

**ADDIS COLLEGE  
SCHOOL OF GRADUATE STUDIES  
DEPARTMENT OF CONSTRUCTION TECHNOLOGY AND  
MANAGEMENT  
POSTGRADUATE PROGRAM**

**DETERMINANT FACTORS AFFECTING  
REAL ESTATE BUSINESS IN ADDIS ABABA**

**BERHANU ABEBE TEFERRA**

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**ADVISOR: MEKONEN ABEBE, PhD**

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**ADDIS COLLEGE SCHOOL OF GRADUATE STUDIES  
DEPARTMENT OF CONSTRUCTION TECHNOLOGY AND  
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**BY BERHANU ABEBE TEFERRA**

**APPROVED BY BOARD OF EXAMINERS:**

Mekonen Abebe , PhD

ADVISOR

\_\_\_\_\_

SIGNATURE

\_\_\_\_\_

DATE

\_\_\_\_\_

INTERNAL EXAMINOR

\_\_\_\_\_

SIGNATURE

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EXTERNAL EXAMINOR

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SIGNATURE

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DATE

## DECLARATION

I, Berhanu Abebe Teferra, the undersigned person declare that the thesis entitled “**Determinant Factors Affecting Real Estate Business in Addis Ababa**” is my original and submitted for the award of Master of Degree in Construction Technology and Management from Addis College at Addis Ababa and it hasn’t been presented for the award of any other degree. Under this study, fellowship of other similar titles of any other university or institution of all sources of material used for the study has been appropriately acknowledged and notice.

BERHANU ABEBE TEFERRA  
CANDIDATE

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
DATE

## **CERTIFICATION**

This is to certify that Mr. Berhanu Abebe, has properly completed his research work entitled *“Determinant Factors Affecting Real Estate Business in Addis Ababa”* with my guidance through the time. In my recommendation, his task is appropriate to be submitted as a partial fulfillment requirement for the Master of art Degree in Construction Technology and Management.

Research Advisor

Mekonen Abebe, PhD

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Signature and Date

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## ABSTRACT

*This study investigates the key determinants affecting the performance of real estate businesses in Addis Ababa, Ethiopia. The research focused on four main variables: availability of construction materials, foreign exchange and local currency depreciation, construction period delay, and availability of land. A quantitative research approach was employed using a structured questionnaire administered to 103 respondents working in various real estate firms. Data were analyzed through both correlation and multiple regression analysis. The findings revealed that availability of construction materials ( $r = 0.436$ ,  $p < 0.01$ ) and land ( $r = 0.514$ ,  $p < 0.01$ ) have significant positive correlations with real estate business performance. Correspondingly, regression analysis confirmed these relationships, showing positive and significant effects with standardized coefficients  $\beta = 0.246$  and  $\beta = 0.289$  respectively. On the other hand, foreign exchange depreciation ( $r = -0.441$ ,  $p < 0.01$ ) and construction delays ( $r = -0.434$ ,  $p < 0.01$ ) had significant negative correlations with business performance. Regression results supported these findings, indicating negative impacts with  $\beta = -0.212$  and  $\beta = -0.216$  respectively. This study concludes that improving access to construction materials and land can enhance business performance, while currency instability and construction delays serve as significant hindrances. The results align with global and regional findings, providing practical implications for policy makers, developers, and urban planners. Recommendations include improving supply chains, stabilizing the financial environment, enhancing project management, and reforming land allocation processes. Future research should consider technological interventions and macroeconomic variables over longer timeframes.*

**Keywords:** *Construction Delay, Construction Materials, Currency Depreciation, Land Availability, Real Estate Performance*

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## **LIST OF ACRONYMS AND ABBREVIATIONS**

<b>BOQ</b>	Bill of Quantities a
<b>ERP</b>	Enterprise Resource Planning
<b>FX</b>	Foreign Exchange
<b>GDP</b>	Gross Domestic Product
<b>M&amp;E</b>	Monitoring and Evaluation
<b>MoUDC</b>	Ministry of Urban Development and Construction (Ethiopia)
<b>NBE</b>	National Bank of Ethiopia
<b>OLS</b>	Ordinary Least Squares
<b>PM</b>	Project Management
<b>PPP</b>	Public-Private Partnership
<b>RE</b>	Real Estate
<b>S.C.</b>	Share Company
<b>SME</b>	Small and Medium Enterprises
<b>USD</b>	United States Dollar

# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of the Study

Real estate is an important driver of both economic growth and social progress, as it involves land and the long-term structures built upon it, such as housing, business complexes, and industrial facilities (Immanuel & Andualem, 2023). In the Ethiopian context, the industry has shown notable expansion, especially in major cities like Addis Ababa and Bahir Dar. This growth is largely linked to rapid urbanization, continuous population increase, and a surge in investment interest from both domestic and diaspora communities (Tadesse, 2017).

Ethiopia's urban population is expected to continue growing rapidly, resulting in escalating demand for housing and commercial spaces. However, this demand has not been met with sufficient supply, leading to a widening housing gap, soaring property prices, and informal settlement expansion (Mekuria et al., 2024). The real estate sector has the potential to bridge this gap, but it faces critical challenges related to land access, construction delays, high material costs, and currency depreciation (Immanuel & Getie, 2023).

Previous studies have identified various factors influencing real estate performance. For instance, Tadesse (2017) categorized real estate price drivers in Addis Ababa into direct factors (e.g., location, accessibility) and indirect factors (e.g., inflation, economic performance). Similarly, Mekuria et al. (2024), using a hedonic pricing model in Bahir Dar, highlighted micro-level property attributes such as plot size, wall materials, and access to infrastructure as significant price determinants, while also emphasizing macroeconomic and regulatory constraints like high loan interest rates and bureaucratic delays.

In the commercial real estate space, Immanuel and Andualem (2023) found that firm performance is influenced by credit access, leadership quality, marketing strategies, infrastructure development, and external factors like political instability and currency volatility. These findings align with the broader understanding of sectoral dynamics, suggesting that real

estate success is multi-dimensional, depending on internal business capabilities and the macroeconomic environment.

Kibru et al. (2014), in their Kenyan study, similarly identified financing, material access, legal clarity, and government support as essential components for real estate market success factors also relevant in the Ethiopian context. Moreover, Tigist (2021) emphasized project-level success factors such as project planning, stakeholder engagement, and supply chain efficiency, underscoring how delays in construction and limited availability of quality inputs can hamper sector performance.

The real estate business in Ethiopia is a relatively recent development compared to other sectors, emerging strongly in the mid-1990s after the liberalization of the economy. During the Derg regime (1974–1991), land and rental housing were nationalized, which restricted private sector participation and limited housing development mainly to government provision. However, with the policy reforms introduced by the Ethiopian People’s Revolutionary Democratic Front (EPRDF) in 1991, private ownership of buildings was permitted, although land remained under state ownership on a leasehold basis. This created the foundation for the establishment of private real estate companies such as Ayat, Sunshine, and Gift Real Estate, which began developing gated communities and apartments to meet the growing urban demand (Wubneh, 2013). The 2000s marked a period of expansion, driven by rapid urbanization, rising middle-class income, and diaspora remittances, while the government complemented this through the Integrated Housing Development Program (IHDP) aimed at addressing low- and middle-income housing needs (UN-Habitat, 2010). Despite such initiatives, supply has not kept pace with demand, as estimates indicate Ethiopia faces a deficit of more than one million housing units, with most private developers focusing on high-end residential projects that are accessible only to wealthy buyers or diaspora investors (World Bank, 2015). Thus, the real estate sector’s growth was initiated by economic liberalization, diaspora-driven investment, and urban housing shortages, but continues to face a demand–supply imbalance due to structural and financial constraints.

Despite these valued insights, there remains a research gap in understanding how the combination of specific operational and macroeconomic variables namely land availability, construction material accessibility and price escalation, construction time delays, and currency

depreciation jointly affect real estate firm performance in Addis Ababa. While existing literature often isolates these variables or limits analysis to pricing and consumer behaviour, there is limited empirical work examining how these factors influence the operational and financial success of real estate businesses (Arsema, 2020).

Moreover, Metassebia (2021) highlighted the performance of real estate firms in Addis Ababa is not only influenced by internal management practices but also by external macroeconomic conditions such as foreign exchange shortages and the depreciation of the Ethiopian birr. These economic pressures, coupled with delays in construction due to material scarcity and bureaucratic inefficiencies, have significantly hindered project delivery timelines and increased costs. Tigist (2021) and Mekuria (2022) also point out that limitations in housing finance and inefficient land management systems further exacerbate these challenges. Therefore, understanding how these interconnected factors land availability, material accessibility, currency depreciation, and construction delays affect firm-level performance is essential for developing targeted strategies to improve the sector's contribution to urban development and economic growth.

This study, therefore, seeks to fill this gap by analyzing the extent to which these four key variables affect the performance of real estate firms in Addis Ababa. The focus is not only on price determinants or consumer choices but on the operational realities confronting firms thus providing a more holistic view of business sustainability in Ethiopia's urban real estate sector.

## **1.2 Statement of the Problem**

If properly managed, the real estate sector can generate significant economic and social benefits for a country. Housing, in particular, plays a central role in economic development, population management, and social stability. Beyond property development and brokerage, the real estate industry encompasses a wide range of services, creating employment, attracting investment, and supporting industrial growth. Despite this potential, in Ethiopia the sector remains young and inefficient, with major gaps that hinder its contribution to sustainable urban development and national economic growth. This study, therefore, aims to examine the factors influencing the performance of real estate firms in Ethiopia and propose solutions that can strengthen the sector.

In recent decades, Ethiopia has experienced a boom in real estate activity, similar to trends in other developing nations. Property prices in Addis Ababa and other urban centers have doubled or even tripled in a short period, creating affordability challenges for many households. Housing shortages remain acute, with Addis Ababa alone facing an estimated deficit of more than one million units, despite interventions by both government and private developers (Kifle, 2009). This mismatch between supply and demand has not only driven prices upward but also forced many residents into informal settlements, undermining housing quality and social well-being (Mekuria, 2022).

The inefficiency of Ethiopia's real estate sector stems from several interrelated challenges. According to the Ministry of Urban Development and Construction (MUDCo, 2011), the projected annual demand for new urban housing, excluding replacement needs, stands at about 381,000 units far exceeding actual supply levels. The shortage is exacerbated by systemic issues, including complex land acquisition processes, scarcity and rising costs of construction materials, foreign exchange shortages, depreciation of the local currency, limited financing mechanisms, delays in project delivery, and political instability (Tigist, 2021). These problems not only constrain real estate firms but also generate ripple effects across the broader construction industry, which is linked to nearly 200 other sectors of the economy and has a strong multiplier effect on employment and industrial output (Ersoz et al., 2018).

The implications of these challenges are wide-ranging. On the economic side, inefficient housing delivery limits private sector growth, discourages investment, and constrains financial institutions that depend on mortgage and housing-related services. Socially, the shortage of affordable housing fuels the expansion of informal settlements, worsens urban poverty, and threatens long-term social stability. If left unaddressed, the demand–supply gap in the real estate sector will continue to widen, undermining both national economic progress and the quality of life in Ethiopia's rapidly urbanizing cities.

Against this background, this research seeks to assess the critical factors that directly affect the performance of real estate firms in Ethiopia. At the firm level, it aims to answer key questions on how issues of land, finance, materials, and delivery processes shape business performance, with

the ultimate goal of offering policy and managerial insights to improve the sector's contribution to Ethiopia's economic and social development.

### **1.3 Objective of the Research**

#### **1.3.1 General Objective**

The general objective of the study is to find out the determinants factors which affect the performance of real estate businesses in Addis Ababa in selected real estate companies.

#### **1.3.2 Specific Objectives**

1. To assess the effect of availability of materials on real estate business.
2. To examine the effect of foreign exchanges rate and/or the depreciation of local currency on the real estate business.
3. To assess the effect of project completion time/ delay on real estate business.
4. To develop the effect of availability of land on real estate firm.

### **1.4 Research Questions**

To attain and deal with the objectives this study was framed by the following questions:

1. To what extent availability of material significantly affect real estate business?
2. How do foreign exchange rate and the depreciation of local currency affect the real estate firm business?
3. To what extent project completion time affect real estate firm business?
4. To what extent availability of land affect real estate firm business?

### **1.5 Significance of the Study**

#### **1.5.1 To the Real Estate Industry**

The real estate sector plays a vital role in Ethiopia's economy, particularly in supporting urban development and meeting the rising demand for housing and commercial spaces. By examining the factors that influence the performance of real estate firms, this study provides valuable

insights for developers, managers, and stakeholders. The findings will help identify critical challenges and opportunities that shape firm performance and guide real estate companies in adopting strategies for improvement and competitiveness. In addition, the results offer practical lessons for other real estate actors operating in similar contexts, supporting more efficient project planning, management, and delivery.

### **1.5.2 To the City Administration of Addis Ababa**

For policymakers and regulators, particularly the Addis Ababa City Administration, the study offers evidence-based insights into the functioning of the real estate sector. This knowledge is essential for formulating and refining urban development policies, land lease regulations, and housing strategies that ensure sustainable growth of the sector. By understanding the challenges and performance gaps of real estate firms, city authorities can design policies that reduce market volatility, avoid speculative bubbles, and enhance housing affordability. Furthermore, the findings can support the creation of a balanced real estate environment that promotes investment while safeguarding social and economic stability in the capital.

### **1.5.3 To the Scientific Community**

The study also contributes to the body of knowledge on real estate development in Ethiopia, an area where scholarly research remains limited compared to other economic sectors. It provides updated empirical evidence that can be used as a reference for future academic studies, enabling researchers to build upon the findings and explore new areas of inquiry. By highlighting gaps in knowledge and areas requiring further investigation, the study lays a foundation for advancing academic discussions on real estate, urban development, and housing policy in Ethiopia. Additionally, the study benefits financing institutions such as banks by supplying reliable information on the dynamics of real estate firms, which can inform lending decisions and investment strategies.

## **1.6 Scope of the Study**

### **1.6.1 Thematic Scope**

This study thematically focuses on the determinants of real estate firm performance in Addis Ababa, Ethiopia. The research emphasizes four critical variables: (1) availability and cost of construction materials, (2) currency depreciation and foreign exchange constraints, (3) construction project delays, and (4) land accessibility. These variables are explored in relation to their direct and indirect impacts on the operational and financial performance of real estate firms. The study deliberately shifts from consumer centered or price-determinant models, instead centering on the operational challenges and structural bottlenecks that real estate businesses face in a rapidly urbanizing environment. As such, it contributes to the broader discourse on construction sector inefficiencies, urban housing crises, and private sector resilience within developing economies.

### **1.6.2 Spatial/Geographical Scope**

Spatially, this research is confined to Addis Ababa, the capital and largest city of Ethiopia. Addis Ababa represents the epicentre of real estate activity in the country and serves as a microcosm of the national urbanization and housing trends.

### **1.6.3 Temporal Scope**

The temporal scope of the study primarily covers the last decade (2014–2024) a period marked by dramatic growth in the real estate sector, sharp currency depreciation, rapid urban expansion, and growing macroeconomic pressures. Data and literature reviewed are drawn from both recent and longitudinal sources within this timeframe. The study also captures on-going trends and challenges as of 2024, particularly those intensified by foreign exchange shortages and inflationary pressures. While the study does not involve long-term forecasting, it seeks to reflect the current and evolving dynamics shaping firm performance in the present economic climate, offering relevant insights for short- to medium-term strategic responses.

## **1.8 Limitation of the Study**

While this study aims to provide valuable insights into the key factors affecting real estate business performance in Addis Ababa, it is not without limitations. One key limitation of this

study is the lack of comprehensive data, which restricted the depth of analysis. In several instances, relevant information was either unavailable or incomplete, which may have affected the accuracy and generalizability of the findings. Additionally, limited responses from participants further constrained the study, as the smaller sample size may not fully represent the broader population. This limitation suggests that the results should be interpreted with caution, and future research should aim to address this gap by utilizing a larger and more diverse dataset.

Further, the research is geographically limited to Addis Ababa, and the findings did not be fully generalizable to other urban canters in Ethiopia. Additionally, the study relies on data collected through surveys and interviews, which may be subject to personal bias and respondent subjectivity. Time and resource constraints also limited the sample size and scope of data collection. These limitations were considered when interpreting the results and applying the findings to broader contexts.

## **1.9 Organization of the Document**

This paper consists of five parts. The first part constitutes the introduction, where the basic concept of the topic is presented against the background of the study section, statement of the problem; research objective and scope are presented. The second parts deals about review of related literature, where both theoretical and empirical development in the issue were synthesized. The third part represents; research design, population/ sampling, data collection & analysis methodology employed for the research. The fourth chapter presents the data analyzed and present the interpretation & discussions in light of the literature review. The last chapter is the conclusion & recommendation and also concludes, summarize and the paper is concluded by make suggestion for further research based on results found from the research.

# CHAPTER TWO

## REVIEW OF LITRATURE

### 2.1 Theoretical Literature Review

#### 2.1.1 Definitions and Concepts of Real Estate

Real estate is broadly defined as the land and everything made permanently a part thereof, and the nature and extent of one's interest there in (Encarta Reference Library, 2006). Any legal entity as determined and defined by law may purchase, own, and convey (or transfer) real estate. Real estate is often used to refer to things that are not movable such as land and improvements permanently attached to the land (Messah & Kigige, 2011). Real estate comprises entities like; raw land, residential homes and a different forms of income property, including office, warehouses and apartment buildings, and condominiums (Kiros, 2009).

Real estate is sometimes mistakenly considered as a profession, nonetheless it is essentially a business. The major divisions of the real estate business include; operation, investment and agency. These vary from one another based on the objectives of the participants and the strategies they plan to use to achieve their goals (Messah & Kigige, 2011).

Given the similarities, real estate is defined by all writers as identifiable and tangible land. They also stated that all structures, improvements, and fixtures attached permanently to the ground should be regarded as real estate. Real estate primarily falls into two categories, each of which also includes numerous sub-categories. The following section discusses the various aspects of real estate segmentation in connection to the housing market (Kiros Aqubamicheal Kifle, 2009). The fundamental categories are listed below:

#### **Residential Real estate**

Individual, family, and communal housing are all included in residential real estate. The majority of people are acquainted with this asset class and this is the most prevalent estate type. Single-family residences, apartments, condos, townhouses, and other living situations fall under the category of residential.

## **Commercial real Estate**

Land and structures used by companies for operations are referred to as commercial property. Shopping centers, individual shops, workplace buildings, parking lots, healthcare facilities, hotels, industrial businesses such as factories are a few examples. Urban land and housing in Ethiopia were largely the property of the federal elite during the imperial era and after the Derg regime implemented a decree on extra urban land and homes, the current administration has implemented a market-oriented approach to housing development since the transition in 1991. The government established the urban land lease holding proclamation in 1993 and declared leasehold to be the preferred form of tenure. For owner-occupied holdings, the lease term ranges from 99 years to 50 years, while it is 50 years for commercial and other uses (proclamation no 80/1993 as cited in Kiros Aqubamicheal Kifle, 2009). However, other conditions other than land & lease laws have also contributed to the liberalization of the real estate market.

Practically speaking, Ethiopia's real estate market began to flourish in the mid-1990s. Different corporate entities entered the market, some of which were unable to fulfill the promises they made to their customers (Metassebia, 2021). The industry is receiving more attention nationwide, with a focus being city of Addis Abeba. Even though there are more than 2000 licensed entities, there are only 71 operational entities during 2009. Foreign nationals make up a sizable portion of registered developers. Investor interest in the field of real estate investment has significantly increased (Kiros, 2009).

There is a sizable unmet demand in terms of both amount and quality, which directly affects prices. According to the MUDCo GTP II plan (2011), the projected yearly demand for new urban housing, excluding the replacement of existing housing, is 381,000, far exceeding the rate of annual supply. Due to this, many urban residents live in informal settlements (Mekuria Haile, 2022).

Regardless of its inefficiency, the real estate sector has been one of the fastest-growing segments of the Ethiopian economy. The growth of the real estate industry and the closely related construction industry has greatly contributed to the double-digit growth of Ethiopia's economy in the recent years (Arsema Eyassu, 2020). Based World Bank estimate, Ethiopia will have about four million new urban households by 2027 and approximately 9.7 million by 2037. Demand for urban houses is estimated to be 471 000 per year from 2015 to 2025, and 486 000 houses a year

from the year 2025 to 2035. The real estate sector has contributed 12.5% to GDP growth in the past 10 years. The growth has largely been attributed to an 8.9% expansion in real estate and construction (World Bank Report, 2019, pg 39).

### **2.1.2 Real Estate as a Business Sector**

Real estate is a business, not a profession. Although it is occasionally incorrectly referred to as a profession, real estate is really just a business. A business is primarily engaged in for profit, and the profit is to the one engaged in the business. In contrast, a profession applies science, art, or learning to be of use to others, with the professor or person applying it earning an incidental profit (Adetunji Osunwusi, 2015).

Real estate has developed into a significant area of business with the rise of private property ownership. The real estate industry has developed into several distinct fields because buying real estate requires a sizable investment and each piece of land has its own characteristics. Real estate appraisals and transaction facilitation frequently involve the use of specialists (Kiros Aquabamichael Kifle, 2009). The three main divisions of the real estate industry are agency, operation, and investment. These vary from one another based on the objectives of the participants and the strategies they intend to use to succeed. Real money capital is necessary to run either of the first two divisions of the business, the operation or the investment. Investment refers to the use of capital to purchase real estate or interests in it for long-term possession or actual use by the buyer. The use of capital in the purchase or improvement of real estate or interests therein for commercial operations is known as operation. Agency is engaging in real estate business on another person's behalf. Real estate investments are typically made for one of two reasons. The agency business's most valuable asset is its customers' goodwill, which can be nurtured, grown, and made extremely valuable (Adetunji Osunwusi, 2015).

Investment for income may be for one of two purposes, one is the derivation of rental; that is, the direct return for the use of real property for definite periods, or for obtaining of income through others upon money lent on the security of real property. Real estate operation may be carried on; for the purchase and sale of land, for the purpose of building or for the purpose of lending money upon mortgages.

Agency is the area of the real estate business that captures the attention of the most people involved in the industry, making it of utmost significance in that regard. It is split into two sections: management and brokerage. A broker is a person who facilitates transactions between principals in exchange for payment, which is typically proportional to the value of the subject-matter. According to the types of business that typically capture the broker's attention, brokerage is divided into two categories, The sales broker is a broker who focuses all of his efforts on facilitating the exchange or sale of real estate. An individual who focuses on obtaining loans with real estate as security is known as a loan broker (Adetunji, 2015).

Since the real estate industry contributes significantly to the nation's economic expansion, it is subject to governance and regulatory oversight. Costs for construction are increased by rising prices for land, labor, capital, and businesses. Adetunji (2015) further elaborates that, these circumstances compel the implementation of a rigid management system as well as the creation of creative sales strategies. Players should focus on maximizing the use of technology across the business as operational costs soar. Through the use of energy-saving techniques, alternative materials, and cutting-edge construction techniques, innovative technology may help lower costs. All businesses continue to have profitability as their main objective. Companies should concentrate on establishing the proper policies and practices in order to ensure strong performance and sustainable growth in the face of the many challenges.

As the research made in India by Adetunji (2015), the industry has traditionally relied on high-net-worth individuals and other unauthorized sources of funding, which has resulted in low levels of transparency, rather than institutional capital. This situation changed as the industry expanded, and as a result of India's growing economic integration with the rest of the world, the real estate market dynamics now reflect consumers' expectations of higher quality (Adetunji, 2015).

### **2.1.3 Performance of Real estate Businesses**

The real estate industry is characterized by large amount of capital, long investment cycle, capital-intensive and slow turnover speed (Shan and Chunyan, 2019). It is very important for the development and operation of real estate enterprises to study the business performance of real estate enterprises.

Enterprise operating performance can be defined as the operator's performance and the enterprise's operating profit during the operation time. Profitability and an organization's capacity for subsequent development are the primary ways in which the level of operating efficiency of an enterprise is demonstrated. The accomplishments and contributions made by managers to the expansion, development, and management of businesses serve as a reflection on their effectiveness as managers. The business performance of real estate firms also influences the performance level of real estate enterprises (Shan and Chunyan, 2019).

The performance level can be reflected by the follow-up development ability of real estate enterprises and so on. The philosophy of enterprise performance derives from people's overly preoccupation with economic concerns, which is also the origin of enterprise performance assessment. The growth of contemporary management theory has increased objectivity in the performance review process (Shan and Chunyan, 2019). The four theories; Maximum & minimum rule, capital preservation, principal agent theory and management theory are theoretical basis for enterprise performance evaluation.

Indeed, organizations are required to 'perform' and to communicate their achievements to key stakeholders. As a consequence, organizational functions and processes are increasingly demanded to demonstrate their contribution to performance. The measurement corporate governance, ownership, political connectivity of local governments, accounting data, and ultimate control are all explanatory variables (Tigist, 2021).

Real estate investment success is affected by macroeconomic factors like GDP per capita, exchange rates, and inflation. Each of these variables is examined in terms of how well it affected real estate investment's ability to boost Nigeria's gross domestic product. After data analysis and regression using OLS, it was discovered that exchange rate, per capita GDP, and inflation are significant macroeconomic determinants of real estate success in Nigeria. It would be challenging and complex to cope with an increase in inflation while achieving higher real estate performance. Therefore, it is recognized that policy is focused on improving GDP (Richard Ugochukwu Elile, Sunday S. Akpan and Valliappan Raju, 2019). The performance of real estate sector is crucial to all flourishing firms in the sector. The smooth operation of activities may be jeopardized if real estate enterprises do not perform to the desired level in terms of revenue generated, profitability, and returns on investment (Tigist Abera, 2021).

## **2.1.4 Theories**

### **2.1.4.1 Bid-Rent Theory**

The bid rent theory is a geographical economic theory that defines how the price and demand for real estate differs as the distance from the central business district (CBD) increases. It states that different land users will compete with one another for land close to the center of the city. This is based upon the idea that retail establishing demands to maximize their profitability, hence, they are much more willing to pay more for land close to the CBD and lowers as the land gets further away from this area. This theory is based upon the reasoning that the more accessible an area (i.e., the greater the concentration of customers), the more profitable.

According to bid- rent theory, land users, whether they be residential, office or retail, all compete for the most accessible land within the central business district (CBD). The amount they are willing to pay is called bid rent. This can generally be shown in a "bid rent curve", based on the reasoning that the most accessible land, generally in the center, is the most expensive land.

### **2.1.4.2 The Gravity Theory**

According to the Gravity Theory, consumers and other space users will be more drawn to a location with a higher concentration of goods and services. Gravity theory, which presupposes that consumers will be pulled to a retail center in proportion to the sheer volume or quantity of operations and the resulting choices assembled at that location, is one of the pillars of retail location models. The relationship between the sorts of goods and services and market demographics as well as consumer spending competition has evolved over time. If housings are built near to good demographic with a little travel it will be more preferable. (Carto, 2016)

### **2.1.4.3 General Equilibrium Theory**

General equilibrium theory is a theory which describes how demand, supply, and price functions in an economy as a whole and not just in a single or specific market. In other words, the general equilibrium analyzes the whole economy. This is contrary to partial equilibrium which analyzes individual markets only. General equilibrium theory is also known as the Walrasian general equilibrium (Jason, 2022). General equilibrium theory refers to a theory which tries to explain how demand, supply, and price functions in an economy as a whole and not just in a single or specific market.

General equilibrium is only in existence when every single products supply equal demand. The main factor influencing demand for housing is the price of housing. By the law of demand, as price decreases, the quantity of housing demanded increases. The demand for housing also depends on the capital of households, their present income, and interest rates. The primary factor influencing supply of housing is the price of housing. As price increases, the quantity supplied also increases. The supply of housing is shifted by changes in the price of inputs and changes in technology. The quantity and price of housing traded is determined by the equilibrium of the housing market.

## **2.1.5 Determinant Factors Affecting Real Estate Business in Addis Ababa**

### **2.1.5.1 Availability of construction materials & Price Escalation**

While many industries have slowed due to the effects of the pandemic, construction and built environment have broken the trend, with demand hitting its highest level in seven years. However, material shortage is hindering project timely completion in many countries around the world (Jeremy, 2021). Materials, such as cement, concrete, and steel, are also facing severe circulation issues. Although these products are frequently in great demand, Brexit-related distribution delays and COVID-19-related labor constraints have combined to cause vendors to face a backlog of orders. Due to the fact that production was drastically cut in the early stages of the COVID-19 epidemic, expect steel to be extremely difficult to find. There are worries that despite the growth, these shortages could lead to a slowdown in building because they are expected to endure until at least 2025 (Jeremy, 2021).

As a significant input in the project development, building construction materials are crucial. The construction sector faces a considerable problem in completing high-quality projects on schedule due to the ongoing increase in the cost of building materials. All project stakeholders, including suppliers, contractors, and customers participating in the construction process, tend to experience elevated project risk as a result of the shifting market value of building materials. The cost of building materials in the construction sector has been significantly challenged by the demand for homes of all types, inflation, and the limited availability of money. Therefore, it is crucial to enhance the delivery of sustainable housing while staying within the allocated time, cost, and quality objectives, as well as taking stakeholder satisfaction and building material prices into account (EPC World, 2021).

Price inflation will ultimately have the most impact on the building industry. While many German contractors discovered that timber prices had increased to three times their regular rate, material costs have increased by over 8% in the UK alone. Because of this, construction firms of all sizes might need to raise labor prices to offset the increased cost (Jeremy, 2021). We can also anticipate matters with fulfilling construction contracts, since many projects will need to adjust their schedules to take materials shortages in to consideration.

Lack of materials will undoubtedly have an impact on real estate development, as one could anticipate. Developers are currently anticipating a certain delay on all construction projects as they struggle to find the supplies needed to complete developments that have been postponed due to COVID-19. Additionally, certain projects may see contracting setbacks as a result of growing costs, which will inevitably necessitate the renegotiation of many current contracts (Jeremy, 2021).

#### **2.1.5.2 Foreign exchange and the depreciation of local currency & Its Effect on Real Estate Industry**

Numerous economic factors, such as inflation, monetary policy, consumer confidence, the balance of payments, and GDP dynamics, contribute to fluctuations in currency exchange rates. This fact appears to be important, most frequently, for those who are organizing international travel. Foreign exchange rates and their fluctuations do, however, have a much wider indirect impact. “The simplest and most accurate way to define the term “exchange rate” would be to say that it’s the value that one currency has when transferred into another” (Eman, 2020).

One must first realize that foreign real estate investors are primarily impacted by exchange rates. The number of foreign investors who enter the market can be significantly impacted by this degree of fluctuation. If a foreign currency is increasing in value, there will typically be a surge in foreign investors in the real estate market. This is due to the fact that foreign investors have more purchasing power and can, therefore, purchase more real estate if the value of foreign currency begins to increase relative to that of a target country. On the other hand, currency devaluation can also be problematic for foreign investors. The issue is that if a rental property is situated in a region where the currency has declined in value due to fluctuations in exchange rates, the value of their rental income may also be significantly diminished when converted. Their return on investment may no longer appear to be as good as it once was (Eman, 2020).

## **Inflation and Real estate Market**

According to the monetary theory of inflation, the cause of inflation is the expansion of the money supply. Faster inflation is a result of faster money supply growth. Supply and demand play a role in determining the price of real estate. When the supply is less than the demand, the price of an item will rise (Friedman and Schwartz, 1963 as cited on Eyerus Abera, 2021). The real estate market and inflation are related. Growing output and income levels in society cause demand to rise through improved consumption and investment, which has a positive impact on the cost of goods and services (Blanchard, 2010).

The inflation rate and interest rates could both increase in response to a weak domestic currency. Higher mortgage payments result from the affordability of homes being reduced by high interest rates. As a result, there will be less demand for housing and loans. On the other hand, a strong currency lowers interest rates and slows inflation. Therefore, the interest rate one pays on his or her mortgage is indirectly affected by exchange rates (Eman, 2020).

The relationship between real estate prices and foreign exchange rate has always been a vital issue mainly for the apparent impact of foreign exchange rate fluctuation on prices of general goods and services in import driven economies. A study made in Ghana finds that an increase in inflation negatively affects the price of real estate houses. This shows that a rise in inflation decreases housing prices which has both positive and detrimental effects (John et. al, 2019). The study was made to find out the effect of exchange rate on real estate of Ghana. The study revealed clearly that fluctuations in the exchange rate has no effect or impact on residential real estate houses.

It was identified the relations among nominal asset with inflation & real asset with inflation. First, the relationship between inflation and nominal, assets, nominal investments, like money or cash. Bonds or market instruments don't provide any form of safety against inflation. To calculate an asset's true return, the nominal interest rate must be reduced by the rate of inflation. Investors experience negative real returns and lose money in terms of purchasing power when inflation is higher than the nominal rate. The real yield is still positive even when inflation is less than the nominal rate; however, it is diminished by the amount of inflation. The second is the connection between real and inflation assets. Real assets, like these, contrast nominal assets. They provide 'so called inflation', like stocks or real estate protection. A country's overall

inflation rate will increase as consumer prices rise. Real estate will benefit from this development as property prices will rise at the same time, protecting against declines in real value due to inflation. The connection between foreign exchange rates and inflation is the last and most crucial point for international real estate investors. According to the study, there is a significant correlation between Consumer Price Indices (CPI) and foreign exchange rates relative to the Swiss Franc, which had the by far lowest inflation. In essence, rising consumer prices make up for a local currency's decline in value against other currencies for investors (Asia Insights, 2020). Fluctuations in the currency markets can substantially affect the international real estate portfolio value and the rental yields of the underlying properties.

### **2.1.5.3 Project Completion Time & its effect on real Estate business**

The determination of a responsible party for delays and their duration, one of the ongoing difficulties in is its impact on the construction schedule that was originally planned. Construction claims in the real estate sector are in dispute. An arrangement of delay analysis models demonstrate that no model can currently collect the reasons behind construction delays by evaluating time overrun caused by the addition of various delays to determine who is in charge suggesting ways to avoid delays while adhering to the construction's planned schedule is to minimize their presence in construction projects for homes. The creation and testing of is the aim of this document and to design method for assessing construction delays liability in the real estate sector and construction projects by assembling causes of delays in arrival and preventative measures that need to be taken/ implemented to cut back on construction hold-ups. A methodology is established to solve real estate construction disputes claims by identifying the responsible party for delay and allowing one to use lean construction principles to avoid delays in other work packages and real estate construction projects. Owner responsible delay means the owner fails to timely approve drawings during work execution. Contractor responsible delay means the contractor does not have the required resources to execute the work as scheduled. Excusable Delay means delays caused by factors which are beyond contractor's control; severe rainfall begins during construction phase (Asim et al., 2017).

Construction project time overrun can be defined as an extension of time beyond the contractual time agreed during the tender (Al- Gahtani and Mohan, 2007 as cited on Merid Taye, 2016). The majority of construction projects are rarely completed on schedule, within budget, and to the

desired quality, according to current industry practice. Construction projects are unusual in nature, time-consuming, expensive, and full of uncertainties, which is the main cause. As a result, claims and disagreements are increasingly common, particularly on significant civil engineering contracts (Merid Taye, 2016).

#### **2.1.5.4 Availability of Land and Real Estate Business**

Numerous initiatives have been taken since the first urban land proclamations, number 80/1993, were issued in the early 1990s to enhance the delivery of land services. Land is a common property of Ethiopia's Nations, Nationalities, and Peoples and is not subject to sale or other forms of exchange, according to Ethiopia's constitution, article 40 subarticle 3. According to the same article's sub article 6, the government was required to protect private investors' rights to use land in accordance with established payment schedules. As a result, the land market primarily involves municipalities and citizens who want to buy land for personal use, business purposes, or to develop real estate (Mekuria Haile, 2022).

According to Mekuria Haile, due to financial limitations, it has been difficult to sustain the land supply for multiple development stakeholders, including the private sector. This is due to the fact that municipalities have provided the majority of the land with priority for government projects like housing, roads, telecom, water, health, and education without receiving any compensation, not even for the development of infrastructure. He further discusses that the lack of modern management means that the land market is still poorly managed and inefficient despite numerous attempts to regulate it at various legislative levels. The primary sources of urban developed land are local governments, and they rarely meet the needs of citizens, investors, and real estate developers. Furthermore, most of the time, there is very little available land with the necessary infrastructure, and a sizable portion is delivered without the provision of major utilities. In addition, the compensation for land taken from farmers when it is reclaimed is insufficient compared to what the farmers can "sell illegally," which becomes the main cause of resistance in Ethiopia's urban hinterlands.

The practical land management system in Ethiopia, which has caused an imbalance in the supply and demand for housing and urban land, has contributed to the country's unprecedented rate and degree of urbanization. Over the past few years, there has been an increase in demand for private

homes in Ethiopia, particularly in Addis Abeba. With Ethiopia's population expected to double, the state sector's ability to address the country's growing urban housing shortage has become uncertain. Prices have risen beyond the means of the majority of country residents due to the country's high demand for domestic housing and the lack of available housing. (Mekuria, 2022).

On the other hand, in addition to the availability of land its location is also crucial for the profitability of the real estate business. The economy and social climate of the area should be taken into account. Location decisions are influenced by a variety of factors, including infrastructure, transportation accessibility, market absorption rate, distribution channels, qualified personnel, a thriving industry, and promotion. Many academics looked into where high-order service activities were located in interurban areas during the 1980s, but few of these studies concentrated on where these activities were located in inner metropolitan areas (i.e., producer services, finance, insurance, real estate, investment, and holding companies).

## **2.2 Empirical Literature Review**

Urbanization has led to numerous socio-economic challenges in developing countries, including acute housing shortages and the proliferation of informal settlements lacking legal property rights. Ethiopia is no exception.

### **2.2.1 Key Determinants Affecting the Performance of Real Estate**

Mekuria et al., (2024) aimed to investigate the factors influencing residential real estate prices in Bahir Dar City. Using purposive and stratified random sampling, the research employed both descriptive and inferential statistical methods to analyze data. The ordinary least squares (OLS) method was applied to determine the influencing factors. The results from the hedonic regression model revealed that 88% of the variation in residential property prices could be explained by factors such as plot size, floor area, number of rooms, house age, external and ceiling finishing materials, house orientation, proximity to the main road, and the involvement of brokers in property transactions. The study also found that real estate developers face challenges like limited access to loans, high-interest rates, mortgage restrictions, financial constraints, delays in plan approvals, and rising construction material costs. To address these issues, the study recommends that the Bahir Dar municipality provide more land for developers, enhance

infrastructure development, and that both federal and regional governments should lower interest rates to support real estate investments, particularly for low-income groups.

Thomas & Getie (2023) aimed to explore the key determinants affecting the performance of the commercial real estate market in Addis Ababa employing an explanatory sequential mixed-methods design. The study found that several factors including organizational efficiency, supplier reliability, and consumer purchase intentions, access to credit, marketing strategies, legal frameworks, land availability, infrastructure, technological integration, and leadership quality positively influenced market performance. Furthermore, qualitative insights highlighted additional influences such as political and economic instability, stakeholder coordination, political interference, and buyer purchasing power. The researchers recommend that real estate firms implement strategies targeting these performance drivers and work closely with governmental and sectoral stakeholders. A performance measurement framework was also proposed to guide developers in enhancing commercial real estate outcomes in Addis Ababa.

The study by Immanuel and Andualem (2023) investigated the factors influencing the performance of the commercial real estate market in Addis Ababa, Ethiopia. The research used an explanatory sequential mixed-methods design, incorporating both quantitative and qualitative approaches. The quantitative phase included a survey of 163 responses from 231 distributed questionnaires among senior professionals, business leaders, and real estate developers in Addis Ababa, achieving a response rate of 71%. The qualitative phase consisted of in-depth interviews with 10 key informants from relevant government ministries, agencies, and industrial sectors. The quantitative results revealed that several factors, including firm efficiency, supplier dependability, customer purchase intentions, credit availability, marketing strategies, legal considerations, land availability, infrastructure development, technological adoption, and leadership quality, all had significant positive impacts on the market's performance. The qualitative findings identified additional factors such as political and economic instability, stakeholder coordination, political interference, and the purchasing power of homebuyers as influential elements in commercial real estate performance. Based on these findings, the researchers recommended that real estate companies adopt strategies that focus on improving performance-related variables and work closely with government and other stakeholders. They also proposed a framework for assessing performance within the commercial real estate sector, which can guide developers in enhancing market outcomes (Immanuel & Andualem, year).

Tadesse (2017) investigated these price dynamics through a survey of managerial personnel in the real estate sector and found that prices have risen dramatically, often placing housing out of reach for middle- and lower-income groups. Key direct factors influencing price escalation include the location of properties, their physical attributes, and accessibility to infrastructure and services. Meanwhile, indirect factors such as taxation policies, macroeconomic performance, and the limited availability of modern construction technologies were also found to be influential. The study further emphasized the need for regulatory oversight, improved access to loans, better infrastructure, and cost-reducing construction innovations to enhance affordability and ensure sustainable growth in the sector (Tadesse, 2017).

### **2.2.2 Foreign Exchange Rate / Currency Depreciation**

The volatility of foreign exchange rates and the continued depreciation of the Ethiopian Birr have severely impacted the cost structure of real estate development. Most construction materials, particularly finishing and mechanical items, are imported, making real estate projects highly sensitive to exchange rate fluctuations. Egert and Mihaljek (2007) found that increases in construction input prices tied to currency depreciation reduce investment profitability. Kiros Aqubamichael (2009) confirmed that these effects are particularly pronounced in Ethiopia, where inflation and foreign currency shortages raise the costs of materials and reduce developer margins.

### **2.2.3 Project Completion Time / Delays**

Timely project completion is crucial in the real estate sector. Delays in project execution often result in cost overruns, loss of investor confidence, and reduced returns. Tigist Shemekt (2021) identified poor organizational planning, insufficient project management skills, and unclear project scope as major causes of delay in Ethiopian real estate developments. Hinze and Tracey (1994) also emphasized the role of subcontractor performance, noting that overreliance on poorly coordinated sub-contractors leads to timeline disruptions. Similarly, Kibru et al. (2014) noted that internal inefficiencies and lack of skilled labor compound the issue of project delays in Ethiopia.

### **2.2.4 Land Availability**

Land availability remains one of the most pressing challenges for real estate developers in Addis Ababa. The city's rapid urbanization, coupled with bureaucratic land allocation processes and

soaring land prices, has limited access to legally acquired and serviced plots. According to Natsvaladze (2014), land value and accessibility directly influence the feasibility of real estate projects. Omirin (2002) defined land availability as a combination of tenure security, affordability, and acquisition ease all of which are problematic in Addis Ababa's formal market. The World Bank (2015) further noted that the lack of available land is a major contributor to the urban housing shortage across Ethiopia.

### **2.2.5 Availability of Construction Materials**

The real estate sector in Ethiopia also struggles with shortages and price fluctuations in construction materials. This scarcity is often due to import dependence, limited domestic production capacity, and distribution inefficiencies. Kiros Aqubamichael (2009) highlighted that delays in material supply increase project timelines and total development costs. Fidelis and Chinedu (2011), in a Nigerian context, found similar results where shortages in building materials and inefficient supply chains severely hindered project progress. These challenges are magnified by inflation and weak foreign currency reserves, making timely procurement and budgeting difficult for developers in Addis Ababa.

Table 1 Empirical Studies Summary

Theme/Section	Author(s) & Year	Location	Methodology	Key Findings	Recommendations
<b>Determinants Affecting Real Estate Performance</b>	Mekuria et al. (2024)	Bahir Dar, Ethiopia	Descriptive & inferential statistics, OLS regression	88% of property price variation explained by plot size, floor area, room count, house age, materials, orientation, road proximity, and broker involvement. Also, faced issues with loan access, high interest, delays, and material costs.	Provide more land, improve infrastructure, and reduce interest rates, especially for low-income housing.
	Thomas & Getie (2023)	Addis Ababa	Explanatory sequential mixed-methods	Performance influenced by organizational efficiency, supplier reliability, consumer intention, credit access, marketing, legal & land issues, infrastructure, tech, leadership. Also noted political/economic instability and buyer power.	Real estate firms should collaborate with stakeholders and implement a performance measurement framework.
	Immanuel & Andualem (2023)	Addis Ababa	Mixed-methods: Survey (71% response), Interviews	Confirmed similar factors as Thomas & Getie (2023). Emphasized firm efficiency, marketing, land, legal, infrastructure, tech. Political/economic instability and buyer purchasing power also key.	Adopt performance-driven strategies and use a sector-specific performance assessment framework.
	Tadesse (2017)	Ethiopia (General)	Managerial surveys	Rising property prices due to location, physical attributes, infrastructure. Indirect factors: tax policy, macroeconomic issues, tech availability.	Recommend better regulation, loan access, infrastructure, and construction cost innovations to improve affordability.
<b>Foreign Exchange Rate / Currency Depreciation</b>	Egert & Mihaljek (2007)	General (Macro focus)	Analytical review	Currency depreciation raises construction input costs, reducing profitability.	N/A
	Kiros	Ethiopia	Literature-based	Inflation and currency shortages raise	N/A

	Aqubamichael (2009)		analysis	material costs and reduce developer profit margins.	
<b>Project Completion Time / Delays</b>	Tigist Shemekt (2021)	Ethiopia	Empirical study	Delays linked to poor planning, lack of project management, and unclear scope.	Improve planning capacity and project management training.
	Hinze & Tracey (1994)	International	Literature review	Poor subcontractor coordination causes delays.	Better subcontractor management.
	Kibru et al. (2014)	Ethiopia	Empirical study	Internal inefficiencies and lack of skilled labor compound delays.	Invest in labor skills and improve internal systems.
<b>Land Availability</b>	Natsvaladze (2014)	Not Ethiopia-specific	Literature review	Land value and accessibility influence real estate feasibility.	N/A
	Omirin (2002)	Nigeria (comparative)	Conceptual analysis	Defines land availability via tenure security, affordability, and acquisition ease all problematic in Addis Ababa.	N/A
	World Bank (2015)	Ethiopia	Policy report	Land shortages significantly contribute to urban housing deficits.	Reforms in land allocation policies are needed.
<b>Construction Material Availability</b>	Kiros Aqubamichael (2009)	Ethiopia	Literature analysis	Material supply delays increase project duration and cost.	Strengthen supply chains and improve foreign currency availability.
	Fidelis & Chinedu (2011)	Nigeria	Empirical study	Supply chain inefficiencies and material scarcity	

## **2.3 Summary of the Study**

The reviewed empirical literature identifies several critical determinants influencing the performance of Ethiopia's real estate sector, particularly in urban centers like Addis Ababa and Bahir Dar. Key factors include plot size, floor area, property location, infrastructure quality, legal frameworks, marketing strategies, and access to credit (Mekuria et al., 2024; Immanuel & Andualem, 2023; Thomas & Getie, 2023). External economic pressures, such as foreign exchange rate volatility and inflation, have further increased the cost of construction materials and reduced profitability (Egert & Mihaljek, 2007; Kiros Aqubamichael, 2009). Land scarcity, bureaucratic land allocation, and rising land prices also significantly affect project feasibility (World Bank, 2015; Omirin, 2002; Natsvaladze, 2014). Moreover, delays in project completion are attributed to poor planning, weak project management, subcontractor issues, and a shortage of skilled labor (Tigist Shemekt, 2021; Hinze & Tracey, 1994; Kibru et al., 2014). Political and economic instability, limited purchasing power, and poor stakeholder coordination further constrain market performance (Thomas & Getie, 2023; Immanuel & Andualem, 2023). Overall, the literature suggests that addressing these challenges through improved governance, better infrastructure, efficient planning, and enhanced collaboration between stakeholders is essential for sustainable growth in the real estate sector.

## **2.4 Research Gap**

The existing studies on the real estate market in Addis Ababa have several gaps that need to be addressed for a more comprehensive understanding of the sector. One significant gap is the lack of research that integrates all types of real estate residential, commercial, and industrial into a single study. While studies like those by Tamirat et al. (2024) focus on specific market segments, they fail to provide a holistic view of how these sectors interact and influence each other.

Another gap lies in the insufficient exploration of government policies and regulations, such as land zoning laws, taxation policies, and foreign investment regulations. Genet (2019) mentions factors like infrastructure and construction technology but does not thoroughly investigate how government actions impact real estate business operations. Furthermore, while Eyob Assefa Tadesse (2017) touches on economic performance and inflation, there is a need to explore a

broader range of macroeconomic variables, such as GDP growth, unemployment rates, and currency exchange rates. These factors can have significant effects on real estate supply, demand, and pricing.

Finally, while studies like Genet (2019) focus on consumer preferences, they do not delve deeply into how urbanization and demographic shifts are altering consumer needs. With rapid urban growth and population changes, consumer expectations in the real estate market are evolving, and understanding these shifts such as preferences for sustainable buildings, green spaces, or proximity to transport were key for real estate developers to stay competitive. Moreover, urban planning strategies, infrastructure development, and transportation systems also significantly influence real estate markets. A deeper investigation into how public infrastructure projects, like new roads and public transport systems, impact property prices and market dynamics is essential. Overall, there is a need for more holistic research that considers all aspects of real estate economic, regulatory, technological, and consumer-related within the broader context of urban development in Addis Ababa.

## **2.5 Conceptual Framework**

The study's conceptual framework illustrates the relationship between real estate firm performance and various factors that influence it. Adapted from previous studies, the framework identifies key independent variables such as construction time, material availability, price escalation, and foreign exchange rate fluctuations, depreciation of the local currency, housing finance, and land availability. These independent variables are considered as the key determinants affecting the performance of real estate firms. On the other hand, the dependent variable in this framework is real estate firm performance, which is evaluated based on factors such as project completion time, cost efficiency, and overall market success. The conceptual structure aims to capture how these independent variables directly or indirectly influence the real estate market, providing a comprehensive view of the performance factors in the industry.

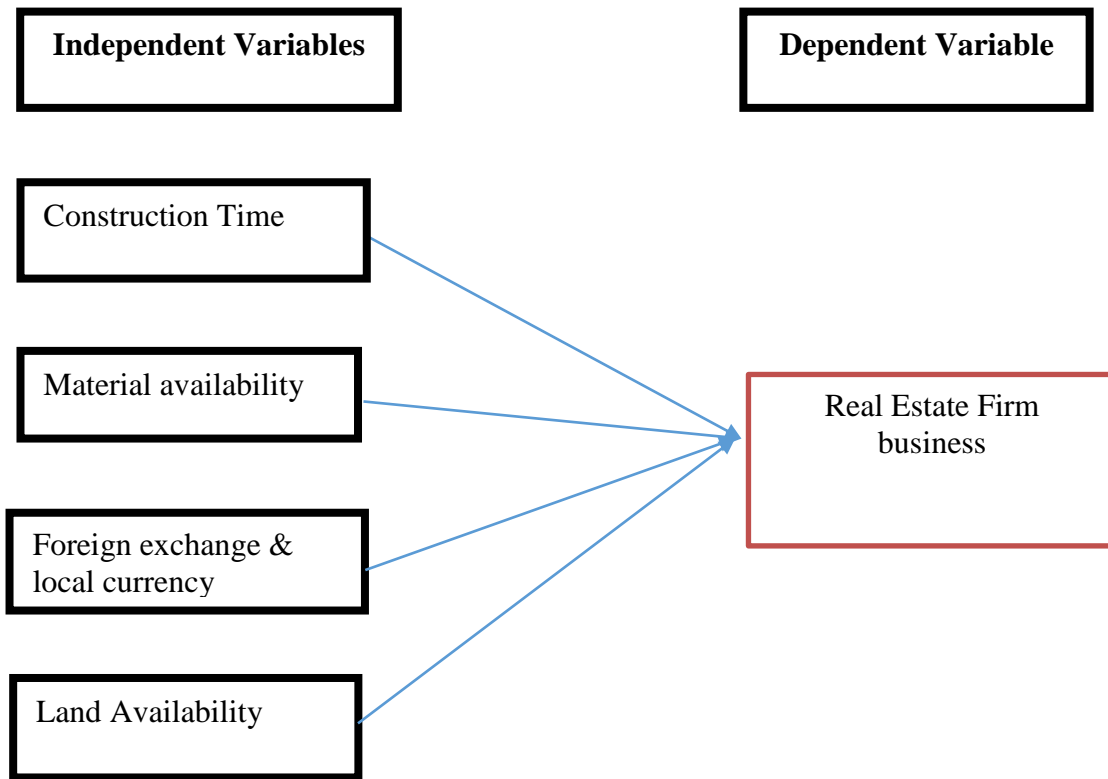


Figure 1 *Conceptual framework*

Adapted from Mekuria et al. (2024)

This study was adapted from Mekuria et al. (2024) who focused on the four variables: land availability, material availability, foreign currency depreciation, and construction delays. Their comprehensive approach to macro- and micro-level determinants of real estate prices provides a valuable foundation for this research.

# CHAPTER THREE

## RESEARCH METHODOLOGY

### 3.1 Introduction

This chapter outlines the methodology used to examine the key factors affecting the performance of real estate businesses in Addis Ababa. It discusses the study area, research design, and approach employed in achieving the research objectives. The methodological choices made are aligned with the nature of the research problem, aiming to ensure reliable and valid findings.

### 3.2 Study Area

Addis Ababa, the capital of Ethiopia, was selected as the study area due to its concentration of private real estate firms, its diverse socio-economic conditions, and the urban development challenges it faces. Focusing on Addis Ababa allows the research to generate a deep and context-specific understanding of how macroeconomic volatility and operational variables influence firm-level performance in the real estate sector. While the findings may have relevance to other Ethiopian cities facing similar urbanization pressures, the scope of the study is intentionally localized to Addis Ababa to enhance specificity and analytical depth.

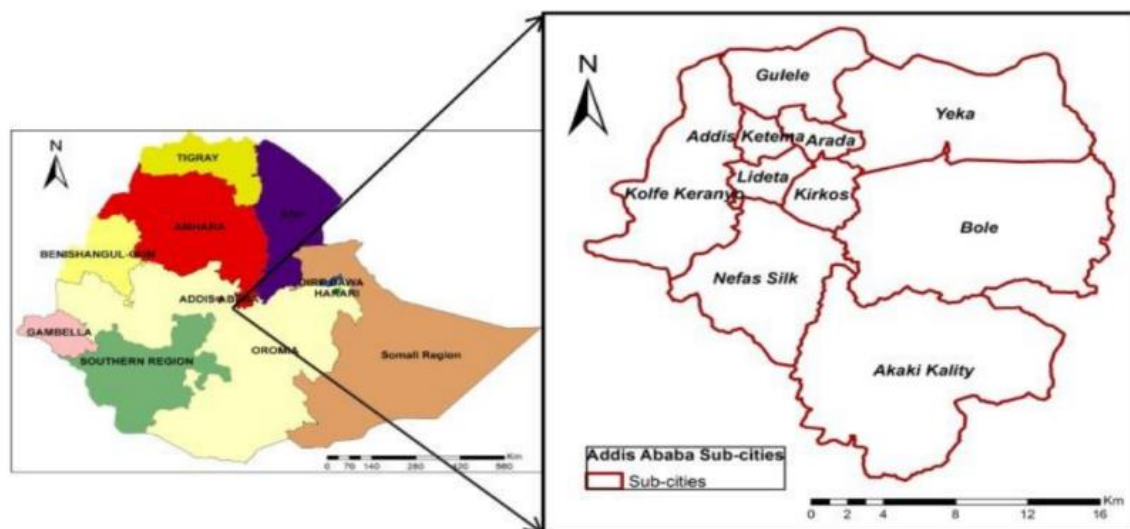


Figure 2 Location map of the study area

(Source, science direct.com, 2025)

### **3.3 Research Design and Approach**

#### **3.3.1 Research Design**

This study adopted a descriptive and explanatory research design to investigate the determinants influencing real estate business performance in Addis Ababa. The research is non-experimental in nature, aiming to identify cause-and-effect relationships among variables without manipulation. It examines the impact of several independent variables such as material prices, access to housing finance, availability of foreign and local currency, land accessibility, and construction time on the overall performance of real estate firms. The explanatory component allows for hypothesis testing to determine the statistical significance of these variables, while the descriptive aspect helps in profiling and summarizing the current trends within the sector.

#### **3.3.2 Research Approach**

The research primarily employed a quantitative approach, which is suitable for analyzing numerical data and conducting statistical assessments of the relationships between variables. This approach facilitates the measurement and quantification of the impact that factors such as material costs, land availability, and financial accessibility have on real estate performance.

##### **3.3.2.1 Quantitative Research Approach**

The quantitative approach was the primary method used in this study. It involves the collection and analysis of numerical data to examine the relationship between macroeconomic and operational factors such as construction material costs, availability of land, access to finance, and exchange rate volatility and the performance of real estate firms in Addis Ababa. Structured questionnaires were distributed to selected participants, and the responses were statistically analyzed using tools such as descriptive statistics, correlation, and regression analysis. This approach enables objective measurement, hypothesis testing, and generalization of findings to the broader real estate sector in the study area.

##### **3.3.2.2 Qualitative Research Approach**

In addition to the quantitative analysis, a qualitative approach was used to gain deeper insights into the lived experiences and expert opinions of stakeholders within the real estate industry. Semi-structured interviews were conducted with key informants, including real estate

developers, government officials, and industry consultants. This approach helped uncover complex issues such as bureaucratic bottlenecks, informal practices, and political influences that may not be captured through quantitative data alone. The qualitative data were analyzed thematically, offering contextual understanding and complementing the numerical findings of the quantitative phase.

### **3.4 Data Type and Sources**

The study has used both primary and secondary data sources; The primary data were collected through the survey of sampled respondents of Real estate companies using questionnaires and questions in a form of structured interviews. Secondary data necessary for the study were collected from literatures in the area, articles and previous studies conducted by different authors.

### **3.5 Population and Sampling**

#### **3.5.1 Target Population**

The target population for this research consists of 1020 employees from selected real estate companies based in Addis Ababa. The companies included in the study are: Hosae Real Estate, Ayat S.c, Sunshine Real Estate, Ovid Real Estate, New Hope Real Estate and Jabo Real Estate.

The selected companies—Hosae Real Estate, Ayat S.C., Sunshine Real Estate, Ovid Real Estate, New Hope Real Estate, and Jabo Real Estate—represent some of the most active and influential players in the Ethiopian real estate industry, particularly in Addis Ababa. They were chosen because of their significant market presence, diverse customer base, and contribution to the growth of the sector. In addition, these firms vary in terms of their years of establishment, which allows the study to capture a broad and balanced perspective on both long-standing practices and emerging trends.

For instance, Ayat Real Estate S.C., established in the late 1990s, is widely recognized as one of the pioneer private developers in Ethiopia, delivering large-scale residential projects and shaping the early growth of the industry. Similarly, Sunshine Real Estate, founded in the early 2000s, has become one of the largest and most reputable developers, with multiple large housing and commercial projects in Addis Ababa. By contrast, companies such as Hosae Real Estate, Ovid

Real Estate, New Hope Real Estate, and Jabo Real Estate are relatively new entrants to the market, established over the past decade. These newer firms bring fresh approaches, competitive business models, and innovative project designs that reflect the evolving dynamics of the sector.

By including both long-serving pioneers and newly established companies, the study is able to compare how experience, market position, and longevity influence firm performance. This combination provides richer insights into the challenges and opportunities facing real estate businesses in Ethiopia today and highlights both historical lessons and emerging industry practices.

### 3.5.2 Justification for Targeting Employees Only

In this study, only employees of the selected real estate companies were targeted as respondents. This decision was based on the nature and objectives of the research, which aims to explore the internal and operational factors affecting the real estate business such as management practices, regulatory challenges, project implementation processes, and strategic decision-making.

Employees, particularly those in management, project planning, and customer relations roles, are better positioned to provide informed insights into these areas. In contrast, while customers can provide valuable feedback on satisfaction and service experience, they typically lack access to the internal dynamics and operational structures that this study seeks to analyze.

Therefore, including only employees rather than both employees and customers was a deliberate and focused methodological choice aligned with the research goals.

Table 2 Target Population

Company Name	Type of Real Estate Development	Head Office Location	Site Locations
Hosae Real Estate	Residential	Bole	Ayat, Bole
Ayate S.c	Residential & Commercial	Wosan	Wosan and Mari
Sunshine Real Estate	Residential & Commercial	Flamingo	CMC,Bole-Beshale and Wosan
Ovid Real Estate	Residential	Gerji	Kazinchis
New Hope Real Estate	Residential	Nifas Silk	Lebu
Jabo Real Estate	Residential	Nifas Silk	Around German Square

(Source: Survey Result, 2025)

Table 3 Sample Size and Techniques

<b>Company Name</b>	<b>Target</b>	<b>Proportion</b>	<b>Sample Size</b>
Hosae Real Estate	175	0.118	21
Ayate S.c	236	0.118	28
Sunshine Real Estate	154	0.118	18
Ovid Real Estate	285	0.118	34
New Hope Real Estate	95	0.118	11
Jabo Real Estate	75	0.118	9
	1020		120

*(Source: Survey Result, 2025)*

### **3.5.3 Sampling Technique**

The study employed a proportionate stratified sampling technique to ensure that employees from all six selected real estate companies in Addis Ababa were fairly represented. Since the target population consisted of 1,020 employees working in firms that differ in size, years of establishment, and organizational structure, simple random sampling alone could have resulted in over-representation of larger firms or under-representation of smaller ones. By dividing the population into strata based on the individual firms and then drawing samples proportionally, the method guaranteed that each company's employees were included in the sample according to their actual share in the total workforce. This approach not only enhanced the representativeness of the data but also improved the accuracy and reliability of the results, as it minimized sampling bias and allowed comparisons across both established and newly emerging companies within the industry.

Each company formed a distinct stratum, and the sample size from each was determined based on its proportion of the total workforce. A total sample size of 120 respondents was drawn, representing approximately 11.8% of the overall population. For example, 34 participants were selected from Ovid Real Estate, which had the highest number of employees, while smaller firms like Jabo Real Estate contributed fewer respondents based on their respective staff sizes. Employees were chosen as the sole respondents, rather than both employees and customers, as this decision aligned with the research objective of analyzing internal operational and strategic factors influencing firm performance. This deliberate and focused methodological choice ensured that the data collected reflected in-depth organizational perspectives critical to understanding the challenges and drivers within the real estate sector.

### 3.5.4 Sample Size

The sample size was determined using Yamane's formula (Yamane, 1967), as follows:

$$n = \frac{N}{1 + N(e)^2} \text{ (Yamane, 1967:886)}$$

Where:

- $n$  = required sample size
- $N$  = total population (estimated 1020 real estate companies in Addis Ababa, per Ethiopian Investment Commission)
- $e$  = margin of error (5%)

$$n = 1020 + 1020(0.085)^2 = 120$$

To strengthen data reliability, the researcher increased the sample size by 120.

For practical implementation, 20 employees were selected from each of the six target companies, resulting in 120 total respondents:

Thus, 120 questionnaires were distributed across the selected real estate companies.

### 3.6 Data Collection Instrument

Survey questionnaires which are self-administered were delivered in person/ via email and telegram to gather the relevant data from each respondent in the selected real estate companies. Additionally, questionnaires in the form of structured interview were also employed to collect additional data.

The research was carried out based on questionnaires distributed to respondents, particularly managers, team leaders, sales persons and other employees in the selected real estate companies. Respondents have answered questions regarding the topic. The questionnaires were delivered by; e-mail, telegram & distributing hard copy for respondents in each selected Real Estate Company.

In this research, a self-completion questionnaire with closed questions was developed. The self-completion questionnaire is much acquainted method of business research, and the research instrument has to be especially easy to follow and its questions have to be particularly easy to answer (Creswell, 2014). In the meantime, whether to ask a question in an open or closed format is one of the most significant considerations for many researchers. The questionnaire with mainly closed and open ended questions was used to collect data from respondents. This study used closed questions as it had some advantages: it is easy to process answers; it enhances the comparability of answers, and makes them easier to show the relationship between variables. It is better than open question for this research. All of the items were measured by using a five-point Likert-type response scales, anchored at 5 strongly agree and 1 strongly disagrees. The questionnaire developed from the study of Azenegash (2019) for business performance in real estate and the study of Cacciolatti, et al., (2020) for factors of Business Performance.

### **3.7 Data Analysis Methods**

The data collected by questionnaire is analyzed quantitatively using excel & SPSS and also employed descriptive analysis method depending on the type of the data collected.

#### **3.7.1 Descriptive Analysis**

Descriptive statistics is used to summarize the data collected from a sample representing a given population. In this study descriptive statistics such as mean, percentage, and frequency have been utilized to analyze & discuss the collected data based on the research question.

#### **3.7.2 Inferential Analysis**

The inferential analysis method is also used to understand the effect of independent variables on the dependent variable and to know to what extent the independent variables affect the dependent variable. In this research paper, the performance determinant factors are considered as an independent variable while the performance is the dependent variable. The dependent variable fulfills the key assumptions of the binary logistic regression model to identify the relationship between performance determinant factors and performance of the real estate firms. Because, the dependent variable performance of real estate firms is binary of success and failure choices, Multinomial logistic regression is not chosen for this study as the interpretation of coefficients,

because my dependent variable has no more than two choices and can't be interpreted by multinomial logistic regression.

Model specification - the statistical regression model of the study was based on the theoretical regression model as indicated follows;

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + e$$

Where:

- Y= Rea; Estate Business Performance
- a= the y intercept.
- $x_1$ = land availability
- $b_1$ = the regression coefficient of X1
- $x_2$ = material availability
- $b_2$ = the regression coefficient of X2
- $x_3$ = foreign currency depreciation
- $b_3$ = the regression coefficient X3
- $x_4$ = construction delays
- $b_4$ = the regression coefficient X4
- e= error term.

### **3.8 Validity and Reliability**

#### **3.8.1 Assessing Validity**

Validity means an instruments ability to measure what is meant to be measured. There are three types of validity in a study: content validity, predictive validity, and construct validity. This study addressed face and content validity through the review of literature and adapting instruments used in previous research. In addition, ten individuals including contractors, marketers, construction engineers, sales experts, students from master degree studies and diaspora customers were participated to validate the questionnaire before data collection were authoritatively administrated.

### 3.8.2 Pilot Test

A pilot test was conducted with ten questionnaires; preliminary draft of the questionnaire was pre-tested to improve upon the clarity of the question items. Sample (10) respondents were given the questionnaire to read and comment on the meaningfulness of the question items and their comment were incorporated.

### 3.8.3 Reliability Test

Reliability is the extent to which a study's operations can be repeated, with the same results and it also involves the accuracy of the chosen research.

**Table 4 Reliability Statistics Test Result**

Variables	Reliability Statistics	
	Cronbach's Alpha	N of Items
Availability of Construction Materials	.868	5
Foreign Exchange & Local Currency Depreciation	.789	5
Construction Period Delay	.771	5
Availability of Land	.863	5
Real Estate Business Performance	.855	5

(Survey Result, 2025)

The overall Cronbach alpha of the scales used in this study was rated as excellent. Consequently, it indicates the reliability of the scales was very high depicting a very strong internal consistency among the measurement items and the selected instrument accurately measures the variables selected. In this regard, values of 0.75 or greater were considered all constructs depicted that the value of Cronbach's alpha are above the suggested value of 0.75 thus it can be concluded that the study was reliable to capture the constructs

### 3.9 Ethical Considerations

It is distinguished that marketing research requires serious ethical considerations. Cognizant of this fact the researcher took precautions while securing the necessary information for the accomplishment of the research objective. The researcher had exerted effort to get the consent of the organization under study prior to the collection of data. Besides, the respondents who were

contributed in the interview had been informed in advance about the objective of the study so as to insure their voluntariness.

## **CHAPTER FOUR**

### **RESULTS AND DISCUSSION**

#### **4.1 Introduction**

This chapter presents results and discussion of the study. It shows how data are presented, analyzed and interpreted and includes a response rate and demographic profile of respondents, the result presentation and analysis of responses on in the survey organization. The data obtained was presented in tables to reflect different response rate amongst the respondents. Analysis of the response rate, general information and independent variables was conducted and the obtained data was subjected to quantitative analysis. Analysis therefore may be categorized as descriptive analysis and inferential analysis which is often known as statistical analysis.

#### **4.2 Response Rate**

As indicated in chapter three, the target population of the study was 120 individual of survey organizations in Addis Ababa. Out of distributed 120 questionnaires, a total of 103 questionnaires were returned which displayed 86 % response rate. Thus, a response rate of 86 % was fit and reliable for the study as shown above table. Consequently, it can be said that the study appeared greatest and well-intentioned reactions with respondents due to busy construction atmosphere and its consequence

#### **4.3 Demographic Profile of Respondents**

The demographic characteristics of the respondents include gender, age, and educational background, service years serving in the surveyed organization.

The demographic characteristics of the 103 respondents offer important insights into the composition of the workforce in the selected real estate companies in Addis Ababa. In terms of age, a majority (50.5%) of respondents are between 36 and 53 years old, indicating that the workforce is predominantly made up of mid-career professionals. Younger employees under the age of 35 accounted for 28.2%, while those over 53 made up 21.4% of the respondents ( See Table 5).

**Table 5 Demographic Profile of Respondents (N=103)**

	Items	Count	Column N %
Age	Below 35	29	28.2%
	36 - 53	52	50.5%
	Above 53	22	21.4%
Gender	"female"	41	39.8%
	"male"	62	60.2%
Education	High school and below	7	6.8%
	Diploma	7	6.8%
	Fisrt Degree	53	51.5%
	Masters and above	36	35.0%
spend on digital world (internet) per day	<1hr	33	32.0%
	1-3	47	45.6%
	3-5	9	8.7%
	5-7	5	4.9%
	7-10	0	0.0%
	> 11	9	8.7%
place of working place	Bole	12	11.7%
	Ras Hotel	33	32.0%
	Hayhuet	18	17.5%
	Other, specify	40	38.8%
Length of continuous service with the real estate firm	Less than five years	19	18.4%
	5-10 years	46	44.7%
	Over 10 years	22	21.4%
	Refused to answer	16	15.5%

(Survey Result, 2025)

Regarding gender, the sample was slightly male-dominated, with 60.2% identifying as male and 39.8% as female. This distribution may reflect broader gender trends within the local real estate sector, where men tend to occupy a larger share of managerial and technical roles.

In terms of educational qualifications, the majority of respondents (51.5%) held a first degree, and a significant portion (35.0%) had attained a master's degree or higher. Only a small percentage had education levels at diploma (6.8%) or high school and below (6.8%), suggesting that the real estate sector is largely staffed by well-educated professionals.

When asked about their daily time spent on the internet, 45.6% of the respondents reported using the internet for 1 to 3 hours per day, while 32.0% used it for less than 1 hour. Only a small percentage reported high levels of internet use, with 8.7% using it more than 11 hours per day. This shows moderate digital engagement among employees, which may influence how real estate companies use technology and online platforms in their operations.

In terms of work location, 32.0% of respondents worked around the Ras Hotel area, 17.5% in Hayahulet, 11.7% in Bole, while 38.8% reported working in other, unspecified locations. This reflects the geographic spread of real estate offices across different parts of Addis Ababa.

Regarding length of service within their respective real estate firms, the largest group (44.7%) had been employed for 5 to 10 years, while 21.4% had more than 10 years of experience. Additionally, 18.4% had less than five years of service, and 15.5% chose not to disclose their tenure. This suggests that many employees have substantial experience in the sector, which adds credibility to their insights provided through the survey.

Overall, the demographic data indicates that the study participants are predominantly experienced, well-educated professionals with moderate internet usage, working in various locations throughout Addis Ababa. This diversity in background enhances the reliability and representativeness of the data collected for analyzing the factors affecting the real estate business in the city.

#### **4.4 Data Analysis Determinants of Real Estate Business**

This response analysis presents respondents' opinion regarding their level of agreement on five dimensions with various questions about real estate factors and business performance. The results were interpreted based on the following measurement scale intervals or range; 4.51-5.00 very excellent, 3.51-4.50 very good, 2.51-3.50 good or average or moderate, 1.51-2.50 fair and 1.00-1.50 poor (Mukorombindo, 2017).

#### 4.4.1 Availability of Construction Materials

Table 6 Availability of Construction Materials (N=103)

Items	"Strongly Disagree"		"Disagree"		"Neutral"		"Agree"		"Strongly Agree"		Mean	Std. Deviation
	N	%	N	%	N	%	N	%	N	%		
Construction material availability determines the pace of real estate development.	1	1.0%	10	9.7%	25	24.3%	30	29.1%	37	35.9%	3.89	1.038
Shortages in construction materials negatively affect project delivery timelines.	5	4.9%	10	9.7%	16	15.5%	41	39.8%	31	30.1%	3.81	1.121
The high cost of materials increases real estate prices.	1	1.0%	17	16.5%	20	19.4%	34	33.0%	31	30.1%	3.75	1.091
Access to reliable material suppliers enhances firm productivity.	1	1.0%	11	10.7%	25	24.3%	34	33.0%	32	31.1%	3.83	1.024
Local availability of materials significantly reduces operational costs.	3	2.9%	4	3.9%	21	20.4%	35	34.0%	40	38.8%	4.02	1.010
Grand Mean 3.86												

(Survey Result, 2025)

The analysis of responses regarding the availability of construction materials indicates that respondents generally perceive material availability as a key factor in the success of real estate development. The grand mean score of 3.86 reflects a generally positive view towards the importance of construction materials in driving productivity and project delivery timelines.

The statement "Construction material availability determines the pace of real estate development" received the highest mean score of 3.89, with 65% of respondents agreeing or strongly agreeing, suggesting that material availability is seen as a critical determinant in the speed of project completion. Similarly, "Shortages in construction materials negatively affect

project delivery timelines" scored a mean of 3.81, reinforcing the view that material shortages can have a significant impact on the timely completion of projects.

The statement "The high cost of materials increases real estate prices" received a mean score of 3.75, indicating that respondents recognize the cost burden of materials and its effect on overall property prices, although some remained neutral on this issue. The perception that "Access to reliable material suppliers enhances firm productivity" scored a mean of 3.83, which shows that reliable suppliers are considered essential for maintaining smooth operations and high productivity in real estate development.

Finally, the statement "Local availability of materials significantly reduces operational costs" received the highest score of 4.02, with nearly 73% of respondents agreeing or strongly agreeing. This highlights the importance of local sourcing in reducing costs and ensuring more efficient operations. Overall, the data suggests that the availability and cost of construction materials are highly influential in the real estate sector, affecting everything from project timelines to final prices.

The findings clearly indicated that the availability of construction materials plays a vital role in the performance of real estate firms in Addis Ababa. The high grand mean score (3.86) suggests that respondents widely acknowledge the critical impact of material availability on project efficiency, cost control, and productivity.

The highest-rated statement, concerning the local availability of materials, implies that when firms can source materials domestically, they experience significant cost reductions, which can translate into more affordable housing and better project margins. Similarly, the strong agreement with the idea that material shortages delay project timelines and drive up property prices highlights the vulnerability of real estate firms to supply chain disruptions and price fluctuations especially in an import-dependent context like Ethiopia. Moreover, access to reliable suppliers is perceived as a strategic advantage, underscoring the need for firms to establish dependable supply networks. These insights imply that improving local production, stabilizing material costs, and enhancing supply reliability could significantly strengthen the sector's sustainability and resilience.

#### 4.4.2 Foreign Exchange & Local Currency Depreciation

Table 7 Foreign Exchange & Local Currency Depreciation (N=103)

Items	"Strongly Disagree"		"Disagree"		"Neutral"		"Agree"		"Strongly Agree"		Mean	Std. Deviation
	N	%	N	%	N	%	N	%	N	%		
Fluctuations in exchange rates increase the cost of imported materials.	6	5.8%	9	8.7%	30	29.1%	33	32.0%	25	24.3%	3.60	1.123
Currency depreciation affects the financial planning of real estate firms.	3	2.9%	9	8.7%	26	25.2%	47	45.6%	18	17.5%	3.66	.966
Real estate developers face difficulties due to limited access to foreign currency.	0	0.0%	6	5.8%	49	47.6%	34	33.0%	14	13.6%	3.54	.802
Currency instability leads to delays in importing construction inputs.	0	0.0%	11	10.7%	28	27.2%	36	35.0%	28	27.2%	3.79	.967
Currency-related inflation reduces affordability for potential buyers.	3	2.9%	12	11.7%	22	21.4%	47	45.6%	19	18.4%	3.65	1.007
Grand Mean 3.65												

(Survey Result, 2025)

The analysis of responses regarding foreign exchange fluctuations and local currency depreciation shows that respondents recognize the significant impact of these economic factors on the real estate sector. The grand mean score of 3.65 reflects a generally moderate agreement with the statements about the challenges posed by currency fluctuations and depreciation.

The statement "Currency instability leads to delays in importing construction inputs" received the highest mean score of 3.79, suggesting that most respondents agree that currency instability is a significant factor causing delays in the importation of necessary materials for construction. This is followed closely by "Currency depreciation affects the financial planning of real estate firms" with a mean score of 3.66, indicating that respondents perceive currency depreciation as a challenge for effective financial planning in the real estate industry.

The item "Fluctuations in exchange rates increase the cost of imported materials" received a mean score of 3.60, showing that exchange rate fluctuations are generally seen as increasing the cost of imported materials, which could add financial pressure on real estate developers. The perception of "Real estate developers face difficulties due to limited access to foreign currency" scored slightly lower at 3.54, indicating that while there is agreement on the difficulty of accessing foreign currency, there is more variability in the perception of its impact.

Finally, the statement "Currency-related inflation reduces affordability for potential buyers" also received a moderate mean score of 3.65, reflecting the general belief that inflation tied to currency depreciation makes real estate less affordable for buyers, further complicating the market dynamics.

Overall, the responses suggest that currency fluctuations and depreciation are perceived as substantial challenges in the real estate business, particularly in terms of cost increases, financial planning, and access to foreign currency for importing construction materials.

The analysis revealed that foreign exchange volatility and local currency depreciation are perceived as significant economic constraints within the real estate sector in Addis Ababa. The grand mean score of 3.65 suggests moderate but consistent concern among respondents regarding the financial and operational impacts of currency instability. The highest-rated item, "Currency instability leads to delays in importing construction inputs" (mean = 3.79), implies that currency fluctuations are a direct threat to timely project execution, especially in a sector reliant on imported materials. Similarly, the perception that currency depreciation disrupts financial planning (mean = 3.66) highlights the planning difficulties firms face when operating in an unstable macroeconomic environment.

Increased costs of imported materials due to exchange rate changes (mean = 3.60) further strain developers, possibly leading to higher property prices. Although the limited access to foreign currency (mean = 3.54) received slightly lower agreement, it still points to access constraints as a barrier to efficient procurement and budgeting. Lastly, the notion that currency-related inflation reduces affordability (mean = 3.65) signals concern over the weakening purchasing power of buyers, potentially reducing demand and limiting market growth. Overall, these findings suggest that mitigating currency risks through improved monetary policy, forex access, or greater reliance

on local inputs could be critical for ensuring stability and affordability in Ethiopia's real estate market.

#### 4.4.3 Construction Period Delay

Table 8 Construction Period Delay (N=103)

Items	"Strongly Disagree"		"Disagree"		"Neutral"		"Agree"		"Strongly Agree"		Mean	Std. Deviation
	N	%	N	%	N	%	N	%	N	%		
Construction delays negatively affect customer trust in real estate firms.	0	0.0%	15	14.6%	26	25.2%	39	37.9%	23	22.3%	3.68	.982
Delays increase total construction costs significantly.	3	2.9%	11	10.7%	26	25.2%	42	40.8%	21	20.4%	3.65	1.017
Schedule slippage reduces firm competitiveness in the market.	7	6.8%	7	6.8%	37	35.9%	25	24.3%	27	26.2%	3.56	1.152
Delays in delivery harm the firm's reputation and future sales.	7	6.8%	10	9.7%	20	19.4%	32	31.1%	34	33.0%	3.74	1.212
Proper project management can reduce the impact of construction delays.	7	6.8%	13	12.6%	26	25.2%	25	24.3%	32	31.1%	3.60	1.239
<b>Grand Mean 3.65</b>												

(Survey Result, 2025)

The analysis of responses regarding construction period delays reveals that delays in construction are perceived as having significant negative impacts on both the operational and reputational aspects of real estate firms. The grand mean score of 3.65 reflects a moderate level of agreement among respondents, indicating that delays in construction are seen as problematic, but they may not be universally viewed as the most critical issue.

The item "Construction delays negatively affect customer trust in real estate firms" received the highest mean score of 3.68, with a majority of respondents agreeing or strongly agreeing. This suggests that respondents believe that delays can harm the trust customers place in real estate

firms, which is crucial for maintaining business relationships. The statement "Delays in delivery harm the firm's reputation and future sales" scored a mean of 3.74, indicating that the reputational damage caused by delays is also seen as a significant concern, with many respondents acknowledging the negative effect on future sales and customer loyalty.

The item "Delays increase total construction costs significantly" had a mean score of 3.65, indicating agreement that delays are costly, but with some variation in how strongly respondents feel about this issue. Similarly, "Schedule slippage reduces firm competitiveness in the market" scored 3.56, showing a more moderate view that while delays affect competitiveness, their impact may not be perceived as severe across all respondents.

The item "Proper project management can reduce the impact of construction delays" had the lowest mean score of 3.60, suggesting that while many respondents believe effective project management can mitigate delays, there is some uncertainty or recognition that other factors may still contribute to delays, regardless of management efforts.

Overall, the findings indicate that construction delays are widely recognized as an issue that affects both customer trust and the financial performance of real estate firms, with proper project management seen as a potential solution, though not a guarantee against delays. The findings suggest that construction delays are perceived as a significant concern for real estate firms, particularly due to their operational, financial, and reputational consequences. The relatively high mean scores, especially for items related to reputational damage (mean = 3.74) and loss of customer trust (mean = 3.68), imply that delays go beyond technical setbacks and directly influence client relationships and future sales. This underscores the importance of delivering projects on time to maintain market credibility and consumer confidence.

While delays are also acknowledged as a driver of increased construction costs (mean = 3.65) and reduced market competitiveness (mean = 3.56), there is some variability in how strongly these effects are perceived. The lower score for project management's effectiveness (mean = 3.60) in addressing delays suggests that while internal planning is essential, respondents may recognize that external factors such as bureaucracy, material shortages, or labor inefficiencies also play a major role.

These insights imply a need for a holistic approach to delay mitigation, combining improved internal project controls with broader systemic reforms. Strengthening supply chain coordination,

enhancing regulatory efficiency, and adopting risk-based project management frameworks could help reduce delays and improve firm resilience in the Ethiopian real estate sector.

#### 4.4.4 Availability of Land

Table 9 Availability of Land (N=103)

Items	"Strongly Disagree"		"Disagree"		"Neutral "		"Agree"		"Strongly Agree"		Mean	Std. Deviation
	N	%	N	%	N	%	N	%	N	%		
Access to land is a major barrier in real estate development.	6	5.8%	4	3.9%	30	29.1%	33	32.0%	30	29.1%	3.75	1.100
Delays in land acquisition prolong the project cycle.	0	0.0%	11	10.7%	19	18.4%	28	27.2%	45	43.7%	4.04	1.028
Land price fluctuations increase project uncertainty.	2	1.9%	7	6.8%	16	15.5%	40	38.8%	38	36.9%	4.02	.990
Bureaucratic processes in land allocation slow down real estate projects.	0	0.0%	14	13.6%	18	17.5%	40	38.8%	31	30.1%	3.85	1.004
Availability of urban land improves investor confidence in real estate.	3	2.9%	9	8.7%	19	18.4%	42	40.8%	30	29.1%	3.84	1.036
Grand Mean 3.90												

(Survey Result, 2025)

The analysis of responses regarding the availability of land reveals that land-related challenges are recognized as significant factors affecting the real estate development process. With a grand mean score of 3.90, it is evident that respondents generally perceive land availability issues as important barriers to successful real estate development.

The statement "Delays in land acquisition prolong the project cycle" received the highest mean score of 4.04, with a substantial portion of respondents agreeing or strongly agreeing. This

suggests that delays in acquiring land are seen as a major factor that extends the overall duration of real estate projects, which can affect timelines and profitability. Similarly, "Land price fluctuations increase project uncertainty" also received a high mean score of 4.02, indicating that fluctuations in land prices are viewed as a source of uncertainty that can complicate financial planning and project feasibility.

The item "Access to land is a major barrier in real estate development" had a mean score of 3.75, which reflects general agreement that land access poses a challenge, but not as strongly as other issues like delays in acquisition or price fluctuations. "Bureaucratic processes in land allocation slow down real estate projects" scored 3.85, suggesting that respondents view bureaucratic inefficiencies as another significant hurdle that impacts project timelines.

Finally, the statement "Availability of urban land improves investor confidence in real estate" had a mean score of 3.84, showing that respondents believe urban land availability plays a key role in boosting investor confidence, which is critical for the attraction of investment in real estate development.

Overall, the responses suggest that land-related issues particularly delays in acquisition, price fluctuations, and bureaucratic processes are perceived as significant obstacles in the real estate development process. However, access to urban land is seen as a positive factor that can help improve investor confidence and reduce uncertainty. The analysis indicates that land availability is perceived as one of the most critical challenges in the real estate development process in Addis Ababa. The high grand mean score of 3.90 reflects widespread agreement among respondents that issues related to land particularly delays in acquisition (mean = 4.04) and price fluctuations (mean = 4.02) pose serious barriers to timely and cost-effective project execution. These delays and uncertainties can significantly disrupt project cycles, complicate financial planning, and reduce profit margins, making real estate ventures riskier and less attractive.

Furthermore, the moderately high mean scores for bureaucratic inefficiencies in land allocation (mean = 3.85) and general access to land (mean = 3.75) reinforce the view that administrative and regulatory bottlenecks continue to slow down development efforts. Interestingly, the item on urban land availability boosting investor confidence (mean = 3.84) highlights a more optimistic perspective suggesting that when land is accessible and predictable, it can serve as a catalyst for attracting both local and foreign investment into the sector.

Overall, these findings imply that addressing land-related challenges particularly by streamlining acquisition processes, stabilizing land prices, and reforming allocation systems could significantly improve the operational environment for real estate firms. Doing so may also enhance market confidence and unlock greater investment potential in urban housing and infrastructure development.

#### 4.4.5 Real Estate Business Performance

Table 10 Real Estate Business Performance (N=103)

Items	"Strongly Disagree"		"Disagree"		"Neutral"		"Agree"		"Strongly Agree"		Mean	Std. Deviation
	N	%	N	%	N	%	N	%	N	%		
The firm has achieved satisfactory growth in revenue from real estate activities.	0	0.0%	10	9.7%	26	25.2%	32	31.1%	35	34.0%	3.89	.989
Customer satisfaction with delivered properties is consistently high.	0	0.0%	0	0.0%	29	28.2%	62	60.2%	12	11.7%	3.83	.612
The firm consistently meets or exceeds its construction project timelines.	0	0.0%	0	0.0%	31	30.1%	59	57.3%	13	12.6%	3.83	.633
The company has increased its market share in recent years.	0	0.0%	1	1.0%	25	24.3%	60	58.3%	17	16.5%	3.90	.664
The firm demonstrates consistent profitability and return on investment.	0	0.0%	1	1.0%	29	28.2%	56	54.4%	17	16.5%	3.86	.687
<b>Grand Mean 3.86</b>												

(Survey Result, 2025)

The analysis of the real estate business performance responses indicates a generally positive view of the performance of the firms, with respondents indicating satisfaction in several key performance areas. The grand mean score of 3.86 suggests that, on average, the respondents believe that real estate businesses have performed well in terms of growth, customer satisfaction, and profitability.

The statement "The firm has achieved satisfactory growth in revenue from real estate activities" received the highest mean score of 3.89, indicating that most respondents agree that their companies have experienced solid revenue growth. This highlights the financial success that the firms have achieved in recent years. Similarly, "The Company has increased its market share in recent years" scored 3.90, suggesting that a majority of respondents perceive their firms as expanding their market presence.

In terms of customer satisfaction, the statement "Customer satisfaction with delivered properties is consistently high" scored 3.83, indicating a positive view of how satisfied customers are with the properties delivered, although there was some variation in responses. Additionally, the item "The firm consistently meets or exceeds its construction project timelines" also scored 3.83, suggesting that the majority of respondents believe that their firms generally meet project timelines, though some might experience delays at times.

Lastly, the statement "The firm demonstrates consistent profitability and return on investment" received a mean score of 3.86, reflecting a general consensus that the firms are profitable and achieving good returns on investments.

Overall, the results indicate that the real estate businesses are performing well in terms of revenue growth, market share, customer satisfaction, and profitability, although there are some variations in responses regarding consistency in meeting timelines and profitability.

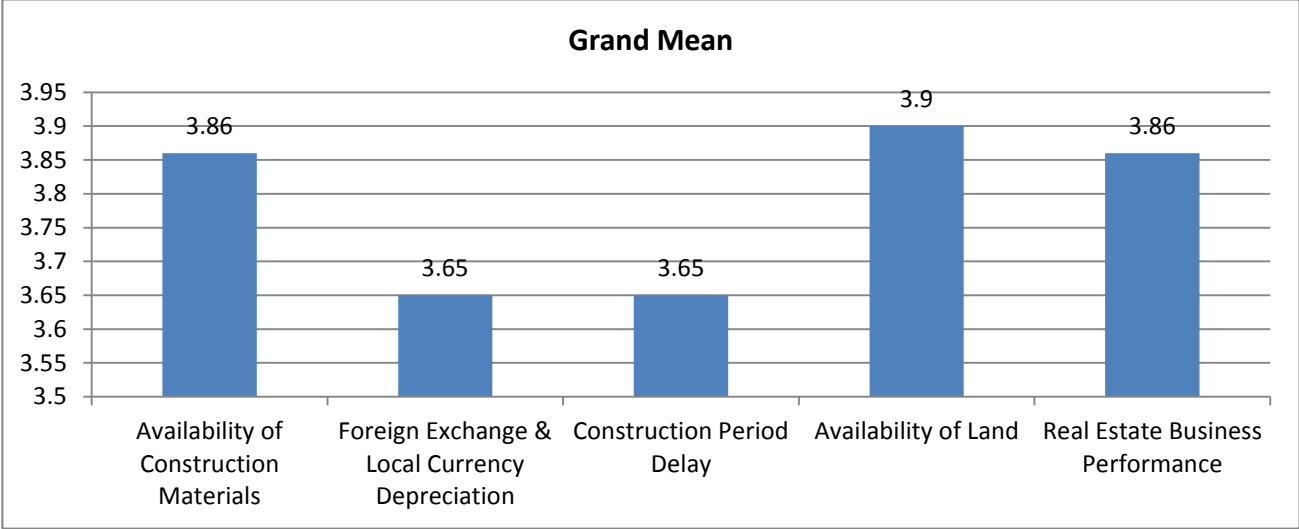


Figure 3 Grand Mean  
(Survey Result, 2025)

The grand mean values reflect the overall consensus of the respondents on various factors affecting the real estate business in Addis Ababa. The availability of land stands out with the highest grand mean score of 3.90, indicating that respondents view land-related factors (like land acquisition delays and price fluctuations) as highly impactful on real estate development. This suggests that access to land plays a critical role in shaping the success and timing of real estate projects.

Following closely, the availability of construction materials and real estate business performance both have grand means of 3.86, suggesting that the respondents view these factors as similarly important. Construction material availability impacts the pace and cost of real estate development, while business performance reflects satisfactory growth in revenue, customer satisfaction, and market share.

Foreign exchange and local currency depreciation, as well as construction period delays, both have grand means of 3.65, indicating these issues are perceived as somewhat impactful but not as strongly as the factors mentioned above. Currency fluctuations and delays in construction projects are acknowledged as challenges but are not viewed as the most critical obstacles compared to land availability or construction materials.

Overall, the results highlight that while various challenges impact the real estate sector, access to land and construction materials are perceived as the most significant factors influencing the pace and success of development, while currency issues and project delays, though notable, have a relatively lower impact.

## **4.5 Inferential Analysis**

This study used two type of inferential analysis namely correlation and multiple regression analysis.

### **4.5.1 Correlation Analysis**

This study used a simple bi-variate relationship analysis between the dependent and independent variables. This study used the rating of relationship between two variables based on Caroline (2017) on the relationship between two variables will be from 0.01 up to 0.09 negligible association, 0.10 up to 0.29 low association, from 0.30 up to 0.49 moderate association, from 0.50 up to 0.69 substantial association from 0.70 and above very strong association. A Pearson's

Product Moment Correlation was conducted to establish the strength of the relationship between the variables. The findings are presented in the below table.

Table 11 Result of Correlation Analysis Pearson Correlation (N=103)

		<b>Correlations</b>				
		Availability of Construction Materials	Foreign Exchange & Local Currency Depreciation	Construction Period Delay	Availability of Land	Real Estate Business Performance
Availability of Construction Materials	Pearson Correlation Sig. (2-tailed) N	1  103	-.257 .009 103	-.232 .018 103	.293 .003 103	.436 .000 103
Foreign Exchange & Local Currency Depreciation	Pearson Correlation Sig. (2-tailed) N	-.257 .009 103	1  103	.280 .004 103	-.362 .000 103	-.441 .000 103
Construction Period Delay	Pearson Correlation Sig. (2-tailed) N	-.232 .018 103	.280 .004 103	1  103	-.351 .000 103	-.434 .000 103
Availability of Land	Pearson Correlation Sig. (2-tailed) N	.293 .003 103	-.362 .000 103	-.351 .000 103	1  103	.514 .000 103
Real Estate Business Performance	Pearson Correlation Sig. (2-tailed) N	.436 .000 103	-.441 .000 103	-.434 .000 103	.514 .000 103	1  103

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

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

(Survey Result, 2025)

The correlational analysis conducted in this study reveals several key findings regarding the factors influencing real estate business performance. First, the availability of construction materials shows a positive and significant correlation of .436 ( $p = .000$ ), indicating that a steady supply of materials plays a crucial role in improving real estate sales performance. When construction materials are readily available, projects are less likely to be delayed, which in turn boosts overall business performance.

On the other hand, foreign exchange and local currency depreciation show a negative correlation of  $-.441$  ( $p = .000$ ), meaning that fluctuations in currency values negatively affect real estate performance. The instability of exchange rates and the depreciation of the local currency can increase the cost of imported materials, leading to higher project costs and potentially slower development, which harms overall business performance.

Similarly, construction period delays also have a negative impact, with a correlation of  $-.434$  ( $p = .000$ ). Delays in construction not only push back project completion but can also damage the reputation of real estate firms, erode customer trust, and increase costs, all of which contribute to reduced sales performance.

In contrast, the availability of land demonstrates a positive and significant correlation of  $.514$  ( $p = .000$ ), meaning that access to land is crucial for successful real estate development. When land is readily available, it boosts investor confidence and helps maintain the momentum of development projects, leading to improved business performance.

Overall, these findings suggest that while factors like the availability of construction materials and land have a positive effect on real estate performance, issues such as foreign exchange fluctuations and construction delays present significant challenges that negatively impact sales and profitability.

## **4.5.2 Multiple Regression Analysis**

Multiple regression is a flexible method of data analysis that may be appropriate whenever a quantitative variable (the dependent or criterion variable) is to be examined in relationship to any other factors (expressed as independent or predictor variables). Relationships may be nonlinear, independent variables may be quantitative or qualitative, and one can examine the effects of a single variable or multiple variables with or without the effects of other variables taken into account (Caroline, 2017).

### **4.5.2.1 Assumptions and Diagnostic Test**

Attempts have been conducted to test normality, Multicollinearity, autocorrelation and test for average value of the error term are found in appendices part; next to the data collection instrument in this study. The assumption test was done based on theoretical and empirical multiple regression concepts of Caroline (2017) and results found on Appendix next to data

collection method. The test results show that the normality, Multicollinearity, autocorrelation and test for average value of the error term were met the assumptions of regression analysis. It includes the data was normally distributed with no Multicollinearity and autocorrelation problems.

### Normality Test

This study used the descriptive statistic of Kurtosis and Skewness statics calculation and demonstrates that the distribution is normal because Kurtosis and Skewness are in between -2 and +2, thus data is normally distributed and had a reasonable variance to use subsequent analysis.

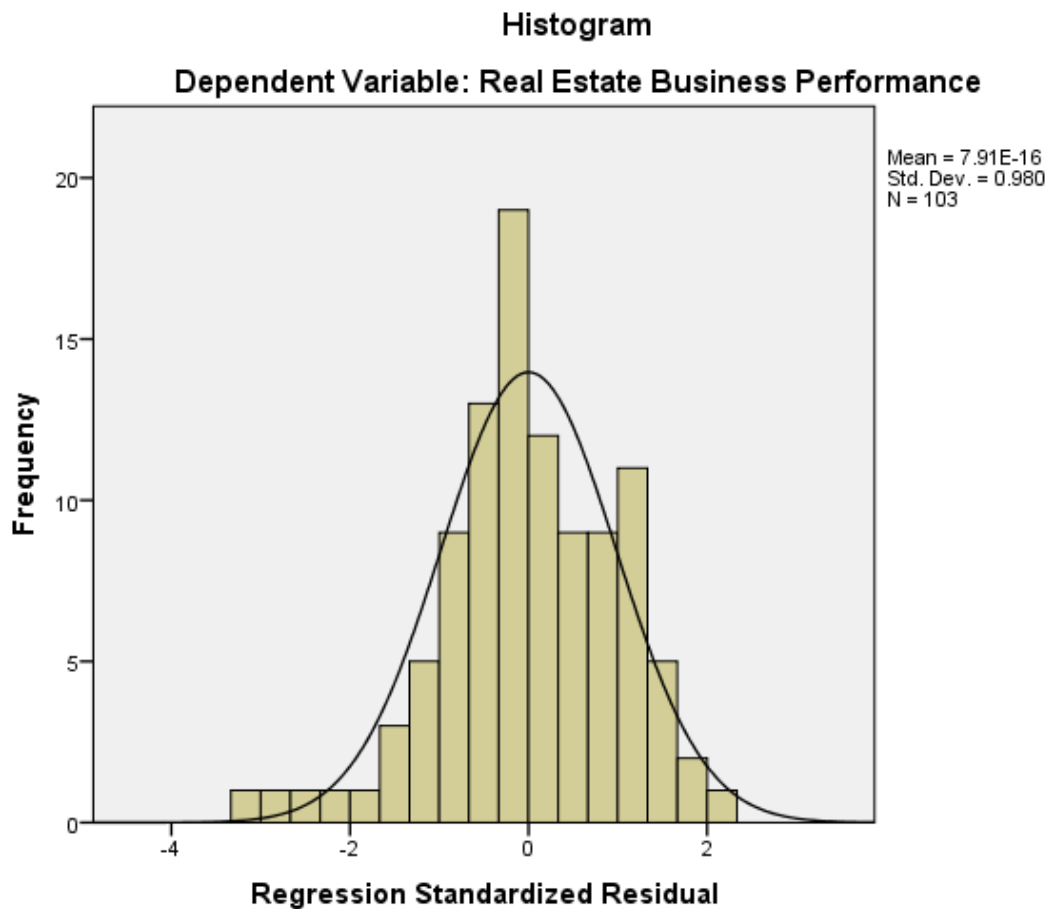


Figure 4 *Normality*  
(Survey Result, 2025)

### Test for Multicollinearity

Multicollinearity refers to a situation in which there is exact (or nearly exact) linear relation among two or more of the input variables. Practical experience indicates that if any of the VIF results exceed 5 or 10, it is an indication that the associated regression coefficients are poorly estimated because of Multicollinearity.

Table 12 Multicollinearity

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Availability of Construction Materials	.875	1.142
	Foreign Exchange & Local Currency Depreciation	.824	1.214
	Construction Period Delay	.838	1.193
	Availability of Land	.774	1.291

(Survey Result, 2025)

This study found no collinearity on the observed (no strong multi collinearity and degree of association between variables) using Multicollinearity test (Collinearity Statistics- VIF). It shows that the VIF value of four factors was found less than 5 or 10. It can be concluded that.

### Test for Autocorrelation

If the observations have a natural sequence in time or space, the lack of independence is called autocorrelation.

Table 13 Test for Autocorrelation

Model	Durbin-Watson
1	1.588

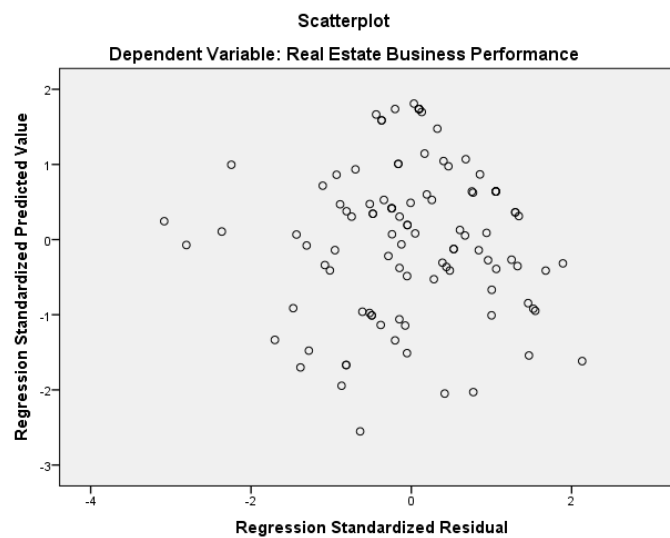
(Survey Result, 2025)

Assumption that is made of the multiple linear regressions disturbance terms is that the covariance between the error terms over time (or cross-sectional, for that type of data) is zero. To

test the presence of autocorrelation, the popular Durbin-Watson Test was employed in this study (Caroline, 2017). The Durbin-Watson statistic is 1.588, representing that the residuals are uncorrelated; therefore, the independence assumption is met for this analysis.

### **Homoscedasticity Assumption**

It refer to homogeneity of variances that is, all of the treatment groups have the same variance. The homoscedasticity assumption can be tested through the visual examination of the same residual plots of the standardized residuals and predicted values depicted in the assumption of linearity (Caroline, 2017).



**Figure 5 Homoscedasticity**

(Survey Result, 2025)

When the homoscedasticity assumption has been met, the residuals will present as being randomly scattered around the horizontal line depicting  $r_i=0$ . The study found the test result of a residual plot demonstrating a relative equal clustering of residuals along the horizontal line in a rectangular shape, therefore, the homoscedasticity assumption seems to have been met.

### **Error Term**

Test for average value of the error term is zero ( $E(u_t) = 0$ ); the first assumption required is that the average value of the errors is zero. Therefore, since the constant term (i.e.  $\alpha$ ) was included in the regression equation, the average value of the error term in this study is expected to be zero.

#### 4.5.2.2 Multiple Regression Test Results

Table 14 Regression Test Results Model Summary (N= 103)

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.666 <sup>a</sup>	.443	.420	.669

a. Predictors: (Constant), Availability of Land, Availability of Construction Materials, Construction Period Delay, Foreign Exchange & Local Currency Depreciation

b. Dependent Variable: Real Estate Business Performance

(Survey Result, 2025)

The above table portrays the result of multiple regression test and its measurement is made by inferring the value of  $R^2$  to explain the magnitude of the effect of the independent variable on the dependent variable. Here below illustrated are the linear regression of six independent variables and dependent variable. As exposed in the above table, the overall bundle of determinant factors of the four independent variables were 44.3 % ( $R^2 = .443$ ) explained the dependent variable. This suggests that 44.3 % of real estate business performance in the real estate market clearly depends on the independent variables while the remaining (100-44.3) 55.7 % is determined by other unaccounted factors in this study.

Table 15 Regression Test Results ANOVA (N=103)

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	34.890	4	8.722	19.486	.000 <sup>b</sup>
	Residual	43.867	98	.448		
	Total	78.757	102			

a. Dependent Variable: Real Estate Business Performance

b. Predictors: (Constant), Availability of Land, Availability of Construction Materials, Construction Period Delay, Foreign Exchange & Local Currency Depreciation

(Survey Result, 2025)

As the second table shows the result  $F= 19.486$ , it can be concluded that the combination of determinant factor have significant effect on real estate sales performance which is statistically significant. Thus, this study rejects the null hypothesis.

Table 16 Regression Test Results ANOVA (N= 103)

		Coefficients <sup>a</sup>				
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.960	.470		6.296	.000
	Availability of Construction Materials	.212	.069	.246	3.057	.003
	Foreign Exchange & Local Currency Depreciation	-.186	.073	-.212	-2.558	.012
	Construction Period Delay	-.156	.060	-.216	-2.621	.010
	Availability of Land	.261	.077	.289	3.372	.001

a. Dependent Variable: Real Estate Business Performance

(Survey Result, 2025)

In the multiple regression analysis, the study examined the impact of several factors on real estate business performance. The coefficients table reveals the relationship between independent variables such as availability of construction materials, foreign exchange & local currency depreciation, construction period delay, and availability of land, with real estate business performance as the dependent variable.

This study found that availability of Construction Materials has a positive unstandardized coefficient of .212, which indicates that for every 1-unit increase in the availability of construction materials, there is a .212 unit increase in real estate business performance. This is significant at the 0.003 level. Availability of Construction Materials has a standardized beta of .246, which suggests that it has a relatively strong positive effect on real estate performance when compared to the other factors.

Foreign Exchange & Local Currency Depreciation has a negative unstandardized coefficient of -.186, implying that a 1-unit increase in foreign exchange depreciation is associated with a -.186 unit decrease in business performance. This is statistically significant at 0.012. Foreign Exchange & Local Currency Depreciation has a standardized beta of -.212, showing that it has a significant negative impact, though weaker than the availability of construction materials.

This study found that construction Period Delay also has a negative coefficient of -.156, indicating that delays in construction periods reduce real estate business performance. The relationship is significant at 0.010. Construction Period Delay shows a standardized beta of -.216, indicating a moderate negative effect on performance.

Availability of Land has a positive coefficient of .261, meaning that greater availability of land positively influences real estate business performance, with statistical significance at 0.001. Availability of Land has the highest standardized beta at .289, demonstrating that it has the strongest positive effect on real estate performance among all the factors.

### **Statistical Significance**

All of the predictors (availability of construction materials, foreign exchange & local currency depreciation, construction period delay, and availability of land) are statistically significant at the 0.01 level (with p-values less than 0.05), meaning that they all contribute meaningfully to the prediction of real estate business performance.

### **Regression Equation:**

The regression equation based on the unstandardized coefficients is

$$Y = 2.960 + 0.212X_1 - 0.186X_2 - 0.156X_3 + 0.261X_4 + e$$

$$\begin{aligned} \text{Real Estate Business Performance} = & 2.960 + 0.212 \text{ Availability of Construction Materials} - 0.186 \\ & \text{Foreign Exchange \& Local Currency Depreciation} - 0.156 \text{ Construction Period Delay} + 0.261 \\ & \text{Availability of Land} + e \end{aligned}$$

The analysis suggests that the availability of construction materials and land positively impact real estate business performance, while foreign exchange & local currency depreciation and construction delays have negative effects. These findings align with prior research, indicating

that stable material supply, efficient land acquisition, and stable currency conditions are crucial for successful real estate business outcomes.

## **4.6 Discussion**

### **Availability of Construction Materials**

This study found a positive and significant correlation between the availability of construction materials and real estate business performance, with a Pearson correlation coefficient of 0.436 (Sig. = 0.000). This means that as the availability of construction materials increases, the performance of real estate businesses tends to improve, likely because steady access to materials ensures timely project completion and cost-efficiency. Further, the regression analysis revealed an unstandardized coefficient (B) of 0.212, with a standardized coefficient (Beta) of 0.246, indicating that for every unit increase in the availability of construction materials, the real estate business performance improves by 0.212 units. The regression result was significant, with a t-value of 3.057 and Sig. = 0.003, confirming that the availability of materials positively impacts business outcomes. These findings are consistent with those of Tsegaye Gebrehiweta and Hanbin Luo (2017), who observed that material availability significantly influences the construction phase and impacts project timelines and delivery in a similar way. Asim et al. (2017) also noted that the availability of construction materials directly affects project efficiency, aligning with the positive effect identified in this study.

### **Foreign Exchange & Local Currency Depreciation**

This study found a negative and significant correlation between foreign exchange & local currency depreciation and real estate business performance, with a Pearson correlation coefficient of -0.441 (Sig. = 0.000). This suggests that when the local currency depreciates or there are fluctuations in foreign exchange rates, real estate business performance tends to decline. This is likely due to the increased cost of imported materials and financial instability, which affects project budgeting and overall profitability. The regression analysis further supported this finding with an unstandardized coefficient (B) of -0.186 and a standardized coefficient (Beta) of -0.212, indicating that for every unit increase in foreign exchange fluctuations or currency depreciation, real estate business performance decreases by 0.186 units. The result was statistically significant, with a t-value of -2.558 and Sig. = 0.012, reinforcing the

negative impact of currency instability. This aligns with the findings of Sultan K. and Dr. Danish A. S. (2019), who highlighted that currency depreciation negatively affects the financial performance of real estate investment trusts (REITs). Similarly, Egert and Mihaljek (2007) demonstrated that currency depreciation has an adverse effect on real estate markets in Central and Eastern Europe, suggesting that currency fluctuations increase construction costs and reduce profitability, a view echoed in this study.

### **Construction Period Delay**

This study found a negative and significant correlation between construction period delay and real estate business performance, with a Pearson correlation coefficient of -0.434 (Sig. = 0.000). This indicates that delays in construction timelines lead to a decrease in business performance, likely due to increased costs, customer dissatisfaction, and reputational damage. The regression analysis revealed an unstandardized coefficient (B) of -0.156 and a standardized coefficient (Beta) of -0.216, suggesting that each unit increase in construction delays results in a 0.156 unit decrease in business performance. With a t-value of -2.621 and Sig. = 0.010, the regression confirmed that construction delays have a significant detrimental effect on performance. This result is consistent with Tsegaye Gebrehiweta and Hanbin Luo (2017), who also observed that delays in construction adversely affect project success. Asim et al. (2017) similarly reported that project delays due to inefficiencies in construction negatively impacted overall business outcomes, supporting the negative relationship identified in this study.

### **Availability of Land**

This study found a positive and significant correlation between the availability of land and real estate business performance, with a Pearson correlation coefficient of 0.514 (Sig. = 0.000). This means that as the availability of land increases, the performance of real estate firms improves, likely due to the opportunity to undertake more projects, attract more investors, and meet market demand. The regression analysis showed an unstandardized coefficient (B) of 0.261 and a standardized coefficient (Beta) of 0.289, indicating that for every unit increase in land availability, business performance improves by 0.261 units. The result was significant with a t-value of 3.372 and Sig. = 0.001, confirming that land availability positively impacts business performance. These findings align with Natsvaladze (2014), who found that land availability is a

critical factor in real estate development success. Similarly, Kiros Aqubamichael (2009) highlighted that access to land in developing countries significantly impacts the ability to meet the growing demand for real estate, which resonates with the results of this study.

Table 17 Correlation and Regression Summary

<b>Independent Variable</b>	<b>Correlation (r)</b>	<b>B</b>	<b>Beta (Standardized)</b>	<b>Sig.</b>	<b>Hypothesis Decision</b>
Availability of Construction Materials	0.436	0.212	0.246	0.003	Accepted
Foreign Exchange & Currency Depreciation	-0.441	-0.186	-0.212	0.012	Accepted
Construction Period Delay	-0.434	-0.156	-0.216	0.010	Accepted
Availability of Land	0.514	0.261	0.289	0.001	Accepted

(Survey Result, 2025)

In summary, the study found that factors such as availability of construction materials, foreign exchange & local currency depreciation, construction period delay, and availability of land significantly affect real estate business performance, with positive and negative correlations as discussed. The regression analysis further supported these findings, providing statistical evidence of the impact each variable has on performance. These results align with various previous studies, but also highlight unique aspects such as the direct negative impact of currency depreciation and construction delays, and the critical importance of land availability in fostering real estate development success.

# CHAPTER FIVE

## CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Introduction

This chapter presented the discussion of key data findings, conclusion drawn from the findings highlighted and recommendation made there-to. The conclusions and recommendations drawn were focused on addressing the objective of the study.

### 5.2 Conclusions

This study found that the availability of construction materials had a moderate and statistically significant positive correlation with real estate business performance ( $r = 0.436$ ,  $p < 0.01$ ). Furthermore, the regression analysis revealed that availability of construction materials positively and significantly influenced real estate performance with a coefficient ( $B = 0.212$ ,  $\beta = 0.246$ ,  $t = 3.057$ ,  $p = 0.003$ ), suggesting that as material availability improves, business performance increases.

In terms of foreign exchange and local currency depreciation, the results showed a statistically significant negative correlation with real estate performance ( $r = -0.441$ ,  $p < 0.01$ ). The regression analysis confirmed this relationship, where depreciation negatively and significantly affected performance ( $B = -0.186$ ,  $\beta = -0.212$ ,  $t = -2.558$ ,  $p = 0.012$ ), indicating that currency instability weakens business outcomes.

Regarding construction period delay, the correlation analysis showed a significant negative relationship with business performance ( $r = -0.434$ ,  $p < 0.01$ ). The regression results also confirmed that delays had a statistically significant negative effect ( $B = -0.156$ ,  $\beta = -0.216$ ,  $t = -2.621$ ,  $p = 0.010$ ), suggesting that the more delays occur, the lower the real estate firm's performance.

Lastly, the availability of land had the strongest positive correlation with business performance among all variables ( $r = 0.514$ ,  $p < 0.01$ ). Regression analysis reinforced this relationship, showing a positive and significant effect on performance ( $B = 0.261$ ,  $\beta = 0.289$ ,  $t = 3.372$ ,  $p = 0.001$ ), indicating that improved access to land leads to better business outcomes.

This study concludes that availability of construction materials is a crucial factor that significantly enhances the performance of real estate businesses in Addis Ababa. It also concludes that foreign exchange challenges and local currency depreciation negatively impact the ability of real estate firms to perform well.

Additionally, the study confirms that delays in construction periods significantly harm real estate business performance by reducing trust, increasing costs, and affecting market competitiveness. Finally, the availability of land was found to be the most influential factor, strongly supporting the growth and operational success of real estate firms.

### **5.3 Recommendations**

1. Real estate firms in Addis Ababa should prioritize strengthening local material supply chains to reduce reliance on imported construction inputs, which are often subject to delays and price fluctuations. This can be achieved through long-term procurement planning, partnerships with local manufacturers, and diversification of suppliers. Additionally, the government should support the sector by incentivizing local production and improving infrastructure to reduce logistical barriers.
2. . Real estate firms should actively implement currency risk management strategies, such as hedging or forward contracts, and seek alternative financing options including foreign investment partnerships or local currency-based contracts to reduce exposure to forex volatility. Given the challenges posed by foreign exchange shortages and currency depreciation, it is essential for policymakers to ensure better macroeconomic stability and provide prioritized access to foreign currency for essential construction materials
3. Construction period delays are shown to reduce firm performance and customer trust. To mitigate this, firms should adopt modern project management tools, enhance their internal technical capacity, and establish realistic scheduling and budgeting plans. It is also important to improve contractual clarity with all project stakeholders and enforce accountability, especially among contractors and subcontractors. Training in risk management and planning should be prioritized for project managers and site supervisors.
4. Land scarcity and acquisition delays remain key barriers to real estate growth. Government agencies should streamline and digitize land allocation systems to reduce bureaucratic delays and increase transparency. Real estate firms are encouraged to engage

in public-private partnerships to unlock serviced land for development. Establishing clear and consistent land pricing policies will also reduce uncertainty and speculative practices, encouraging more sustained investment in the sector.

## **5.4 Future Research Directions**

Future studies should examine the role of digital technologies, such as Building Information Modelling (BIM) and property tech (proptech), in improving real estate performance and mitigating risk. Comparative studies between public and private real estate projects could also help uncover structural or managerial differences influencing outcomes. To better understand how these specific factors contribute in improving this performance, further research is needed to explore the remaining 55.7% of factors that influence real estate performance and contribute to mitigating risk. Finally, longitudinal research could provide a deeper understanding of how macroeconomic variables like inflation and currency depreciation impact the sector over time.

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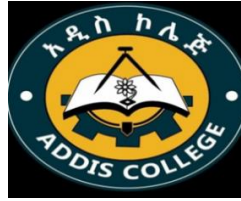
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## ANNEX

## Appendix I Questionnaire



**ADDIS COLLEGE**

**SCHOOL OF GRADUATE STUDIES**

**DEPARTMENT OF CONSTRUCTION TECHNOLOGY AND MANAGEMENT**

**POSTGRADUATE PROGRAM**

Dear Respondent, I am, a student of Addis College, School of Graduate Studies, Department of Construction Technology and Management, Postgraduate Program. I am conducting a research on *”Determinant Factors Affecting Real Estate Business in Addis Ababa”*. This questionnaire aims to collect data for partial fulfilment of the requirements for the award of Master Degree of construction technology and management. Therefore, the researcher declares that, this research is for academic purpose only.

You are kindly invited to complete this questionnaire as directed for a purpose of facilitating the study. Information from this document will be confidential and in no way will it be communicated to any person.

Thank you in advance.

Sincerely yours,

Berhanu Abebe

Email: jimiy 755@gmail.com

## **A. BACKGROUND INFORMATION**



CM3	The high cost of materials increases real estate prices.					
CM4	Access to reliable material suppliers enhances firm productivity.					
CM5	Local availability of materials significantly reduces operational costs.					
	<b>Foreign Exchange &amp; Local Currency Depreciation</b>					
FX1	Fluctuations in exchange rates increase the cost of imported materials.					
FX2	Currency depreciation affects the financial planning of real estate firms.					
FX3	Real estate developers face difficulties due to limited access to foreign currency.					
FX4	Currency instability leads to delays in importing construction inputs.					
FX5	Currency-related inflation reduces affordability for potential buyers.					
	<b>Construction Period Delay</b>					
CD1	Construction delays negatively affect customer trust in real estate firms.					
CD2	Delays increase total construction costs significantly.					
CD3	Schedule slippage reduces firm competitiveness in the market.					
CD4	Delays in delivery harm the firm's reputation and future sales.					
CD5	Proper project management can reduce the impact of construction delays.					
	<b>Availability of Land</b>					
LA1	Access to land is a major barrier in real estate development.					
LA2	Delays in land acquisition prolong the project cycle.					
LA3	Land price fluctuations increase project uncertainty.					
LA4	Bureaucratic processes in land allocation slow down real estate projects.					
LA5	Availability of urban land improves investor confidence in real estate.					
	<b>Real Estate Business Performance</b>					
RP1	The firm has achieved satisfactory growth in revenue from real estate activities.					
RP2	Customer satisfaction with delivered properties is consistently high.					

RP3	The firm consistently meets or exceeds its construction project timelines.					
RP4	The company has increased its market share in recent years.					
RP5	The firm demonstrates consistent profitability and return on investment.					

**Thank You!**