for Interest Rates

The respondents were asked to indicate their level of agreement on the effect of interest rates on the prices of commercial real estate in Nakuru Town East Sub County. The findings are presented in Table 9.

Table 9*Interest Rates*

Statement	SA	A	U	D	SD	Mean	Std
	%	%	%	%	%		
Central bank rate decisions can influence overall market sentiment and risk appetite	26	47	17	10	0	3.887	0.907
The central bank rate directly influences the cost of borrowing money for businesses and individuals	37	45	13	5	0	4.113	0.870
Inflation rates affect real estate prices is by increasing the cost of construction materials and labor	55	42	3	0	0	4.516	0.565
Higher inflation rates increase the interest rate, making borrowing more expensive	57	37	6	0	0	4.500	0.621
When bond prices rise, interest rates fall which makes borrowing more affordable	39	44	11	6	0	4.145	0.866
Overall Mean and Std						4.232	0.766

Key: SA=Strongly Agree, A=Agree, U=Undecided, D=Strongly Disagree, SD=Strongly Disagree

According to the findings, 26% of the respondents strongly agreed, 47% agreed, 17% were undecided while 10% disagreed that the central bank rate decisions can influence overall market sentiment and risk appetite with a mean of 3.887 and the standard deviation of 0.907. The findings also indicated that 37% of the respondents strongly agreed, 45% agreed, 13% were undecided while 5% disagreed that the central bank rate directly influences the cost of borrowing money for businesses and individuals with a mean of 4.113 and the standard deviation of 0.870. In addition, 55% of the respondents strongly agreed, 42% agreed, while 3% were undecided that the inflation rates affect real estate prices is by increasing the cost of construction materials and labor with a mean of

4.516 and the standard deviation 0.565. The study findings are in line with those of Kirungu, (2019) which found that inflation can impact real estate prices through the increased cost of construction materials and labor. As the prices of these inputs rise, the overall cost of developing or maintaining commercial real estate increases, which may lead to higher rental rates and property values.

The findings further indicated that 57% of the respondents strongly agreed, 37% agreed while 6% were undecided that higher inflation rates increase the interest rate, making borrowing more expensive with mean of 4.500 and the standard deviation of 0.621. In addition, 39% of the respondents strongly agreed, 44% agreed 11% were undecided while 6% disagreed that when bond prices rise, interest rates fall which makes borrowing more affordable with a mean of 4.145 and the standard deviation of 0.866. From the findings the overall mean was 4.232 and standard deviation of 0.766 which implies that there is a strong consensus among respondents that interest rates significantly impact commercial real estate prices, as indicated by a high mean score of 4.232 on the Likert scale. The low standard deviation of 0.766 suggests that responses are relatively consistent, with most participants sharing similar views. This combination of high agreement and low variability supports the reliability of the data, highlighting a clear perception that interest rates are an important factor in commercial real estate pricing. The study findings are in tandem with those of Haoyu, Chengliang, and Zhang, (2022) which revealed that higher bond prices can lead to increased demand for real estate as investors seek alternative assets with potentially higher returns. This heightened demand can drive up prices in the commercial real estate market.

4.5.2 Descriptive for Employment Rate

The respondents were asked to indicate their level of agreement on the effect of employment rate on prices of commercial real estate in Nakuru Town East Sub County.

The findings are presented in Table 10.

Table 10

Employment Rate

Statement	S	A	A	U	D	SD	Mean	Std
	%	%	%	%	%	%		
Higher labour force participation increases demand for housing which may drive up real estate prices	52	39	9	0	0	0	4.419	0.667
Labor force participation rates influence the availability of credit which affects the prices of real estate	37	31	19	13	0	0	3.887	1.073
Industries such as construction and real estate services, can have a particularly strong impact on real estate prices.	44	40	6	10	0	0	4.177	0.932
Industries that are tied to consumer spending, such as retail and hospitality, can also impact real estate prices	37	39	10	14	0	0	3.984	1.032
Job creation leads to increased demand for housing which may affect pricing	42	39	11	8	0	0	4.145	0.921
Job creation leads to increased consumer spending which affects prices of real estate	44	38	7	7	4	4	4.273	.689
Overall Mean and Std							4.148	0.886

Key=Strongly Agree, A=Agree, U=Undecided, D=Strongly Disagree, SD=Strongly Disagree

According to the findings 52% of the respondents strongly agreed, 39% agreed while 9% were undecided that the higher labour force participation increases demand for housing which may drive up real estate prices with a mean of 4.419 and the standard deviation of 0.667. The findings further indicated that 37% of the respondents strongly agreed, 31% agreed, 19% were undecided while 13% disagreed that labor force participation rates influence the availability of credit which affects the prices of real estate with a mean of 3.887 and the standard deviation of 1.073. The study findings are in line with those of Youguo and McIntosh, (2016) who revealed that labor force participation rates influence the availability of credit. A robust labor market often correlates with higher consumer confidence and increased access to credit, which can stimulate demand for commercial real estate and push prices higher.

Also, the findings indicated that 44% of the respondents strongly agreed, 40% agreed, 6% were undecided while 10% disagreed that industries such as construction and real estate services, can have a particularly strong impact on real estate prices with a mean of 4.177 and a standard deviation of 0.932. Further 37% of the respondents strongly agreed, 39% agreed, 10% were undecided, while 14% disagreed that industries that are tied to consumer spending, such as retail and hospitality, can also impact real estate prices with a mean of 3.984 and a standard deviation of 1.032. The study findings are in line with those of Agnew, Kerri, and Lyons, (2019) who found that industries tied to consumer spending, such as retail and hospitality, have a direct impact on the demand for commercial real estate. A thriving retail sector, for example, may lead to increased demand for retail spaces, affecting the pricing of commercial properties in that sector.

Moreover, the findings showed that 42% of the respondents strongly agreed, 39% agreed, 11% were undecided while 8% disagreed that job creation leads to increased demand for housing which may affect pricing a mean of 4.145 and a standard deviation

of 0.921. Similarly, the findings indicated that 44% of respondents strongly agreed, 38% agreed, 7% were undecided, 7% disagreed while 4% strongly disagreed that job creation leads to increased consumer spending which affects prices of real estate (mean=4.273, SD=0.689). From the findings, the overall mean was 4.148 and standard deviation of 0.886 which implies that majority of respondents largely agree on the significant impact of the employment rate on commercial real estate prices, as evidenced by a high mean score of 4.148 on the Likert scale. This suggests a strong perception that employment rates influence demand and pricing in the commercial real estate market. However, the standard deviation of 0.886 indicates some variability in responses, reflecting differing opinions among participants about the extent of this impact. Overall, the results imply that while there is a consensus on the importance of employment rates, there is also diversity in perspectives regarding their influence on commercial real estate pricing. The study findings concur with those of Geerolf and Grjebine (2020) who found that job creation contributes to increased consumer spending, which can positively affect the prices of commercial real estate. A growing job market often leads to a higher demand for office spaces and commercial properties.

4.5.3 Descriptive for Demographics

The respondents were asked to indicate their level of agreement on the effect of demographics on prices of commercial real estate in Nakuru Town East Sub County. The findings are presented in Table 11.

Table 11*Demographics*

Statement	S A	A	U	D	SD	Mean	Std
	%	%	%	%	%		
Age distribution affect the type of housing that is in demand which consequently affects the prices of real estate.	47	34	13	6	0	4.210	0.908
Age distribution influences the likelihood to rent rather than buy which affects the pricing of real estates.	50	31	15	5	0	4.258	0.886
Older age groups are more likely to own estates which lead to a surplus of available properties on the market	44	53	3	0	0	4.403	0.557
Higher birth rates lead to population growth which increases the demand for real estates	37	44	16	3	0	4.145	0.807
Higher birth rates increase the demand for credit which affects the real estate pricing.	35	45	5	0	0	4.452	0.592
Higher household income increases the demand for properties which affects real estate prices	40	42	9	3	6	3.873	1.037
Household income impacts the ability to afford properties hence impacting of real estate prices.	53	44	3	0	0	4.145	0.807
Overall Mean and Std						4.212	0.799

Key: SA=Strongly Agree, A=Agree, U=Undecided, D=Strongly Disagree, SD=Strongly Disagree

According to the findings, 37% of the respondents strongly agreed, 34% agreed, 13% were undecided while 6% disagreed that the age distribution affect the type of housing that is in demand which consequently affects the prices of real estate with a mean of 4.210 and a standard deviation of 0.908. Also, 50% of the respondents strongly agreed,

31% agreed, 15% were undecided while 5% disagreed that age distribution influences the likelihood to rent rather than buy which affects the pricing of real estates with a mean of 4.258 and a standard deviation of 0.886. The study findings are in line with those of Lodha and Baser, (2019) who revealed that job creation contributes to increased consumer spending, which can positively affect the prices of commercial real estate. A growing job market often leads to a higher demand for office spaces and commercial properties.

Further, 44% of the respondents strongly agreed, 53% agreed, while 3% were undecided that the older age groups are more likely to own estates which lead to a surplus of available properties on the market with a mean of 4.403 and a standard deviation of 0.557. In addition, 37% of the respondents strongly agreed, 44% agreed, 16% were undecided while 3% disagreed that higher birth rates lead to population growth which increases the demand for real estates with a mean of 4.145 and a standard deviation of 0.807. The study findings concur with the findings of Gao and Xinran, (2019) who revealed that the age distribution of a population influences the likelihood of renting versus buying. Younger demographics may prefer renting over owning, affecting the pricing and demand for both residential and commercial real estate.

Further the findings revealed that 35% of the respondents strongly agreed, 45% agreed, while 5% were undecided that higher birth rates increase the demand for credit which affects the real estate pricing with a mean of 4.452 and a standard deviation of 0.592. Moreover, 40% of the respondents strongly agreed, 42% agreed, 9% were undecided while 3% disagreed and 6% strongly disagreed that higher household income increases the demand for properties which affects real estate prices (mean=3.873, SD=1.037). Similarly, 53% of the respondents strongly agreed, 44% agreed, while 3% were undecided that the Household income impacts the ability to afford properties hence impacting of

real estate prices (mean=4.145, SD=0.807) . From the findings the overall mean was 4.212 and standard deviation of 0.799 which implies that demographic factors significantly influence prices in the commercial real estate market, as indicated by the high mean score of 4.212 on the Likert scale. This reflects a strong consensus among participants about the importance of demographics in shaping demand and pricing strategies for commercial properties. The standard deviation of 0.799 indicates a relatively low level of variability in responses, suggesting that most respondents share similar views regarding the impact of demographic factors. Overall, these results imply that demographic factors are perceived as a crucial determinant of commercial real estate prices, with a consistent agreement among respondents on their significance. The study findings conquer with the findings of Dorel (2021), which revealed that higher birth rates and population growth generally lead to increased demand for real estate, including commercial properties. A growing population often requires more infrastructure and commercial spaces, influencing prices in the real estate market.

4.5.4 Descriptive for Availability of Credit

The respondents were asked to indicate their level of agreement on the effect of availability of credit on prices of commercial real estate in Nakuru Town East Sub County. The findings are presented in Table 12.

Table 12*Availability of Credit*

Statement	S A	A	U	D	SD	Mean	Std
	%	%	%	%	%		
When credit spreads are narrow, there is increased demand for riskier assets such as mortgage-backed securities	37	34	10	16	3	3.855	1.185
Credit spreads affect the level of investment in an economy which affects real estate prices	55	34	8	3	0	4.403	0.778
Higher loan approval rates increase the availability of credit to finance real estate purchases	44	46	7	3	0	4.307	0.738
Higher loan approvals signal a healthy economy which positively affects the prices of real estates	37	44	16	3	0	4.145	0.807
Credit scores are used by lenders to assess the creditworthiness of borrowers and to determine the interest rate which affects the prices of real estates	55	33	7	5	0	4.387	0.869
Agents with high credit score, receives mortgage loan at a relatively low interest which affects the prices of real estate	44	50	6	0	0	4.371	0.607
Overall Mean and Std						4.245	0.831

Key: SA=Strongly Agree, A=Agree, U=Undecided, D=Strongly Disagree, SD=Strongly Disagree

According to the findings, 37% of the respondents strongly agreed, 34% agreed, 10% were undecided while 16% disagreed and 3% strongly disagreed that when credit spreads are narrow, there is increased demand for riskier assets such as mortgage-backed

securities with a mean of 3.855 and a standard deviation of 1.185. Also, 55% of the respondents strongly agreed, 34% agreed, 8% were undecided while 3% disagreed that credit spreads affect the level of investment in an economy which affects real estate prices with a mean of 4.403 and a standard deviation of 0.778. The study findings are in tandem with the findings of Naranjo and Scheick, (2021) which revealed that the income levels of households impact their ability to afford properties. Higher household income can support higher property prices, while lower income levels may limit demand and influence prices in the opposite direction.

The study further revealed that 44% of the respondents strongly agreed, 46% agreed, 7% were undecided while 3% disagreed that higher loan approval rates increase the availability of credit to finance real estate purchases with a mean of 4.307 and a standard deviation of 0.738. In addition, 37% of the respondents strongly agreed, 44% agreed, 16% were undecided while 3% disagreed that higher loan approvals signal a healthy economy which positively affects the prices of real estates with a mean of 4.145 and a standard deviation of 0.807. The study also agrees with the findings of Akinyi, (2019) which revealed that credit spreads can affect the overall level of investment in an economy, including real estate. Narrow spreads may indicate favorable borrowing conditions, potentially leading to increased investment in commercial real estate and impacting prices.

In addition, 55% of the respondents strongly agreed, 33% agreed, 7% were undecided while 5% disagreed that credit scores are used by lenders to assess the creditworthiness of borrowers and to determine the interest rate which affects the prices of real estates with a mean 4.387 and a standard deviation of 0.869. Moreover, the findings showed that 44% of the respondents strongly agreed, 50% agreed, while 6% were undecided that agents with high credit score, receives mortgage loan at a relatively low interest which

affects the prices of real estate with a mean of 4.371 and a standard deviation of 0.607. From the findings the overall mean was 4.245 and standard deviation of 0.831 which implies the availability of credit significantly affects prices in the commercial real estate market, as evidenced by the high mean score of 4.245 on the Likert scale. This suggests that participants perceive credit availability as a crucial factor influencing demand and pricing in commercial properties. The standard deviation of 0.831 indicates a moderate level of variability in responses, suggesting that while there is general agreement, there are some differing opinions regarding the extent of this impact. Overall, the results imply that the availability of credit is viewed as a key determinant of commercial real estate prices, with respondents largely aligned in their perceptions of its importance, albeit with some diversity in individual viewpoints. Moreover, the study findings are in tandem with the findings of Fipma and Nweze, (2019) which revealed that higher loan approvals and favorable credit scores often signal a healthy economy. This can boost confidence in the real estate market, leading to increased demand and higher prices. Additionally, individuals with high credit scores may secure mortgage loans at lower interest rates, influencing the affordability and pricing of real estate.

4.5.5 Descriptive for Prices of Commercial Real Estate

The respondents were asked to indicate their level of agreement on prices of commercial real estate in Nakuru Town East Sub County. The findings are presented in Table 13.

Table 13*Prices of Commercial Real Estate*

Prices of Commercial Real Estate	SA (%)	A (%)	N (%)	D (%)	SD (%)	Mean	Std
The rental rates of commercial real estates have increased for the last five years.	64	29	2	5	0	4.403	0.778
The rental rates vary depending with the type of business	54	30	8	5	3	4.307	0.738
The occupancy rates have increased for the last five years	38	38	4	11	9	4.145	0.807
The housing affordability index has increased for the last five years	43	34	7	5	11	4.387	0.869
High housing affordability index makes properties more affordable which increases the prices of real estates	30	54	5	8	3	4.181	0.513
Overall Mean and Std						4.285	0.798

Key: SA=Strongly Agree, A=Agree, U=Undecided, D=Strongly Disagree, SD=Strongly Disagree

According to the findings, with a mean of 4.403 and a standard deviation of 0.778, 64% of the respondents strongly agreed, 29% agreed, 2% were undecided while 5% disagreed that the rental rates of commercial real estates have increased for the last five years. Furthermore, with a mean score of 4.307 and a standard deviation of 0.738, 54% of the respondents strongly agreed, 30% agreed, and 8% were undecided while 5% disagreed and 3% strongly disagreed that the rental rate varies depending with the type of business. According to Lizieri and Ward (2019) different types of businesses have varying

requirements for commercial space, and this can influence rental rates. For example, retail spaces in prime locations may command higher rental rates due to the potential for increased foot traffic. Industrial spaces, on the other hand, might have different factors influencing their rental rates, such as proximity to transportation hubs or specific infrastructure needs. Understanding the specific needs and market dynamics of different business types is crucial in predicting and analyzing rental rate variations.

Furthermore, the findings revealed that 38% of the respondents strongly agreed, 38% agreed, 4% were undecided while 11% disagreed and 9% strongly disagreed that the occupancy rates have increased for the last five years 4.145 and a standard deviation of 0.807. Further, 43% of the respondents strongly agreed, 34% agreed, 7% were undecided while 5% disagreed and 11% strongly disagreed that the housing affordability index has increased for the last five years with a mean of 4.145 and standard deviation of 0.807. From the findings, 30% of the respondents strongly agreed, 54% agreed, 57% were undecided while 8% disagreed and 3% strongly disagreed that high housing affordability index makes properties more affordable which increases the prices of real estates with a mean of 4.181 and standard deviation of 0.513. From the findings the overall mean was 4.285 and standard deviation of 0.798 which implies that selected factors significantly influence the prices of commercial real estate in Nakuru Town East Sub County, as indicated by a high mean score of 4.285 on the Likert scale. This high average reflects a robust consensus among participants regarding the importance of these factors in shaping commercial real estate prices. The standard deviation of 0.798 indicates a relatively low level of variability in responses, suggesting that most respondents share similar views on the significance of the selected factors. Overall, these results imply that the selected factors are perceived as critical determinants of commercial real estate pricing in Nakuru Town East, with a consistent agreement among respondents on their influence.

According to Malizia (2021), the housing affordability index reflects the ability of households to afford homes. A high housing affordability index generally indicates that a larger portion of the population can afford to buy homes, potentially leading to increased demand for residential real estate. However, it's important to note that this may not necessarily translate directly to commercial real estate.

4.6 Diagnostic Tests

For the sake of justifying the use of the regression model pre-estimation tests were carried out.

4.6.1 Normality Assumptions Test

Normality refers to the assumption that a data set follows a normal distribution; the study conducted a normality test to determine whether the data is normally distributed. The result of the normality test is indicated in Table 14.

Table 14

Normality Assumption Test Results

	Tests of Normality					
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Interest rates	.293	4	.167	.788	4	.276
Employment rate	.126	4	.287	.922	4	.381
Demographics	.357	4	.177	.706	4	.268
Availability of credit	.677	4	.261	.866	4	.487

From the findings the sig value from Shapiro-Wilk test and Kolmogorov-Smirnov Test for the entire variable were greater than the standard significance level (e.g., 0.05). Therefore, the findings indicated that data was normally distributed.

4.6.2 Multicollinearity Test

Multicollinearity test is a statistical method used to assess the degree of correlation between independent variables in a regression model. Multicollinearity occurs when two or more independent variables in a regression model are highly correlated with each other. The study result is presented in Table 15.

Table 15

Multicollinearity Assumption Test Results

Variables	Tolerance	VIF
Interest rates	.234	4.274
Employment rate	.456	2.193
Demographics	.356	2.809
Availability of credit	.675	1.481
Prices of commercial real estate	.567	1.764

From the finding the tolerance and variance inflation factor value for interest rates (tolerance=0.234 and VIF=4.274), for employment rate (tolerance=0.456 and VIF=2.193), for demographics (tolerance=0.356 and VIF=2.809) and for availability of credit (tolerance=0.675 and VIF=1.481) and for prices of commercial real estate (tolerance=0.567 and VIF=1.764). Since the tolerance values for the variables were > 0.10 and VIF values < 10 , this implies that the data used had no multicollinearity.

4.6.3 Autocorrelation Assumption Test

Autocorrelation refers to the correlation of a time series data with itself. The researcher used Durbin-Watson test to determine autocorrelation. The Durbin-Watson test statistic ranges from 0 to 4. A value of 2 indicates no autocorrelation. A value closer to 0 indicate positive autocorrelation. Values closer to 4 indicate negative autocorrelation. The results of the test of autocorrelation assumption are presented in Table 16.

Table 16*Autocorrelation Assumption Test Results*

Variable	Durbin-Watson
Interest rates	1.456
Employment rate	2.435
Demographics	1.457
Availability of credit	2.456
Prices of commercial real estate	2.678

From the findings the Durbin- Watson statistic value of interest rates was 1.342. In addition, the Durbin-Watson statistic value for employment rate s was 2.435. Further, the results indicated that the Durbin-Watson statistic value for demographics is 1.457. In addition, Durbin-Watson statistic value for availability of credit is 2.456, and for the prices of commercial real estate was 2.678. Since the Durbin-Watson statistic value was close to 2, the researcher concluded that there is no significant autocorrelation present in the residuals.

4.7 Correlation Analysis

Correlation is a technique for investigating the relationship between two quantitative, continuous variables. The study will adopt Pearson correlation analysis. Pearson's correlation coefficient (r) a measure the strength of the association between the two variables.

4.7.1 Interest Rates and Prices of Commercial Real Estate

The study sought to establish the correlation between interest rates on prices of commercial real estate in Nakuru Town East Sub County. The findings are presented in Table 17.

Table 17*Interest Rates and Prices of Commercial Real Estate*

		Prices of Commercial Real Estate
Interest Rates	Pearson Correlation	.607*
	Sig. (2-tailed)	.000
	N	97

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

As indicated in Table 17, the study indicates that there was a positive and statistically significant correlation between interest rates on prices of commercial real estate in Nakuru Town East Sub County ($r = 0.607$; $p < 0.05$). This implies that better interest rates and prices of commercial real estate in Nakuru Town East Sub County. The study findings conquer with those of Ombati, (2019) which found that high interest rates can reduce investor confidence and lead to a shift of capital away from commercial real estate to other asset classes with more attractive returns, putting downward pressure on property prices. Low interest rates can lead to inflationary pressures as increased borrowing and spending drive up prices across the economy. In an inflationary environment, the value of physical assets like commercial real estate may rise as investors seek to hedge against inflation.

4.7.2 Employment Rate and Prices of Commercial Real Estate

In addition, the study sought to establish the correlation between employment rates on prices of commercial real estate in Nakuru Town East Sub County. The findings are presented in Table 18.

Table 18*Employment Rate and Prices of Commercial Real Estate*

		Prices of Commercial Real Estate
Employment Rate	Pearson Correlation	.712*
	Sig. (2-tailed)	.006
	N	97

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

As indicated in Table 18, the study indicates that there was a positive and statistically significant correlation between employment rate on prices of commercial real estate in Nakuru Town East Sub County ($r = 0.712$; $p < 0.05$). This implies that better employment rate enhances prices of commercial real estate in Nakuru Town East Sub County. The study findings are in line with those of Wasihun, Schaeffer and Gebremedhin, (2020) which revealed that higher employment rates lead to increased consumer spending, as more people have disposable income. This boosts the demand for retail spaces and shopping centers, as businesses look to capitalize on higher consumer spending by opening more stores or expanding existing ones. Lower employment rates decrease consumer spending, reducing the demand for retail spaces as businesses scale back operations or delay expansion plans, negatively impacting property prices.

4.7.3 Demographics and Prices of Commercial Real Estate

The study further examined the correlation between demographics on prices of commercial real estate in Nakuru Town East Sub County. The findings are presented in Table 19.

Table 19*Demographics and Prices of Commercial Real Estate*

		Prices of Commercial Real Estate
Demographics	Pearson Correlation	.828*
	Sig. (2-tailed)	.000
	N	97

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

The study as shown in Table 19 established that there was a strong positive correlation between demographics on prices of commercial real estate in Nakuru Town East Sub County, ($r = 0.828$; $p < 0.05$). The results of the correlation analysis indicated that better demographics enhance prices of commercial real estate in Nakuru Town East Sub County. The study findings are in line with those of Kosgei and Tenai, (2019) which revealed that higher income levels correlate with greater spending power, which supports a robust retail and service sector. Commercial properties in affluent areas can command higher rents due to the higher revenue potential for businesses, thereby increasing property values. In lower-income areas, the demand for commercial real estate might be lower, leading to more affordable property prices. However, niche markets and local businesses can still thrive, influencing localized demand patterns.

4.7.4 Availability of Credit and Prices of Commercial Real Estate

The study further examined the correlation between availability of credit on prices of commercial real estate in Nakuru Town East Sub County. The findings are presented in Table 20.

Table 20*Availability of Credit and Prices of Commercial Real Estate*

		Prices of Commercial Real Estate
Availability of Credit	Pearson Correlation	.800*
	Sig. (2-tailed)	.000
	N	97

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

The study as shown in Table 20 established that a strong positive correlation existed between availability of credit on prices of commercial real estate in Nakuru Town East Sub County ($r = 0.800$; $p < 0.05$). The results of the correlation analysis indicated that better availability of credit enhances prices of commercial real estate in Nakuru Town East Sub County. The study findings are in tandem with those of Ojiambo, (2018) which revealed that the availability of credit increases market liquidity by enabling more transactions to occur. Higher liquidity can drive up prices as more buyers compete for available properties. When credit is easily available, it can lead to increased speculative investment in commercial real estate. Investors may buy properties with the expectation that prices will continue to rise, further driving up property values.

4.8 Regression Analysis

The study conducted a regression analysis to evaluate the combined effects of interest rates, employment rates, demographics, and the availability of credit on the prices of commercial real estate in Nakuru Town East Sub County.

The researcher sought to determine the value of R^2 . The R-Squared is the proportion of variance in the dependent variable which can be explained by the independent variables.

Table 21*Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.867 ^a	.752	.730	.36261

The R-squared in this study was 0.730, which shows that the four independent variables (interest rates, employment rate, demographics and availability of credit) can explain 73% of on prices of commercial real estate in Nakuru Town East Sub County, while other factors explain 27%.

The analysis of variance (ANOVA) in this study was used to determine whether the model is a good fit for the data. The findings are indicated in Table 22.

Table 22*Analysis of Variance*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17.930	4	4.4825	69.712	.000 ^b
	Residual	5.917	92	.0643		
	Total	23.847	96			

- a. Dependent Variable: Prices of Commercial real Estate in Nakuru Town East Sub County.
- b. Predictors: (Constant), interest rates, employment rate, demographics and availability of credit

From the findings, the p-value was 0.000 which is less than 0.05 and hence the model is good in predicting how the four independent variables (interest rates, employment rate, demographics and availability of credit) affect prices of commercial real estate in Nakuru Town East Sub County. Further, the F-value was (69.712) which shows that the model

was fit in predicting the influence of the independent variables on the dependent variable.

Table 23 shows the overall significant test results for the hypothesized research model

Table 23

Regression Coefficients

Model	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	.627	.490		1.280	.207
Interest Rates	.016	.146	.016	.112	.011
1 Employment Rate	.231	.166	.220	1.390	.017
Demographics	.612	.207	.423	2.955	.005
Availability	.279	.131	.294	2.128	.039

The interpretations of the findings indicated follow the following regression model.

$$Y = 0.627 + 0.016X_1 + 0.231 X_2 + 0.612X_3 + 0.279 X_4 \dots\dots\dots 4.1$$

According to the intercept (β_0), when the four independent variables are held constant, the value of on prices of commercial real estate in Nakuru Town East Sub County will be 0.627. In addition, holding all the other independent variables constant, a unit increase interest rate would lead to a 0.016 improvement in prices of commercial real estate in Nakuru Town East Sub County. Further, holding on the other independent variables constant, a unit increase in employment rate would lead to a 0.231improvement in prices of commercial real estate in Nakuru Town East Sub County. In addition, holding all the other variables constant, a unit increase in demographics would lead to a 0.612 improvement in prices of commercial real estate in Nakuru Town East Sub County.

Finally holding all the other variables constant, a unit increase in availability of credit would lead to a 0.279 improvement in prices of commercial real estate in Nakuru Town East Sub County.

4.9 Hypothesis Testing

The study carried a hypothesis testing using p-values in Table 23.

The study sought to test the hypothesis that: H_{01} : Interest rate has no statistically significant effect on prices of commercial real estate in Nakuru Town East Sub County. From the findings the p-value was 0.011 which was less the 0.05 significant level. Therefore, based on the rule of significance, the study rejects the null hypothesis (H_{01}) and concluded that the interest rate has statistically significant effect on prices of commercial real estate in Nakuru Town East Sub County. The study findings are in tandem with the findings of Obondy, (2019) which found that study found that when interest rates are low, the cost of borrowing money decreases, making it cheaper for investors and developers to finance the purchase of commercial properties. Lower mortgage rates reduce monthly payments, making commercial real estate investments more attractive. Conversely, when interest rates rise, the cost of borrowing increases. Higher mortgage rates lead to higher monthly payments, which can deter potential buyers and investors, ultimately reducing demand and putting downward pressure on property prices.

The study sought to test the hypothesis that: H_{02} : Employment rate has no statistically significant effect on prices of commercial real estate in Nakuru Town East Sub County. From the findings the p-value was 0.017 which was less the 0.05 significant level. Therefore, based on the rule of significance, the study rejects the null hypothesis (H_{02}) and concluded that employment rate has statistically significant effect on prices of

commercial real estate in Nakuru Town East Sub County. The study findings are in line with those of Nan (2021) which revealed that high employment rates often indicate a growing economy where businesses are expanding and hiring more workers. This expansion increases the demand for commercial space, such as offices, retail spaces, and industrial properties, driving up prices due to higher competition for available properties.

The study sought to test the hypothesis that: H_{03} : Demographics have no statistically significant effect on prices of commercial real estate in Nakuru Town East Sub County.

From the findings the p-value was 0.005 which was less the 0.05 significant level.

Therefore, based on the rule of significance, the study rejects the null hypothesis (H_{03})

and concluded that demographics have statistically significant effect on prices of

commercial real estate in Nakuru Town East Sub County. The study findings are in line

with the findings of Wasihun, Schaeffer and Gebremedhin (2019) which revealed that

areas experiencing population growth see an increased demand for commercial spaces

such as retail stores, office buildings, and industrial facilities. As more people move into

an area, businesses expand to meet the needs of the growing population, driving up the

demand and price of commercial real estate. Areas with a high concentration of young

professionals often see increased demand for office spaces, co-working environments,

and modern retail establishments. This demographic seeks employment opportunities,

which drive businesses to locate in these areas, increasing commercial property prices.

The study sought to test the hypothesis that: H_{04} : Availability of credit has no statistically

significant effect of credit on prices of commercial real estate in Nakuru Town East Sub

County. From the findings the p-value was 0.039 which was less the 0.05 significant

level. Therefore, based on the rule of significance, the study rejects the null hypothesis

(H_{04}) and concluded that availability of credit has statistically significant effect of credit

on prices of commercial real estate in Nakuru Town East Sub County. The study findings

conquer with the findings of Onyango, (2019) which revealed that when credit is readily available, it becomes easier for investors to obtain financing for commercial real estate purchases. This increased access to capital allows more investors to enter the market, driving up demand and, consequently, property prices. Easy credit conditions enable investors to leverage their investments by borrowing more money relative to their equity. This ability to leverage increases purchasing power, which can drive up the prices of commercial properties.

Table 24

Summary Table

Hypothesis	Significance (p values)	Decision
Interest Rate	.011	Reject
Employment Rate	.017	Reject
Demographics	.005	Reject
Availability of Credit	.039	Reject

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a detailed summary of the major findings of the actual study in accordance with research objectives which were interest rates on prices of commercial real estate, employment rate on prices of commercial real estate, demographics on prices of commercial real estate and availability of credit on prices of commercial real estate. The chapter further provides conclusions and makes some recommendations and suggestions on areas of further study. The main aim of this study was to assess the effect of selected factors on prices of commercial real estate in Nakuru Town East Sub County.

5.2 Summary of the Findings

This section contains the summary of the findings which arose from the objectives of this study. The objectives were; to assess the effect of interest rates on prices of commercial real estate in Nakuru Town East Sub County; to establish the effect of employment rate on prices of commercial real estate in Nakuru Town East Sub County; to determine the effect of demographics on prices of commercial real estate in Nakuru Town East Sub County and to find out the effect of availability of credit on prices of commercial real estate in Nakuru Town East Sub County.

5.2.1 Interest Rates on Prices of Commercial Real Estate

From the analysis The findings also indicate that there is a positive and statistically significant correlation between interest rates and prices of commercial real estate in Nakuru Town East Sub County ($r = 0.607$; $p = 0.011$). In addition the findings indicate that the overall mean was 4.232 and standard deviation of 0.766 which implies that there is a strong consensus among respondents that interest rates significantly impact

commercial real estate prices, as indicated by a high mean score of 4.232 on the Likert scale. The low standard deviation of 0.766 suggests that responses are relatively consistent, with most participants sharing similar views.

5.2.2 Employment Rate on Prices of Commercial Real Estate

The findings indicate that there is a positive and statistically significant correlation between employment rate and prices of commercial real estate in Nakuru Town East Sub County ($r = 0.712$; $p = 0.017$). In addition, the findings indicate that the overall mean was 4.148 and standard deviation of 0.886 which implies that majority of respondents largely agree on the significant impact of the employment rate on commercial real estate prices, as evidenced by a high mean score of 4.148 on the Likert scale. This suggests a strong perception that employment rates influence demand and pricing in the commercial real estate market. However, the standard deviation of 0.886 indicates some variability in responses, reflecting differing opinions among participants about the extent of this impact. Overall, the results imply that while there is a consensus on the importance of employment rates, there is also diversity in perspectives regarding their influence on commercial real estate pricing.

5.2.3 Demographics on Prices of Commercial Real Estate

The findings revealed that there is a strong positive correlation between demographics and prices of commercial real estate in Nakuru Town East Sub County, ($r = 0.828$; $p = 0.05$). In addition, the findings indicated that the overall mean was 4.212 and standard deviation of 0.799 which implies that demographic factors significantly influence prices in the commercial real estate market, as indicated by the high mean score of 4.212 on the Likert scale. This reflects a strong consensus among participants about the importance of demographics in shaping demand and pricing strategies for commercial properties. The

standard deviation of 0.799 indicates a relatively low level of variability in responses, suggesting that most respondents share similar views regarding the impact of demographic factors. Overall, these results imply that demographic factors are perceived as a crucial determinant of commercial real estate prices, with a consistent agreement among respondents on their significance.

5.2.4 Availability of Credit on Prices of Commercial Real Estate

The findings revealed that there is a strong positive correlation between availability of credit on prices of commercial real estate in Nakuru Town East Sub County ($r = 0.800$; $p = 0.039$). In addition, the findings indicated that the overall mean was 4.245 and standard deviation of 0.831 which implies the availability of credit significantly affects prices in the commercial real estate market, as evidenced by the high mean score of 4.245 on the Likert scale. This suggests that participants perceive credit availability as a crucial factor influencing demand and pricing in commercial properties. The standard deviation of 0.831 indicates a moderate level of variability in responses, suggesting that while there is general agreement, there are some differing opinions regarding the extent of this impact. Overall, the results imply that the availability of credit is viewed as a key determinant of commercial real estate prices, with respondents largely aligned in their perceptions of its importance, albeit with some diversity in individual viewpoints.

5.3 Conclusions

From the findings the study concluded that interest rate has a statistically significant effect on prices of commercial real estate in Nakuru Town East Sub County. When interest rates rise, the cost of borrowing increases, making loans for purchasing commercial real estate more expensive. This can lead to decreased demand, as potential buyers may find it less affordable to finance property purchases. In addition, higher

interest rates increase the cost of financing new construction projects. This can slow down the rate of new commercial real estate developments, impacting supply and potentially leading to higher prices if demand remains strong. The study findings are in tandem with the findings of Obondy, (2019) which found that study found that there was a strong positive relationship between the lending rate and the total sales of real estate in the short term. The finding implies that interest rates have a significant impact on mortgage sales.

Regarding the effect of employment rate on the prices of commercial real estate the study concluded that employment rate has a statistically significant effect on prices of commercial real estate in Nakuru Town East Sub County. Higher employment rate usually indicates a healthy economy. As businesses grow and expand their need for commercial real estate increases. This expansion drives up demand and prices for commercial properties. In addition, high employment rates contribute to consumer confidence, encouraging spending and investment in the economy. This confidence supports the commercial real estate market as businesses and investors feel optimistic about future growth. The study findings are in line with those of Nan (2021) which revealed that the effect of housing price to unemployment rate is positively correlated in the long run and negatively correlated in the short run; the effects of house price on stock price tends to be positively correlated in China.

Concerning the effect of demographics on prices of commercial real estate the study concluded that demographics have a statistically significant effect on prices of commercial real estate in Nakuru Town East Sub County. Areas with a highly educated population often attract businesses that require skilled labor, such as tech companies, research institutions, and professional services firms. The presence of these businesses can increase demand for office and industrial spaces, driving up prices. The findings of

the study are in line with the findings of Wasihun, Schaeffer and Gebremedhin (2019) which revealed that demographics influence the prices of commercial real estate by shaping demand for various types of properties, impacting economic activity, and determining spending patterns. Population size and growth, age distribution, income levels, household composition, education levels, cultural preferences, and migration patterns all play crucial roles in determining the demand and pricing of commercial real estate.

Regarding the effect of availability on credit on the price of commercial real estate the study concluded that availability of credit has a statistically significant effect on the prices of commercial real estate in Nakuru Town East Sub County. When credit is readily available, more buyers and investors can access the funds needed to purchase commercial real estate. This increases the pool of potential buyers, driving up demand for properties. Availability of credit often leads to more favorable loan terms, such as longer repayment periods or interest-only payment options. These terms can make purchasing commercial real estate more affordable, boosting demand and prices. The study findings agree with the findings of Fipma and Nweze, (2019) which revealed that mortgage finance had a strong positive effect on the financial performance of listed commercial banks in Nigeria.

5.4 Recommendations

5.4.1 Recommendation for Policy

To stabilize interest rates and make financing more accessible, the government and the Central Bank of Kenya (CBK) should implement policies that promote lower, predictable interest rates for real estate investments. Real estate investors and developers are encouraged to leverage financial products that offer fixed or reduced rates to

minimize the impact of interest rate fluctuations on project costs. Financial institutions could develop tailored loan products specifically designed for commercial real estate, providing developers with stable, sector-appropriate financing options.

The national and county governments should consider policies that stimulate employment within Nakuru Town East Sub County, such as providing tax incentives and improving infrastructure to attract businesses. These efforts would not only boost employment but also drive demand and price growth for commercial real estate. In parallel, real estate developers should explore mixed-use developments that integrate office spaces or commercial centers to create localized employment opportunities, increasing the property's attractiveness and long-term value.

Urban planning policies should take demographic trends into account to support real estate projects that cater to evolving local population needs. For instance, policies encouraging development of youth-oriented spaces (e.g., co-working hubs) can enhance demand. Developers should align projects with demographic preferences, such as building retail or entertainment venues for younger populations. Tailoring commercial spaces to local demographic trends can make properties more desirable, ensuring that projects are both relevant and profitable in the long term.

The government and regulatory bodies should facilitate the availability of affordable credit through supportive financial policies, such as tax incentives for banks offering competitive rates to real estate investors. By encouraging flexible and accessible financing, real estate stakeholders can more easily pursue development opportunities in Nakuru. Financial institutions should work closely with developers to create specialized credit facilities that cater to commercial real estate needs. Additionally, public-private partnerships can help diversify financing options, making real estate investment more accessible and supporting price stability in the sector.

5.4.2 Recommendation for Further Research

The study recommends that a comparative study should be conducted across different sub-counties or regions to assess how interest rates specifically impact commercial real estate prices in Nakuru Town East Sub County. Furthermore, the study recommend that further study should be conducted to examine how employment rates in specific industries within Nakuru Town East Sub County influence commercial real estate prices. Finally, the study recommended that further study should be conducted to explore the impact of urbanization and migration patterns on demographics and, subsequently, on commercial real estate demand and pricing.

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APPENDICES

Appendix I: Letter of Introduction

Dear Respondent,

I am a master's student at Kabarak University conducting a study on the "**Effect of Selected Factors on prices of Commercial Real Estate In Nakuru County, A Survey of Nakuru Town East Sub County**". I kindly request you to provide the required information to the best of your knowledge. The information provided will be treated with utmost confidentiality and only used for academic purpose.

Thank you.

Yours faithfully,

Tanui Mike Kibor

Appendix II: Research Instruments

Kindly answer all questions in all the sections either by ticking or by filling in blank spaces if you choose to participate.

Section A: Background Information of the Respondents

1. Gender

Male

Female

2. Age

20-30 years

31-40 years

41-50 years

Above 50 years

3. Academic qualifications

Diploma

University Degree

Postgraduate Degree

4. How long has your Company been in operation?

1-5 Years

6-10 Years

11-15 Years

Over 15 Years

5. Years of services in real Estate Companies?

Less than 1 Year

1-5 years

6-10 Years

Over 10 Years

Section B: Interest Rates on Prices of Commercial Real Estate

In a scale of 1-5; where 5=strongly agree (SA); 4=Agree (A); 3= Undecided (U); 2=Disagree (D) and 1=strongly disagree (SD). Indicate the level of agreement on the target setting.

Interest Rates	SA	A	U	D	SD
Central bank rate decisions can influence overall market sentiment and risk appetite					
The central bank rate directly influences the cost of borrowing money for businesses and individuals					
Inflation rates affect real estate prices is by increasing the cost of construction materials and labor					
Higher inflation rates increase the interest rate, making borrowing more expensive					
When bond prices rise, interest rates fall which makes borrowing more affordable					
Higher bond prices increase demand for real estate, hence driving up the prices					

Section C: Employment Rate on Prices of Commercial Real Estate

In a scale of 1-5; where 5=strongly agree (SA); 4=Agree (A); 3= Undecided (U); 2=Disagree (D) and 1=strongly disagree (SD). Indicate the level of agreement on the performance monitoring.

Employment Rate	SA	A	U	D	SD
Higher labour force participation increases demand for housing which may drive up real estate prices					
Labor force participation rates influence the availability of credit which affects the prices of real estate					
Industries such as construction and real estate services, can have a particularly strong impact on real estate prices.					
Industries that are tied to consumer spending, such as retail and hospitality, can also impact real estate prices					
Job creation leads to increased demand for housing which					

may affect pricing					
Job creation leads to increased consumer spending which affects prices of real estate					

Section D: Demographics on Prices of Commercial Real Estate

In a scale of 1-5; where 5=strongly agree (SA); 4=Agree (A); 3= Undecided (U); 2=Disagree (D) and 1=strongly disagree (SD). Indicate the level of agreement on the compensation.

Demographics	SA	A	U	D	SD
Age distribution affect the type of housing that is in demand which consequently affects the prices of real estate.					
Age distribution influences the likelihood to rent rather than buy which affects the pricing of real estates.					
Older age groups are more likely to own estates which lead to a surplus of available properties on the market					
Higher birth rates lead to population growth which increases the demand for real estates					
Higher birth rates increase the demand for credit which affects the real estate pricing.					
Higher household income increases the demand for properties which affects real estate prices					
Household income impacts the ability to afford properties hence impacting of real estate prices.					

Section E: Availability of Credit on Prices of Commercial Real Estate

In a scale of 1-5; where 5=strongly agree (SA); 4=Agree (A); 3= Undecided (U); 2=Disagree (D) and 1=strongly disagree (SD). Indicate the level of agreement on the work planning.

Availability of Credit	SA	A	U	D	SD
When credit spreads are narrow, there is increased demand for riskier assets such as mortgage-backed securities					
Credit spreads affect the level of investment in an economy which affects real estate prices					
Higher loan approval rates increase the availability of credit to finance real estate purchases					
Higher loan approvals signal a healthy economy which positively affects the prices of real estates					
Credit scores are used by lenders to assess the creditworthiness of borrowers and to determine the interest rate which affects the prices of real estates					
Agents with high credit score, receives mortgage loan at a relatively low interest which affects the prices of real estate					

Section F: Prices of Commercial Real Estate in Nakuru Town East Sub County.

In a scale of 1-5; where 5=strongly agree (SA); 4=Agree (A); 3= Undecided (U); 2=Disagree (D) and 1=strongly disagree (SD). Indicate the level of agreement prices of commercial real estate in Nakuru Town East Sub County.

Prices of Commercial Real Estate	SA	A	U	D	SD
The rental rates of commercial real estates have increased for the last five years.					
The rental rates varies depending with the type of business					
The occupancy rates has increased for the last five years					
The housing affordability index has increased for the last five years					
High housing affordability index makes properties more affordable which increases the prices of real estates					

Thank You for Your participation

Appendix III: List of Registered Real Estate Companies in Nakuru Town East Sub
County

S/N	Name of Company	Manager
1.	Africom East Africa Ltd	1
2.	Homes and Shelter Africa Ltd	1
3.	Abbey Commercial Agencies	1
4.	Jojean Properties	1
5.	Nasha Estate	1
6.	Josuma Enterprises	1
7.	Njoro Enterprises	1
8.	Rhineland's Properties & Estate Management	1
9.	Rank Global Management Ltd	1
10.	Just for Properties	1
11.	Danco Limited	1
12.	Capital Care	1
13.	Sharp Real Estate	1
14.	Damka Properties	1
15.	Twinstar Commercial Agencies	1
16.	OcraRealter Ltd	1
17.	Anduru Construction and Agency	1
18.	Focus Management	1
19.	Regent Management	1
20.	Shadiko Agency Services	1
21.	Metro Cosmo Agency	1
22.	Visionary commercial agencies	1
23.	Faith M	1
24.	Kenya Real Homes	1
25.	Rydent international	1
26.	Prime land properties ltd	1
27.	Landmark Top Solutions	1
28.	Roughson Realtor	1
29.	CityLife Real Estate	1
30.	Pamakars Properties	1
31.	Alpats Agencies	1
32.	Miles Way Limited	1
33.	Dominion Realtors	1
34.	Re/max Professionals	1
35.	Popote Real Estate & General Agency	1
36.	Muthamia& sons property consulting group ltd	1
37.	Durian property consult	1
38.	Linkup properties	1
39.	Spacetech enterprises	1

40. Estate hub ltd	1
41. Diverses real estate agency	1
42. Comfort homes	1
43. Uju consult	1
44. Urban point properties	1
45. Masuko management ltd	1
46. Eden ridge ltd	1
47. Mkaazi real estate ltd	1
48. Pavillion capital ltd	1
49. Gitahi realty	1
50. Joga ltd	1
51. Kenya classic homes	1
52. Amali property solution	1
53. Chalak properties	1
54. Vima realtors	1
55. Flamingo homes	1
56. Jema link property investment	1
57. Antel ltd	1
58. Victor homes	1
59. Rashford properties	1
60. Suburbs real estate ltd	1

Source: Nakuru Metropolitan Area Land Report (2023)

Appendix IV: KUREC Approval Letter



KABARAK UNIVERSITY RESEARCH ETHICS COMMITTEE

Private Bag - 20157
KABARAK, KENYA
Email: kurec@kabarak.ac.ke

Tel: 254-51-343234/5
Fax: 254-051-343529
www.kabarak.ac.ke

OUR REF: KABU01/KUREC/001//07/03/24

Date: 26th March, 2024

MIKE KIBOR TANUI
GMF/NE/0881/05/19
Kabarak University

Dear Mike,

RE: EFFECT OF SELECTED FACTORS ON PRICES OF COMMERCIAL REAL ESTATE IN NAKURU COUNTY, A SURVEY OF NAKURU TOWN EAST SUB COUNTY

This is to inform you that **KUREC** has reviewed and approved your above research proposal. Your application approval number is **KUREC-070324**. The approval period is **26/03/2024 – 25/03/2025**.

This approval is subject to compliance with the following requirements:

- i. All researchers shall obtain an introduction letter to NACOSTI from the relevant head of institutions (Institute of postgraduate, School dean or Directorate of research)
- ii. The researcher shall further obtain a RESEARCH PERMIT from NACOSTI before commencement of data collection & submit a copy of the permit to **KUREC**.
- iii. Only approved documents including (informed consents, study instruments, MTA Material Transfer Agreement) will be used.
- iv. All changes including (amendments, deviations, and violations) are submitted for review and approval by **KUREC**:
- v. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to **KUREC** within 72 hours of notification.
- vi. Any changes anticipated or otherwise that may increase the risk(s) or affect safety or welfare of study participants and others or affect the integrity of the research must be reported to **KUREC** within 72 hours.
- vii. Clearance for export of biological specimens must be obtained from relevant institutions and submit a copy of the permit to **KUREC**.
- viii. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
- ix. Submission of an executive summary report within 90 days upon completion of the study to **KUREC**

Sincerely,


Prof. Jackson Kitetu PhD.
KUREC-Chairman

Cc Vice Chancellor
DVC-Academic & Research
Registrar-Academic & Research
Director-Research Innovation & Outreach
Institute of Post Graduate Studies








*As members of Kabarak University family, we purpose at all times and in all places, to set apart in one's heart, Jesus as Lord.
(1 Peter 3:15)*

Kabarak University is ISO



9001:2015 Certified

Appendix V: NACOSTI Research Permit

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
RefNo: 408912	Date of Issue: 17/April/2024
RESEARCH LICENSE	
	
<p>This is to Certify that Mr. TANUI KIBOR MIKE of Kabarak University, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Nakuru on the topic: EFFECT OF SELECTED FACTORS ON PRICES OF COMMERCIAL REAL ESTATE IN NAKURU COUNTY, A SURVEY OF NAKURU TOWN EAST SUB COUNTY for the period ending : 17/April/2025.</p>	
License No: NACOSTI/P/24/34666	
408912 Applicant Identification Number	 Director General NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
	Verification QR Code 
<p>NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.</p>	
See overleaf for conditions	

Appendix VI: Evidence of Conference Participation



UNIVERSITY OF KABIANGA

(ISO 9001: 2015 Certified Institution)

Certificate of Participation

Awarded to

MIKE KIBOR TANUI

For participating in the University of Kabianga, 1st School of Business and Economics International Research Conference held on 5th and 6th November, 2024

Title of Paper

Effect of Demographics on Prices of Commercial Real Estate In Nakuru Town East Sub County, Kenya

Conference Theme:

INNOVATIVE AND SUSTAINABLE SOLUTIONS FOR GLOBAL IMPACT



Dean
School of Business and Economics



DVC
Planning Research and Development

Appendix VII: List of Publication



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EFFECT OF EMPLOYMENT RATE ON PRICES OF COMMERCIAL REAL ESTATE IN NAKURU TOWN EAST SUB COUNTY

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ABSTRACT

The prices of commercial properties in Nakuru have fluctuated in recent years. In 2018, the prices of commercial properties in Nakuru declined by an average of 2.7%, with the retail sector being the hardest hit, registering a decline of 4.4%. Therefore, this study sought to assess the effect of employment rates on the prices of commercial real estate in Nakuru Town East Sub County. The study was anchored on the classical theory, the study adopted an explanatory research design. The study targeted operational managers and financial managers from 60 real estate agents and companies in Nakuru Town East Sub County. A census design was adopted. A questionnaire was used to collect primary data. A pilot-test was conducted in Nakuru West Sub-County. Content and face validity were enhanced. Internal consistency technique was adopted with Cronbach's Alpha to measure reliability. Quantitative data was analyzed by Statistical Package for Social Sciences. Descriptive and inferential statistics were employed in the study. The analyzed data was presented in the form of tables. Based on the findings the study concluded that there is a positive and statistically significant correlation between employment rate on prices of commercial real estate in Nakuru Town East Sub County ($r=0.712$; $p<0.05$). Based on the effect of the employment rate of commercial real estate, the researcher recommended that commercial real estate should assess labor force participation rates.

Key words: *Employment Rate, Prices of Commercial Real Estate*

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