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**ASSESSING ECONOMIC VALUE OF THE EMERGING TREND OF
CONSTRUCTING HIGH-RISE HEADQUARTERS BY ETHIOPIAN BANKS**

M.A. Thesis By
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Assessing Economic Value of the Emerging Trend of Constructing High-rise Headquarters by Ethiopian Banks

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Acronyms

AACPO	Addis Ababa City Planning Office
ACH	Automated Clearing House
BCR	Benefit-Cost Ratio
CAR	Capital Adequacy Ratio
CBA	Cost Benefit Analysis
CBE	Commercial Bank of Ethiopia
CBD	Central Business District
CDs	Certificate of Deposit
CEO	Chief Executive Officer
CFI	Corporate Finance Institute
DB	Design Build
DBE	Development Bank of Ethiopia
E.C.	Ethiopian Calendar
ESS	Ethiopian Statistical Service
ETB	Ethiopian Birr
EVA	Economic Value Added
G.C.	Gregorian Calendar
GDP	Gross Domestic Product
HQ	Headquarter
HQs	Headquarters
IRAs	Individual Retirement Accounts
IRR	Internal Rate of Return
LCR	Liquidity Coverage Ratio
LDR	Loan to Deposit Ratio
MFIS	Microfinance Institutions
NBE	National Bank of Ethiopia
NIM	Net Interest Margin
NOPAT	Net Operating Profit After Tax
NPL	Non-Performing Loan

NPR	Net Profit Ratio
NPV	Net Present Value
PV	Present Value
RE	Real estate
ROA	Return on Assets
ROE	Return on Equity
ROI	Return on Investment
Sq. m.	Square Meter
SWOT	Strength Weakness Opportunity Threat
TEV	Total Economic Value
USD	United States Dollar
WACC	Weighted Average Cost of Capital
WTA	Willingness to Accept
WTP	Willingness to Pay

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Abstract

Ethiopian banks are increasingly shaping Addis Ababa's skyline through the construction of high-rise headquarters. This thesis examines the economic value of constructing high-rise headquarters by Ethiopian banks focusing on three areas: the contribution of bank headquarters to the local economy, the efficiency and cost-effectiveness of such investments, and their comparison with other commercial high-rises in the city. Using a mixed-method approach that combines surveys, interviews, and cost-benefit analysis, the study finds that these investments generate notable economic benefits for the local economy. They create jobs during construction and operation, stimulate local procurement, increase tax contributions, and enhance the city's real estate market. Beyond their financial impact, they also strengthen banks' visibility, prestige, and customer trust. According to the findings of the study, the efficiency and cost-effectiveness of high-rise bank headquarters investment appear to be generally satisfactory. However, the research also uncovers risks that these investments may not always yield the most efficient returns compared to other investments. When compared with other commercial developments, bank headquarters stand out as symbols of institutional strength, as drivers of urban transformation, and as more valuable in the market. Overall, the study suggests that while these projects carry real economic and symbolic value, banks must balance their desire for landmark buildings with strategies that ensure long-term financial sustainability and broader economic contribution.

Key words: Ethiopian banks, Headquarter, High-rise building, Economic value, Central Business District

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Banks play a central role in every economy as financial intermediaries that connect savers and borrowers. They mobilize deposits, provide credit, and facilitate payments, thereby supporting investment, business growth, and national development. Beyond their financial services, banks have increasingly become major actors in urban transformation through their investments in corporate buildings and headquarters development (Barone, 2023; Dinesh, 2018; Selgin, 2025).

Across the world, the construction of high-rise headquarters has become a symbol of modernization, economic power, and institutional confidence. These buildings are not only centers of management and coordination but also expressions of brand identity and prestige (Hayes, 2022; Kunisch et al., 2020). Headquarter buildings often serve dual purposes, functional efficiency and symbolic representation embodying the institution's strength, stability, and long-term vision (Al-Kodmany, 2022; Weber, 2002).

High-rise buildings, in general, are tall, multi-story structures designed to maximize limited urban land through vertical development. They typically rely on elevators for vertical circulation and surpass the height that firefighting equipment can reach (Dupré, 2001; John R. Hall, 2013). Such buildings are often preferred for commercial and corporate purposes because they integrate multiple uses, support sustainable land use, and contribute to higher urban density (Intergovernmental Panel on Climate Change, 2012; Chen, 2023).

Economic value refers to the worth assigned to goods, services, or assets based on the benefits they provide or the willingness to pay for them. From an economic standpoint, constructing high-rise headquarters can generate substantial value for both institutions and the local economy (Banton, 2023a; Mathur, 2022). For banks and investors, these buildings bring diverse benefits: they optimize the use of scarce land, reduce long-term rental costs, attract skilled talent, and enhance corporate visibility and reputation. Moreover, high-rise headquarters often stimulate surrounding real estate markets and commercial activities, reflecting the broader multiplier effects of construction on urban economies (Jeffrey A Kenoff et al., 2007; Rechkemmer, 2023; Al-Kodmany, 2022).

Driven by many economic and social factors, high-rise building construction in Addis Ababa has been growing. High-rise buildings are seen as a solution to accommodate the growing population within limited land space, particularly in the city center, where there is a very high demand for residential and commercial space due to rapid urbanization and demographic expansions (Endale, 2020; Mosie, 2022). In the development of high-rise buildings and skyscrapers in Addis Ababa, the role of Ethiopian banks is exceptional. Besides constructing their own HQs, they are providing necessary financing for numerous real estate developments. Among Ethiopian banks, CBE is a prime example, constructing a 209.5-meter-tall skyscraper (Graetz et al., 2016; Mosie, 2022).

Despite this impressive growth, there remains limited empirical understanding of the actual economic and financial value generated by these investments. While bank headquarters visibly contribute to city image and institutional branding, it is less clear whether they deliver proportionate returns or cost-effective performance. As Flyvbjerg (2014) cautions through his concept of the megaproject paradox, large-scale iconic projects often bring prestige and political visibility but may fall short in terms of efficiency and measurable economic benefit.

Assessing the true value of these investments therefore requires considering both their tangible and intangible impacts, including job creation, tax contribution, urban development, and real estate market stimulation, alongside financial feasibility indicators such as net present value (NPV), benefit–cost ratio (BCR), payback period, and return on investment (ROI) (Gangwar, 2023).

1.2 Statement of the Problem

Ethiopian banking sector has grown rapidly since the entry of private banks in 1994, reaching 31 local banks in 2024 and becoming one of the fastest growing sectors in terms of assets (NBE, 2023b; NBE, 2024). The total asset of a bank, which represents the sum of its loans, investments, and other holdings, is one of the key indicators of the strength of a country's banking sector. The size, quality, composition, and growth of a bank's assets provide a more comprehensive view of the strength of the banking sector and indicate the bank's capacity to support economic activities and absorb financial shocks (Sundararajan et al., 2002).

The competition within the country's banking industry is getting stiffer, despite the fact that Ethiopia's private banking sector is still young. In recent years, the construction of high-rise bank headquarters has become one of the most visible features of Addis Ababa's urban transformation. These landmark projects are often presented as a symbol of institutional strength, modernity, and national progress. Due to the skyrocketing cost of rent in major cities, as a result of interbank competition and the pursuit of corporate prestige as well as its opportunity for leasing spare office space and generate revenue banks are scrambling to construct their own high-rise headquarters. Currently, some private banks in the country, alongside the state-owned CBE, have completed constructing their own high-rise headquarters; some of them are on the verge of completing their headquarters, while others are under construction and in a rush to acquire their headquarters, which are either high-rises or skyscrapers ranging from 20 stories up to more than 60 stories (Tadesse, 2016). However, despite their prominence, there is limited empirical evidence on whether such investments generate proportional economic and financial value for both the banks and the local economy.

Hence, most banks in the country, including some of those that have recently grown from regional microfinance institutions to banks, are planning to construct their own high-rise headquarters, and some of them are already undergoing the construction. While banks justify these projects as strategic investments that reduce rental costs, centralize operations, and enhance corporate image, the enormous capital required raises questions about their cost-effectiveness and long-term return. At the same time, the potential economic spillovers such as job creation, tax revenue, real estate stimulation, and knowledge transfer remain largely un-quantified. As Flyvbjerg (2014) notes in the megaproject paradox, large-scale developments often promise transformative benefits but may fail to achieve them in practice.

There have been some existing studies in Ethiopia conducted on and around banks that had constructed high-rise headquarters in the city. Among them, the study on assessing the challenges of project management practices in building construction: In the case of the commercial bank of Ethiopia head office project, the study revealed changing requirements late in the project, continuing change requests, project schedule delays, inaccurate time estimations, and cash flow difficulties were the most concerning among many challenging factors identified in the study (Zewdu, 2021). A study on green building concepts and technologies in Ethiopia: In

the case of Wegagen bank headquarters building, the study revealed that some sustainable materials had been utilized for constructing this high-rise headquarters building. But the study illustrates that, besides numerous pulling factors in the country's construction industry, there has to be done a lot more regarding green building concepts and technologies (Gelan, 2023). There was also another study, an assessment of project implementation practices of the commercial bank headquarter construction project, which addressed the project integration management, project time and scheduling, as well as the project planning processes of the CBE headquarters construction (Shewafera, 2019). Based on the previously conducted studies, we can understand that there is a gap observed in addressing the economic advantages and disadvantages of these banks' actions over headquarters construction. There is also a gap in addressing the efficiency and cost-effectiveness of high-rise headquarters investment by Ethiopian banks. This gap leaves uncertainty about whether the current trend of constructing bank headquarters is a sound economic choice or a prestige-driven phenomenon with limited tangible return.

Therefore, this study seeks to address this gap by assessing the economic value of the emerging trend of constructing high-rise bank headquarters in Ethiopia. It examines whether these investments truly contribute to the local economy through job creation, tax revenue, and real estate market stimulation; evaluates their efficiency and cost-effectiveness using cost-benefit and financial performance measures; and compares their market performance with other commercial high-rise developments in Addis Ababa. The findings will provide insights into whether this construction trend represents a sound strategic investment or a prestige-driven expansion with uncertain returns.

1.3 Objectives

1.3.1 General Objective

The general objective of the study is assessing the economic value of the emerging trend of Ethiopian banks' high-rise headquarters construction alongside comparing these valuation outputs with other commercial high-rise developments.

1.3.2 Specific Objectives

- ☒ Assessing the economic value of high-rise headquarters constructed by Ethiopian banks to the local economy.
- ☒ Evaluate the efficiency and cost-effectiveness of the high-rise headquarter investments.

- ❏ Evaluate the high-rise headquarters construction trend of Ethiopian banks in comparison with other high-rise commercial developments.

1.4. Research Question

- ❏ What is the economic value of constructing high-rise headquarters by Ethiopian banks for the local economy?
- ❏ How efficient and cost-effective are the high-rise headquarters investments made by Ethiopian banks?
- ❏ How does the construction trend of high-rise bank headquarters compare with other commercial high-rise developments in Addis Ababa?

1.5. Scope of the Study

This study tries to assess the economic value of the emerging trend of constructing high-rise headquarters by Ethiopian banks. As explained before, the banking industry in the country is growing rapidly; in regard to that, the number of banks is increasing as well. In recent years some of these banks have been constructing their own headquarters, which are high-rise buildings. So spatially, this study is conducted on the Addis Ababa city's central business district (CBD), Sengatera area, where these financial institutions are constructing their headquarters. The study specifically focused on assessing the economic value of banks that have constructed and completed their own high-rise headquarters in the study area since 2024.

1.6. Significance of the Study

This study offers valuable evidence for decision-makers in the banking sector. By examining the economic contributions and financial performance of these investments, the findings can guide bank executives and boards in making more informed choices about large-scale real estate projects. Understanding whether these headquarters truly enhance operational efficiency, reduce long-term costs, and generate measurable returns will help ensure that future investments are based on sound financial and strategic reasoning rather than competition or prestige alone.

The study also carries important value for policymakers, urban planners, and real estate developers. For policymakers, especially those in financial and urban development institutions, the findings provide evidence that can help shape policies balancing economic growth with financial prudence. Urban planners can use the insights to better understand how large

institutional buildings influence city form, land use, and infrastructure demand. Likewise, real estate developers can gain a clearer view of how bank headquarters projects affect property values, rental dynamics, and market confidence.

From an academic standpoint, this research contributes to the limited body of literature on the economic assessment of corporate high-rise investments in Ethiopia. Generally, the study is expected to enrich the understanding of whether Ethiopia's ongoing headquarters construction boom represents a sustainable and economically justified development or a prestige-driven trend with uncertain long-term benefits.

1.7. Research Limitations

This study encountered several limitations that influenced the depth and scope of the findings. One of the main challenges was the limited willingness of some participants to provide detailed information during data collection. Although six banks were selected as the study sample, a few institutions were unable or unwilling to participate due to temporary internal constraints. Access to senior decision-makers and project managers involved in the headquarters construction was also limited, which restricted the collection of in-depth insights about planning and post-construction evaluation of these projects.

Similarly, collecting financial data, especially those related to indirect benefits such as improved institutional image, employee productivity, or customer trust proved difficult because such indicators are rarely recorded in conventional financial systems. Business owners located near the study sites were also hesitant to provide information, partly due to concerns about government regulations or misunderstandings about the purpose of data collection.

The other limitation of the study was the lack of academic research that has an attachment and similarities in scope with this study. Regarding the lack of sufficient research similar to this study, accessing secondary data was challenging. This made it challenging to compare findings or establish a strong empirical benchmark. Despite these challenges, the study provides credible and valuable insights into the economic implications of high-rise bank headquarters construction.

1.8. Definition of Key Terms

High-Rise Building: A high-rise building is a tall, multi-story structure that extends beyond the reach of standard firefighting equipment and depends on elevators for vertical circulation

(Dupré, 2001; John R. Hall, 2013). In this study, it refers to the tall office and mixed-use buildings, especially those high-rise headquarters constructed by Ethiopian banks in Addis Ababa.

Bank Headquarters (HQ): A bank headquarters, or corporate head office, is the main building where top management and key administrative functions of a bank are housed (Hayes, 2022; Kunisch et al., 2020). In this study, it refers to the newly built or ongoing high-rise headquarters projects developed by Ethiopian banks mainly to escape rising rental costs, centralize operations, and strengthen their brand image and institutional prestige.

Commercial Building: Commercial buildings are structures designed and constructed to facilitate business activities such as offices, retail spaces, and service centers (Intergovernmental Panel on Climate Change, 2012; Chen, 2023). In this research, they represent the non-bank high-rise developments in Addis Ababa used as a basis for comparing rental prices and market values, through the hedonic price model.

Economic Value: Economic value refers to the worth placed on a good, service, or asset based on the benefits it provides to individuals or society (Banton, 2023a; Mathur, 2022). In this study, it captures both the visible and indirect contributions of high-rise bank headquarters, including employment creation, tax generation, stimulation of nearby businesses, and improvements in urban image and real estate activity.

Efficiency: Efficiency is the ability to use available resources in the best possible way to achieve desired results (Damodaran, 2012). Here, it refers to how well banks manage their financial and physical resources in the process of constructing and operating their high-rise headquarters.

Cost-Effectiveness: Cost-effectiveness means achieving intended goals at the lowest possible cost or with the most efficient use of resources (Gittinger, 1982). In this research, it relates to whether the benefits gained from constructing high-rise headquarters, such as lower rent, improved performance, and enhanced image are proportional to the costs incurred.

Benefit–Cost Ratio (BCR): BCR compares the total expected benefits of a project with its total expected costs (Boardman et al., 2018; EPA, 2024). In this study, it helps to determine whether

the financial and economic returns of constructing high-rise bank headquarters justify the scale of investment.

Net Present Value (NPV): NPV represents the difference between the present value of a project's cash inflows and its outflows over time (Boardman et al., 2018; Dai et al., 2022). It is used in this study to show whether the long-term financial benefits of high-rise headquarters construction exceed the initial capital outlay.

Payback Period: The payback period measures how long it takes for an investment to recover its initial cost through net income or cash inflows (Cooper et al., 2019; Luthra et al., 2015). In this study, it indicates how quickly a bank can regain the cost of constructing its headquarters.

Return on Investment (ROI): ROI is a simple ratio that shows how much profit an investment generates compared to its cost (Damodaran, 2002; Phillips & Phillips, 2019). For this study, ROI helps to evaluate how profitable high-rise headquarters projects are for the investing banks.

Hedonic Price Model: The hedonic price model is a statistical method used to determine how individual characteristics of a property, like size, location, or purpose affect its price (Malpezzi, 2002; Rosen, 1974). In this research, it is applied to compare the market and rental values of bank headquarters with other high-rise commercial buildings in Addis Ababa.

Local Economy: The local economy refers to the system of businesses, jobs, and economic activities within a specific geographic area (McCann, 2013; Porter, 2010). In this context, it describes the urban economy of Addis Ababa and how it is influenced by the construction and operation of high-rise bank headquarters.

Megaproject Paradox: The megaproject paradox describes how large-scale projects often promise major benefits and prestige but frequently face cost overruns, delays, and uncertain returns (Flyvbjerg, 2014). This idea helps frame the study's analysis of whether Ethiopia's high-rise bank headquarters deliver real economic value or serve mainly symbolic and competitive purposes.

Employment Density: Employment density refers to the concentration of jobs within a defined geographic area or building floor space. In urban economics, it is commonly expressed as the number of employees per unit area (Ahlfeldt & Pietrostefani, 2019; McCann, 2013).

1.9. Organization of the Research

This thesis is organized into five chapters. Chapter one is an introduction which provides the background and context of the study, states the research problem, outlines the objectives and research questions, and presents the significance, scope, and limitations of the research. It also sets out the theoretical and conceptual framework that underpins the study.

Chapter two is review of related literature that discusses the theoretical foundations and empirical studies relevant to the economic value of high-rise bank headquarters. It highlights gaps in the literature and situates the research within broader debates on urban economics, corporate real estate, and megaprojects.

Chapter three is the research methodology explaining the research design, approach, and methods employed. It describes the data sources, sampling strategies, tools of data collection, and analytical techniques, including cost–benefit analysis and hedonic price modeling. Issues of validity, reliability, and ethical considerations are also addressed.

Chapter four is the results and discussion section where the findings of the study in relation to the three objectives are presented. It discusses the economic value of bank headquarters to the local economy, evaluates their efficiency and cost-effectiveness through cost–benefit analysis, and compares them with other commercial high-rises using hedonic pricing models. Quantitative results are complemented by qualitative insights from interviews.

Chapter five is summary of findings, conclusion, and recommendations that summarizes the major findings, draws conclusions in light of the objectives and literature review, and offers recommendations for banks, policymakers, urban planners, and researchers.

CHAPTER TWO: LITERATURE REVIEW

2.1 Bank: definition, classification and the Ethiopian context

A bank is a financial institution that provides services such as individual retirement accounts (IRAs), certificates of deposit (CDs), currency exchange, and safe deposit boxes besides its legal entity to accept checking and savings deposits and make loans. Banks allocate funds for those (both people and companies) with a deficit of funds (borrowers) by collecting surplus funds from savers (Barone, 2023; Casu et al., 2006).

Similar to other financial institutions, banks play a crucial role in the economy by facilitating monetary transactions, mobilizing savings, providing loans and investment, and managing financial risk. Banks foster economic growth and financial stability by acting as intermediaries between savers and borrowers, mobilizing savings, and channeling them into productive investments (Aggarwal, 2024; Heffernan, 2005).

As we can understand from the above interpretations, banks are institutions dealing with monetary-related services, such as savings, loans, money transactions, securities, investment banking, and other financial services. With an intermediary role between savers and borrowers or depositors and loans, this enables them to allocate resources efficiently. Net interest income and fee and commission income are sources of income for a bank. There are various types of banks on the basis of their function in the financial sector.

2.1.1 Types of Banks

Central Banks: independent institutions authorized by a government that are entrusted with the functions of guiding and regulating the banking system of a country, implementing the government's monetary policy, controlling the flow of currency, managing the money supply, and setting interest rates (Barone, 2023; Dixon, 2023).

Commercial Banks: tend to concentrate on supporting either individuals and businesses or both retail and corporate customers. Commercial banks offer services like savings and checking accounts, loans, credit cards, commercial real estate services, and trade finance. Public sector banks, private sector banks, and foreign banks are sorts of commercial bank (Barone, 2023; Casu et al., 2006; Dixon, 2023).

Investment Banks: Banks mainly deal with companies and other large institutions and focus on services such as underwriting securities issues, facilitating mergers and acquisitions, providing investment advisory service, managing investment portfolios, or raising money for certain businesses and the federal government. Large corporations, other financial institutions, pension funds, governments, and hedge funds are their clients (Barone, 2023; Casu et al., 2006; Dixon, 2023).

Retail Banks: are those banks usually small-scale in nature that provide financial services to the general public, including savings and checking accounts, mortgages, and personal loans. Their services can be acquired from other large banks of different types (Barone, 2023; Casu et al., 2006).

Cooperative Banks: can be either retail banks or commercial banks, which are typically local or community-based associations owned by their members, offering similar services as commercial banks but focusing on serving their members' needs (Casu et al., 2006; Dixon, 2023).

2.1.2 Banking sector in Ethiopia

The Ethiopian banking sector is composed of NBE, which is the central bank owned by the state and regulates all other banks in the country, including DBE, which is also another state-owned bank providing loans to investors operating in priority sectors (NBE, 2024; Worku, 2023). Currently, there are over 100 financial service institutions, including 31 commercial banks, 18 insurance companies, and 48 microfinance institutions alongside 6 payment service companies, 6 capital goods leasing companies, and 7 wallet service providers in the country's financial sector (Hailemairam, 2024; NBE, 2023b). With the goal of attracting foreign capital to improve the country's competitiveness and contribute to its economic growth, the Ethiopian government is aiming to introduce a suite of reforms that will open the sector to foreign banking institutions (Kassu, 2022). Besides managing other banks in the country, administering the nation's monetary policy, providing its bank notes and coins, acting as a banker for the government, supervising financial institutions, managing the exchange rate as well as foreign exchange reserves, and undertaking economic researches are a set of responsibilities that has been entrusted to NBE (NBE, 2024).

Historical development of Ethiopian banking sector

In 1905, by concession between British representatives of the National Bank of Egypt, the Bank of Abyssinia was formed as the first modern banking institution in Ethiopia by the regime of Emperor Menelik II. It was under the management of the National Bank of Egypt since its formal establishment on 16th February 1906 (NBE, n.d.; Schaefer, 1992). The Bank of Abyssinia was purchased by the Ethiopian government in 1931 regarding the reforms introduced to the banking sector by the regime of Emperor Haile Selassie and renamed as The Bank of Ethiopia - the first nationally owned bank on the African continent. Central and commercial banking services were provided by the Bank of Ethiopia at the time (NBE).

The Italian banks were particularly active, and the banking activity had been expanded during the five years of Italian invasion (1936-1941). Barclays Bank was established and remained in business in Ethiopia between 1941 and 1943 after the liberation, where the role of Britain was paramount owing to its strategic planning during the Second World War. The State Bank of Ethiopia combined central banking and commercial banking operations like its predecessor and became the Central Bank of Ethiopia on April 15, 1943. The State Bank of Ethiopia had established 19 domestic branches, a transit office in Djibouti, and a branch in Khartoum by the time it ceased operation in 1963 (NBE).

A new banking law allowing the banking sector to split into the National Bank of Ethiopia and the Commercial Bank of Ethiopia was introduced in 1963. The law included other commercial banks to operate; including foreign banks that are 51% owned by Ethiopians. Addis Ababa Bank, 40% owned by British-owned Grindlays Bank, had 26 branches by 1975 and was one of the biggest of those banks at the time. The Banco di Roma and the Banco di Napoli, which had eight branches and one branch, respectively in 1975, were also other commercial banks then (NBE).

During the Derg regime, Monetary and Banking Proclamation No. 99 of 1976 went into effect, defining the National Bank's duty in accordance with the country's socialist economic principles on September 1, 1976. The Bank's supervisory and regulatory role expanded to insurance institutions, credit cooperatives, and investment banks, besides actively participating in national planning. In addition to that, the Ethiopian birr replaced the Ethiopian dollar as legal tender (NBE).

Many financial institutions were recognized to operate largely on a market-oriented policy framework following the regime change in 1991 and the liberalization policy that began in 1992. The National Bank of Ethiopia was established as a judicial entity separate from the government in the Monetary and Proclamation No. 83 of 1994, and its roles, functions, and expected duties were defined under the proclamation (NBE).

After Proclamation No. 591 of 2008 went into effect the National Bank of Ethiopia underwent a major restructuring, and its regulatory and supervisory role was strengthened. New financial products and innovations that helped accelerate access to finance and financial inclusion, like those of mobile banking, internet banking, and digital finance, were introduced. The financial intermediation got boosted as a number of new banks and MFIs joined the financial industry. Allowing the banking sector for foreign investment is one of the decisions that the government forwarded recently to liberalize the financial sector (NBE).

According to the recent data from the National Bank of Ethiopia, there are about 31 local banks operating in the country currently. The number of branches in the country increased by 130% in the last five years and reached 11, 28. As of the last financial year, there are about 130 million accounts (Leul, 2025; Endale, 2023).

2.2 Commercial building: concepts, typologies and the Ethiopian context

Commercial buildings are structures designed carefully with consideration of location, design, layout, amenities, accessibility, and safety and constructed for commercial or business purposes such as office buildings, retail stores, hotels, warehouses, and other commercial activities (Riley et al., 2014; Baum et al., 2020; Chudley & Greeno, 2006; RES, 2023).

Commercial buildings are integral to the urban landscape, supporting a wide range of economic activities and providing essential services to businesses and the public. Contribute to economic growth by providing functional spaces for various commercial activities, facilitating the movement of goods and services, and supporting trade and commerce, and they help to create vibrant urban centers, attract investment, and contribute to the overall development of cities (Riley et al., 2014).

Based upon the above definitions, real estate properties or building structures used for business operation and activities are constituted as commercial buildings. They have a significant role in boosting economic growth, enhancing business operations, facilitating trade and commerce, and supporting urbanization. There are different types of commercial buildings based on their intended function.

2.2.1 Types of Commercial Buildings

Office Buildings: Common types of commercial buildings provide space for office operations. They range from single-story to skyscraper. Individual offices, meeting rooms, common areas, and amenities such as lifts and parking facilities can be found under this type of building (Baum et al., 2020; Riley et al., 2014).

Retail Stores: These are designed for selling goods directly to consumers. Standalone stores, strip malls, large shopping malls, food courts, and entertainment facilities are included under retail buildings (Baum et al., 2020; Riley et al., 2014).

Hotels: are commercial buildings designed to provide temporary accommodation, lodging, dining, and other related services to travelers. Hotels can vary widely in size and luxury levels, from budget accommodations to five-star resorts (Baum et al., 2020; Riley et al., 2014).

Industrial Buildings: are actually a broad range of buildings, including manufacturing facilities, workshop facilities, and even certain types of warehouses (Baum et al., 2020; Riley et al., 2014).

Mixed-Use Buildings: These buildings incorporate both residential and commercial spaces. Restaurants, retailers, offices, health care facilities, shopping, and even residential rentals are found under one roof in mixed-use buildings (Baum et al., 2020; Riley et al., 2014).

2.2.2 Commercial buildings in Ethiopia

Due to population growth, urbanization, increased investment in infrastructure projects, and various other factors, the construction market in Ethiopia is growing rapidly. The market

encompasses different sectors playing a vital role in shaping Ethiopia's urban landscape, meeting the growing demand for housing, offices, and public amenities. Commercial building is one of the sectors in the market with a crucial role in the country's construction market (Andrew, 2023; GlobalData, 2023).

Significant growth driven by the expansion of industries and the rise of foreign investment is experienced in Ethiopia's construction sector. There is a surge in the construction of commercial complexes, office spaces, and retail centers in Addis Ababa as a result of the capital becoming a hub for commercial activities, attracting multinational corporations and businesses. Nowadays, commercial buildings in Ethiopia are characterized by modern high-rises, shopping malls, and business complexes (Andrew, 2023; GlobalData, 2023).

Mirroring the country's economic progress and urbanization, Ethiopia's commercial buildings have transformed from modest structures to modern high-rises and business complexes. Contemporary architecture, sustainability efforts, and technological advancements reflect the current landscape in the country while highlighting the nation's development trajectory and aspirations for the future (Graetz et al., 2016; Soressa et al., 2018).

Low-rise structures with limited facilities and simple architecture, and businesses operating in traditional markets and small shops were the main features of pre-1990s commercial buildings in Addis Ababa. The rise in the construction of more sophisticated commercial buildings, including office complexes, and retail centers followed after the 1990s due to the economic liberalization policies, which led to increased private sector participation. After the 2000s, foreign investments have driven the development of modern commercial buildings, featuring advanced architectural designs and amenities, besides the rapid urbanization (Graetz et al., 2016; Soressa et al., 2018).

2.2.3 Impact of commercial property developments in Addis Ababa

Economic Growth and Employment: under the country's GDP, which shows a fluctuation in the last five years (2018-2023) of 9.0, 6.1, 6.3, 6.4, and 7.2, respectively, the construction industry takes the major share by covering an average of 20.84% in the last five years from the total GDP of the country (NBE, 2023). Approximately 29% of the national GDP and 20% of urban employment is contributed by Addis Ababa (Central Statistical Agency, 2020). The

service sector, like that of trade and repair services, dominates Addis Ababa's employment landscape. Commercial property developments play a great role by enhancing employment and stimulating economic activity in the city through attracting businesses. Nearly 10% of the urban workforce is employed under the construction sector, which indicates the substantial role of commercial property developments in providing employment opportunities (Zardo et al., 2017).

Urban Development and Infrastructure: Constructions of high-rise office buildings, shopping centers, and mixed-use developments have transformed the cityscape, leading to extensive urban renewal and modernization efforts. These projects enhance the overall urban environment by improving infrastructure, including roads, utilities, and public services, beyond providing modern business spaces (Zardo et al., 2017).

Real Estate Market Dynamics: Because of the influx of multinational companies and investors seeking to capitalize on the city's strategic location and economic potential, the commercial real estate market in Addis Ababa has shown robust growth with high demand for office and retail spaces, besides driving up property values. As a result, by making real estate a lucrative investment, rental yields for prime commercial properties have remained attractive (Gyourko & Molloy, 2015; Yirgalem, 2018; Zardo et al., 2017).

Socio-Economic Impacts: Commercial property developments provide opportunities for businesses and improve living standards through enhanced amenities and services; in addition to that, they can contribute to gentrification and displacement of lower-income residents, particularly in central areas undergoing redevelopment (Yirgalem, 2018; Zardo et al., 2017).

2.3 The concepts and functions of corporate headquarters

A place where a company's executive management, including the CEO and other managerial and support staffs, is located, which may be a single building or campus of buildings in a centralized office location, is referred to as a corporate headquarters. It serves as the focal point for leadership, strategic planning, and decision-making processes (Hayes, 2022; Kunisch et al., 2020; Koloski, 2020).

The headquarters is a symbol of the company's identity and stature, often visited by clients, investors, and stakeholders, and typically situated in major cities or financial hubs to facilitate

business operations and networking. They are designed to reflect the organization's brand and values, combining functionality with aesthetic appeal (Hayes, 2022; Koloski, 2020).

Studies on the role of headquarters buildings in signaling stability and growth suggest that the construction and maintenance of prominent headquarters can serve as powerful symbols of corporate stability, success, and long-term commitment. These buildings often reflect the financial health and ambitions of an organization, thereby instilling confidence among stakeholders, including investors, customers, and employees (Koloski, 2020).

Based on the above interpretations, a corporate headquarters is the main building or the center office of an organization where human resources management, corporate communications, legal, and accounting teams, as well as its main support teams and staffs, are situated, and key managerial and administrative activities are conducted. This makes it a focal point for leadership, strategic planning, and decision-making processes, housing executives and key personnel. On the other hand, besides serving as powerful symbols of corporate stability, success, and long-term commitment, corporate headquarters are a symbol of the company's identity and stature.

2.4 High-rise building definition and standards

A high-rise building is a building that differentiates from conventional low-rise and mid-rise buildings due to its need for a special engineering system, with a small footprint, small roof area, and very tall facade (Scott, 1998). Those buildings are opposed to a low-rise building in terms of height and can be varied based on their intended use, like hotels, retail, residential buildings, office buildings, and multi-purpose buildings (Kovačević & Džidić, 2018). A structure with a minimum of 12 floors or a building whose architectural height is between 35 and 100 meters (Emporis, 2019). Building structures that have more than twelve floors and above, or buildings of unknown height from 12 to 39 floors or 35 to 100m tall buildings, are referred to as high-rise buildings, and they are considered skyscrapers when they reach 40 to 50 stories or higher (Major, 2023). A high-rise building is a structure with more than 75 feet (22,680 mm) in height (NFPA, 2009).

The 2017 to 2027 structural plan classifies building height regulation zones of Addis Ababa into four hierarchical and other special zones (historical sites and aviation zones) based on building height, Floor Area Ratio (FAR) and location (AACPPO, 2017).

Table 1: Zone and building height regulation provision of the 2017 to 2027 AACPPO structural plan

Zone	FAR			Building Height (meter)	
	min	max		min	max
1	10	Free		70	Free
2	5	Free	≥CS		70
	5	5	LS		35
3	2	Free	≥CS		35
	2	5	LS		
4	0.5	Free	≥CS		35
	0.5	3.5	LS		
HZ	0.5				21
Green		0.05			6

Source: AACPPO (2017)

As we can see from the above interpretation and definitions, a high-rise building has been defined differently based on its height and number of stories. Undoubtedly, most analyst companies in the construction sector, building engineers, inspectors, architects, and similar professionals define a high-rise building as a building structure that is at least 114 feet (35 meters) tall above the ground level and has a minimum number of twelve stories. In Addis Ababa, the 2017 to 2027 structural plan classifies high-rise buildings into four hierarchical and other special zones. Considering this fact, this study will use building height zones 1 and 2, which is more than 35 meters, as stated in the international standards, too.

2.5 The concept and dimensions of Economic Value in high-rise bank headquarters development

The monetary worth of an asset, business entity, good's sold, services rendered, liability, or obligation acquired in accounting terms, and the sum of all the benefits and rights arising from ownership in economic terms is referred to as value. The monetary, material, assessed worth of an asset, goods, or service is termed as value. On the other hand, it's often used to determine the worth of an asset, a company, and its financial performance in finance. It can be tangible, like the monetary worth of a product, or intangible like, the ethical principles guiding behavior;

generally, it is a complex and multifaceted concept that plays a vital role in various aspects of life (Kenton, 2022; Murray, 2022).

Economic value is subjective and difficult to measure; it is estimated based on a person's willingness to pay for the good, and it is the value that a person places on an economic good based on the benefit that they derive from the good (Banton, 2023; Mathur, 2022). Economic value is an essential concept influencing decision-making, resource allocation, and market dynamics in economics, which is a measure of the benefit derived from a good or service to an individual or a company (Griffiths & Lucas, 2016).

2.5.1 Components of Economic Value

Economic value can be broken down into several key components that capture the different dimensions of value derived from goods and services. These components include consumer surplus, producer surplus, and total economic value, which itself comprises use value and non-use value (Field et al., 2017; Mankiw, 2018).

(a) Consumer Surplus

This is the difference between what consumers are willing to pay for a good or service and what they actually pay. It represents the extra satisfaction or utility consumers get from paying less than their maximum willingness to pay.

(b) Producer Surplus

This is the difference between what producers are willing to accept for a good or service and what they actually receive. It reflects the additional benefit producers get by selling at a market price higher than their minimum acceptable price.

(c) Total Economic Value (TEV)

TEV includes both use value (direct use, indirect use) and non-use value (option value, existence value, bequest value). Use value refers to the tangible benefits derived from using a good or service, while non-use value refers to the intangible benefits, such as the value of knowing that a resource exists even if one never uses it.

Use Value: represents the benefits derived from the actual use of a resource, good, or service. These can be categorized into direct use value (which refers to the benefits derived from direct consumption of goods and services) and indirect use value (which refers to the benefits derived from the ecosystem and infrastructure services that enhance direct use).

Non-use Value: represents the value that people assign to a resource, good, or service without intending to use it. These can be categorized into option value (reflects the potential future benefits that might arise from the resource's continued existence), existence value (refers to a value derived from knowing that a particular resource or species exists), and bequest value (refers to a value that people place on ensuring that resources are available for future generations).

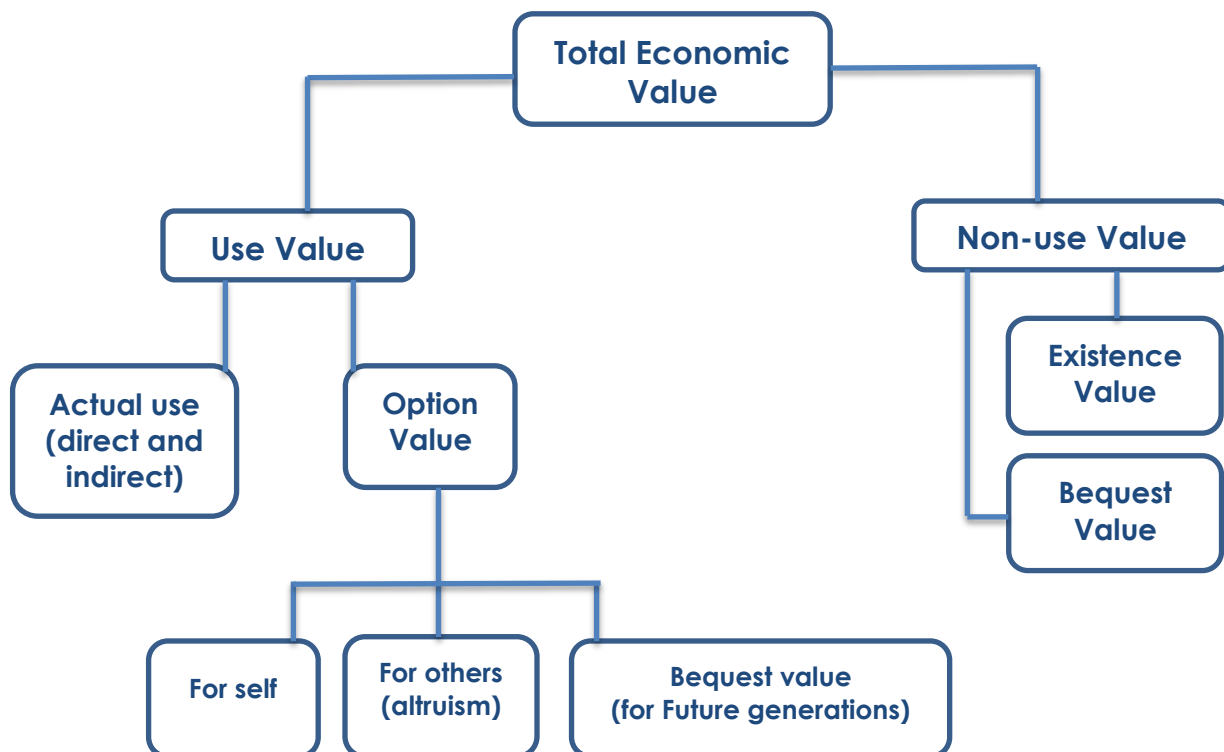


Figure 1: Components of total economic value

Source: Adapted from Field et al. (2017) and Mankiw (2018)

2.5.2 Measuring Economic Value

Measuring economic value involves quantifying the benefits and costs of goods, services, and resources to determine their worth within an economy. This process is critical for policymaking, business decisions, and assessing overall economic health. Economic value can be measured

using various methods such as market price, cost-benefit analysis, net present value, and other valuation techniques (Mankiw, 2018; Samuelson & Nordhaus, 2009).

Market Price: They reflect the value that consumers are willing to pay and producers are willing to accept for goods and services in competitive markets. Market prices are determined through the interaction of supply and demand in a competitive market.

Cost-Benefit Analysis (CBA): is a method used to evaluate the economic worth of a project or decision by comparing the total expected costs against the total expected benefits. It includes both direct and indirect costs and benefits, often incorporating intangible factors through techniques like contingent valuation or revealed preferences.

Net Present Value (NPV): is used in investment appraisal to calculate the present value of a series of future cash flows generated by a project, discounted back to the present using a discount rate. It helps determine whether an investment will yield a net positive return.

Willingness to Pay (WTP) and Willingness to Accept (WTA): WTP is the maximum amount a consumer is willing to pay for a good or service, reflecting its perceived value. Conversely, WTA is the minimum amount a person is willing to accept to give up a good or service.

Hedonic Pricing: is used to estimate economic value by analyzing how product characteristics affect prices. Conducted through identifying attributes of the good or service that influence price and using statistical models to estimate the value of each attribute.

Contingent Valuation: This is a survey-based method that assesses economic value by asking people how much they would be willing to pay for specific goods or services, especially non-market goods like clean air or endangered species.

2.5.3 Factors demonstrating economic value of high-rise buildings

Through their significant contribution to job creation, urbanization, and real estate market growth, alongside the increment in the tax and revenue role, the role of high-rise buildings is undeniable and is becoming an integral part of modern cities' economies.

Job creation: Architects, engineers, and various skillful professionals get the chance to show their capabilities in high-rise developments, starting from the planning phase, pre-construction, and construction phases. There is a wide range of demand for many professionals, as the scale of

the development is larger than low-rise building construction and other residential developments by individuals. Even after the post-completion of these developments, they attracted different businesses, which in response led to the creation of long-term job opportunities. Generally, high-rise developments contribute to local economies with their significant role in creating temporary job opportunities ranging from months to years during construction, as well as long-term job opportunities in the subsequent operational phase (Kitila et al., 2023; P. Larsen et al., 2019; McCann, 2013).

High employment density: High-rise buildings play a significant role in increasing employment density by allowing a large number of people to work within a limited urban footprint. By extending vertically rather than horizontally, these buildings enable cities to make more efficient use of scarce and expensive land, particularly in central business districts where space is highly constrained. A higher employment density often indicates greater economic intensity, land-use efficiency, and accessibility to labor markets (Ahlfeldt & Pietrostefani, 2019; McCann, 2013).

$$\text{Employment density} = \frac{\text{Number of Employees}}{\text{Land area occupied by the building}}$$

Or employment density in a building can be calculated using

$$\text{Employment density} = \frac{\text{Number of Employees}}{\text{Net usable floor area}}$$

Real estate market growth: For real estate market growth in urban areas, high-rise buildings play a crucial role. Mixed-use high-density developments in Toronto and urban renewal in Taipei, Chongqing, and Shenzhen, China, as well as some similar projects in other countries, are exemplary in initiating other developments and attracting other businesses and services to the area. Besides, influencing housing prices, also by reflecting desirability in various scales, high-rise developments also contribute to real estate growth (Gyourko & Molloy, 2015; Weldegebriel et al., 2022; Yirgalem, 2018).

Urbanization: By accommodating population growth and prompting compact urban forms, as well as their ability to influence land use and activities, high-rise buildings play a significant role

in urbanization. So as to respond to land constraints and high-density neighborhoods and promote sustainable urban development, high-rise urbanism has been adopted in some cities found in eastern Asian countries like Singapore, Hong Kong, Shanghai, and Tokyo, which becomes effective in promoting efficient land use alongside supporting urban growth of the cities (Al-Kodmany, 2022; Guironnet & Halbert, 2014; Watson, 2014).

Increased tax revenue: Income taxes, value-added taxes, local tax revenues through property taxes, and other forms of taxation will be enhanced by high-rise developments, contributing to the rise of the government's income in tax revenue. In regard to high-rise developments' impact on local businesses, in attracting businesses and services in surrounding spaces, high-rise developments' economic benefit is extended to an indirect contribution for increasing tax revenue from local businesses in their surrounding (Gyourko & Molloy, 2015; Peterson, 2008; Shin et al., 2023; Yang et al., 2022).

Cost-benefit analysis (CBA): CBA is an analytical and systematic process where individuals, organizations, or others determine the feasibility of a project before or after its completion by comparing the costs and benefits of a project through the utilization of measurable financial metrics and sometimes even by considering intangible benefits and costs. CBA analysis can be performed using different tools and techniques, like net annual benefit, NPV, BCR, payback period, and ROI, by conducting an analysis involving summarized costs and benefits as well as their impact by considering the output of the finding (Boardman et al., 2018; Ginés de Rus, 2010; Hayes, 2024).

2.5.4 Cost-Benefit Analysis (CBA)

CBA is an analytical and systematic process where individuals, organizations, or others determine the feasibility of a project before or after its completion by comparing the costs and benefits of a project through the utilization of measurable financial metrics and sometimes even by considering intangible benefits and costs. In general, whether the benefits of the project/ an action are justified or not justified through CBA. As CBA is made by data-driven decision-making and recommendations based on quantifiable data, it is a very important thing supported by deeper and potentially reliable findings. It simplifies decision-making over the use of scarce resources of individuals, society, different companies, and organizations. As a result of various assumptions and uncertainties that are hard to quantify, it's difficult to get the right value in

conducting CBA for large projects (Boardman et al., 2018; EPA, 2024; Hayes, 2024; Mishan & Quah, 2007).

A CBA conducted before a decision is made to implement a project or a policy is called “Ex ante CBA” or “Prospective CBA”, which is helpful to understand and reach a decision on whether to proceed with the targeted project or not. On the other hand, a CBA made after a project or a policy is completed is called “ex post CBA” or “retrospective CBA”, which is important to answer whether making the project or policy happen was a good idea or not. The major difference, alongside the period the two analyses are performed, is that during ex post CBA, as the resources and decisions are already allocated, we can’t reverse anything, but it will provide a very important lesson for the future to the decision makers (Boardman et al., 2018; Mishan & Quah, 2007).

2.5.4.1 How to perform a cost benefit analysis

In order to conduct a CBA in the first place, the purpose of the CBA for the project to be analyzed has to be clearly defined, the purpose of the analysis has to be taken into consideration, constraints have to be figured out, and understanding the way of analyzing the project or policy by selecting a proper evaluation technique is an important step. Determining the qualitative pros and cons of a project continues. After that, whether they are financial or non-financial, identifying costs is the next step: initial capital costs, operational costs, intangible costs, and opportunity costs. Determining the benefits is the fourth step that involves cost savings, rental and other incomes, operational cost savings, and indirect benefits. The next step after determining the cost and benefit data is selecting methods to assess a project, like NPV, BCR, payback period, or ROI, and then conducting an analysis involving summarized costs and benefits as well as their impact by considering the output of the findings that follows. Finally, interpreting the results from the analysis and making a recommendation that leads to a decision will be expected so as to be considered in the decision-making process of an investment and also for the upcoming projects (Boardman et al., 2018; Ginés de Rus, 2010; Hayes, 2024).

2.5.4.2 Time value of money and discounting

Time value of money explains the change that occurs over time in the amount of money that is currently on hand due to inflation, opportunity cost, some risks, and uncertainty regarding its recovery. It is used to clearly distinguish money between different periods, and the amount of money can’t be compared in two different periods without making an adjustment to it. The time

value of money explains that the money that we have today, if utilized on various activities, can produce a profit in different ways too; it earns interest if it is deposited, earns profit if invested in business, or earns dividends if invested in shares (Ahmed, 2025; Vyasan, 2024). Discounting is a process where we can determine the money or value to be received in the future based on the value or money received currently, which is very helpful in making decisions over projects or policies by determining and understanding their future impact. It's used to measure the difference between present values and future values, or it is a way of converting future outcomes into present value terms (EPA, 2024; Prest, 2020; Squires, 2020).

$$PV = FV \frac{1}{(1 + r)^n}$$

Where:

PV = Present value
FV = Future value
r = discount rate
n = analysis period

2.5.4.3 How to determine project's cost benefit analysis

i. Net benefit per year

Net benefit per year is a measure of the annual economic advantages of a project or a policy. It is one of the determinants of CBA conducted by understanding the annual costs (operational costs, intangible costs, and opportunity costs) and benefits (cost savings, rental and other incomes, operational cost savings, and indirect benefits) of a project or a policy (Boardman et al., 2018; Maas, 1999; Solberg et al., 2023).

$$\text{Net Annual Benefit} = \text{Total Annual Benefits} - \text{Annual Operating Costs}$$

ii. Net present value (NPV)

NPV is the means of analyzing the profitability of a project or a policy, which is done by subtracting current values of expenditure from current values of income over a period of time, or it is done by considering the time value of money, besides comparing a project's inflows and outflows of cash. Using NPV, we can ensure the amount of money or benefit that we can earn if we proceed with the project or policy by taking the time value of money into consideration. To know the NPV of a project, all cash flows regarding the cost and benefit of the project have to be known alongside the discount rate used to explain the time value of money; missing values, whether from

benefits or costs, as well as a high discount rate, can create an influence on NPV value and can affect our decision over a project or policy. When the outcome of NPV is positive, it tells us that the project is viable. On the other hand, negative NPV suggests that the project is financially unviable, whereas large-scale projects may show short-term benefits but struggle to generate net long-term financial gains (Boardman et al., 2018; Dai et al., 2022; Fitzgerald, 2023; Flyvbjerg, 2014).

$$NPV = \sum_{t=1}^n \frac{\text{Net Benefit}_t}{(1+r)^t} - \text{Initial Investment Cost}$$

Where:

t = year

n = analysis period

r = discount rate

iii. Benefit-cost Ratio (BCR)

BCR is the ratio of the overall benefits generated by a project or policy to the overall costs of the project. It is one of the determinants of CBA, which determines the viability of investment and feasibility of a project, and the BCR value can be used to compare the project with other competing projects. Under BCR, the PV of all benefits earned via a project to the PV of all costs. BCR can suggest whether the projects expected NPV is positive or not, alongside what the internal rate of return value would be in regard to the discount rate. BCR only in itself doesn't provide how much the economic value will be; other determinants must have to be determined too. If the BCR is greater than one, it suggests that the benefits of the project are more than its costs and the project is financially viable. If the BCR is less than one, the project may not be financially viable with a negative NPV (Boardman et al., 2018; EPA, 2024; Lizieri, 2009; Shively & Galopin, 2014).

$$BCR = \frac{PV(\text{benefits})}{PV(\text{costs})}$$

Where:

PV (benefits) = Present value of total benefits = Total benefits / Discount factor

PV (costs) = Present value of total costs = Operational costs / Discount factor

iv. Payback period

Payback period determines the length of time it will likely require for a business in order to earn back the amount initially invested in a project without taking the time value of money into

consideration, or it is the time from the start of investment up to recovery of capital investment, which is mostly used and recommended for long-term investments. If the payback period gets higher, the viability of the project is questionable. Due to that, an investment with a short payback period is preferable, but long payback horizons are common on skyscraper and large corporate real estate projects (Cooper et al., 2019; Knox, 2021; Luthra et al., 2015).

$$\text{Payback Period} = \frac{\text{Initial Investment}}{\text{Average Annual Net Benefit}}$$

v. **Return on Investment (ROI)**

ROI is a ratio of net income to investment cost, which is a measure of an investment’s benefit relative to its initial cost expressed by a percentage. ROI can be used in order to evaluate the efficiency and profitability of an investment, assess the performance and potential return of an investment, and compare multiple competing investments. A greater ROI suggests that the investment is highly beneficial, while when comparing multiple competing investments, ROI has to be annualized (Damodaran, 2002; Phillips & Phillips, 2019; Schueler & Loveder, 2020).

$$\text{ROI} = \frac{\text{Net Investment Income}}{\text{Cost of Investment}} * 100\%$$

Where:

Net Investment Income = Final value of Investment – Cost of Investment

$$\text{Annualized ROI} = [(1 + \text{ROI})^{\frac{1}{n}} - 1] * 100\%$$

Where:

n = Number of years investment is held

2.6 Ethiopian Banks High-rise Headquarters Construction Trend

The banking sector in Ethiopia is dynamic, with significant contributions to the country's economic development, where the sector contributes 4.2% to the national economy and it constitutes approximately 93% of the financial sector’s total capital in 2022 (Abate & Kaur, 2023). Driven by various regulations and rules of the NBE, rather than its young age, the Ethiopian banking sector is growing with stiffer competition in the industry. Annual branch expansion is one of the regulations that has a role in increasing their reachability in various parts

of the country, as well as it creating an environment in which financial institutions are scrambling to acquire or construct buildings in prime locations to house their headquarters (Tadesse, 2016). Awash bank was the first commercial bank to build its own High-rise HQs building called the Twin Towers in collaboration with Awash Insurance at the hub of Ethiopia’s financial center, which was inaugurated in 2010. After that, some commercial banks in the country have started and completed constructing their own high-rise HQs, while others are in a rush to acquire their own HQs currently (AIB, 2011).



Figure 2: Awash bank and Awash insurance headquarter

Source: Author’s photograph.

Table 2: Ethiopian Banks that have constructed their own high-rise headquarters

HQs of Bank	Location	No of stories	Height (in m)	Year of completion	Construction cost	
					In ETB	In USD (currency rate during inauguration)
Awash bank and Awash Insurance HQ	Bherawi on Ras Abebe Aregay St.	18	-	2010 GC	-	-
Wegagen Bank HQ	Stadium on Ras Mekonen St.	23	107	2017 GC	805,000,000	33.73M
Dashen Bank HQ	Goma-kuteba on Sudan St.	21	75	2017GC	1,000,000,000	41.9M
Nib Bank HQ	Sengatera on Ras Abebe Aregay St.	38	132	2021GC	2,000,000,000	44.32M
Hibret Bank HQ	Sengatera on Ras Abebe Aregay St.	37	134	2022GC	2,800,000,000	55.37M
CBE HQ	Ambasador, Ras Desta Damtew St.	53	209.5	2022GC	15,349,117,950	303.5M
Zemen Bank HQ	Sengatera on Ras Abebe Aregay St.	36	126	2023GC	1,500,000,000	27.62M

Source: Author.

CBE: The state-owned bank CBE has a skyscraper HQ that took 5 years and 11 months of construction to be completed, besides asking 303.5 million USD. It was completed and inaugurated on February 13, 2022. One of the tallest structures of the continent and the leader in terms of height in Ethiopia as well as East Africa is situated on an 18,316 sq. m. plot of land, having 53 Stories, of which 4B+G+M+47 are tower and 4B+G+8 are podium buildings with a total height of 209.5m, which enables it to accommodate various activities under one roof and be a commercial and conference center at the same time (CBE, 2022; ENA, 2022).

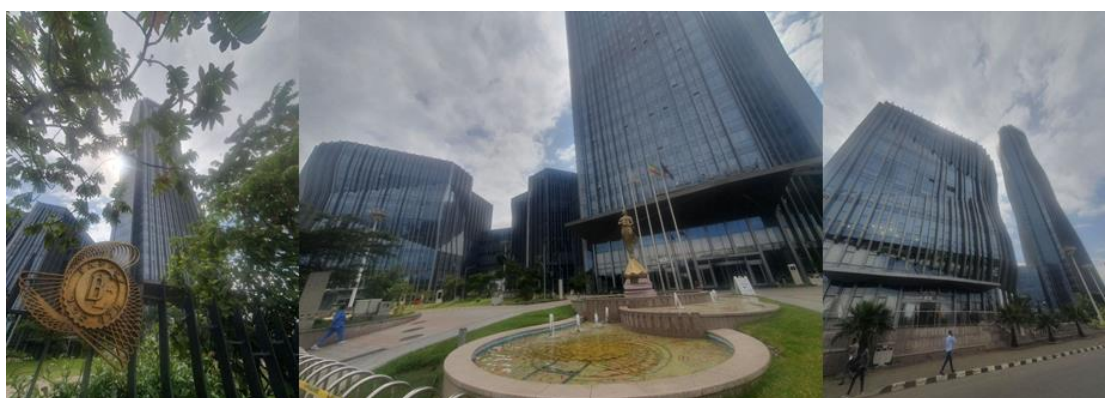


Figure 3: CBE headquarter
Source: Author's photograph.

Wegagen Bank: Wegagen Bank has a 107 m long 23-Storey high-rise HQ building, which relies on 1800 sq. m. of land in front of Addis Ababa Stadium on Ras Mekonen St., which was completed and inaugurated on September 30, 2017. This makes the bank the second commercial bank to construct its own high-rise HQ. The construction takes six years for completion with a construction cost of 805,000,000 ETB (Semonegna, 2017; Wegagen Bank, 2020).



Figure 4: Wegagen bank headquarter
Source: Author's photograph.

Dashen Bank: Dashen Bank has its own 21-story high-rise HQ that relies on 2700 sq. m. of built-up area from a total area of 4200 sq. m, located on Sudan Street around Goma-kuteba, which costs one billion ETB and took four years for completion, which was also completed and inaugurated on November 4, 2017 (Abiye, 2017; Dashen Bank, 2017; Yewondwossen, 2019).



Figure 5: Dashen bank headquarter
Source: Author's photograph.

NIB Bank: NIB Bank has a 37-Story high-rise HQ building that relies on 3600 sq. m. plot of land, which takes five years of construction to be completed, and it's located around Sengatera on Ras Abebe Aregay Street. The bank invests close to two billion ETB so as to complete this distinct architectural structure in the city, which is around 400 million ETB over budget from the time when the construction began (Nib Bank, 2021; Fikadu, 2021).

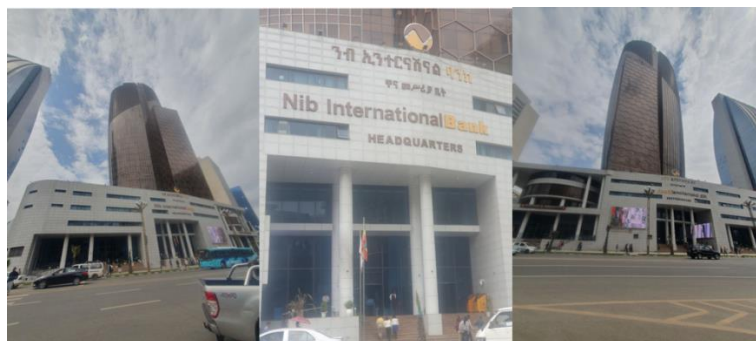


Figure 6: NIB bank headquarter
Source: Author's photograph.

Hibret Bank: The-two-point-eight-billion-ETB-worthy investment “Hibir Tower”, which is Hibret bank's 37-Story HQ building lying on 3300 sq. m. plot of land located around Sengatera on Ras Abebe Aregay Street, was inaugurated on January 15, 2022, and took a six-years period for completion (Addis Fourtune, 2022; Hibret Bank, 2021).



Figure 7: Hibret bank headquarter
Source: Author's photograph.

2.7 Review of Empirical Literatures

Some reviewed literature relevant to the study will be discussed in this section. The reviewed literature under this study implies that there is not much research done in Ethiopia, as well as worldwide, regarding the economic value of high-rise buildings and skyscrapers specifically. Such that the study tries to assess some related literature on high-rise buildings and skyscrapers from an economic and social point of view.

Research by (Chaudhary, 2024) with the main objective of exploring the influence of the construction of skyscrapers on a nation's economy, exploring how skyscrapers influence the economic status of the nation worldwide, and the growth of Asian and Western skyscrapers and their influence on the nation's economic status is also underscored by the study. A combination of literature review and the researcher's personal insights was used to develop the conceptual parts. With the main criteria of relevancy of contacts with the research themes and sub-themes, purposive sampling method was applied to select representative research papers. The study points out that, skyscrapers have a significant role in a nation's economic growth and prosperity, they reflect the nation's glory as well as act as an attraction for business and tourists, beside the fact that there are some fundamental reasons for a nation to construct a skyscraper. The growth of a nation's economy behind the construction of skyscrapers is due to other determinants like population density and GDP. Structural vulnerabilities and risks that skyscrapers face, as many peoples believe, which latter reduced due to the innovation of new technology in the engineering sector, were the other concerns assessed under this study. The study summarizes that tall buildings often come with high operational costs; tall buildings can have an adverse effect on the microclimate due to wind funneling and turbulence around their base, their potential to create

public overcrowding in the surrounding areas, their risk to isolate people from each other, and some issues of ensuring safety during emergencies as challenges of high-rise developments. While accommodating the rapidly growing population in urban areas due to migration and other reasons, being local to globalization through high investment attraction ability, having a great value in maintaining public space and agricultural lands by minimizing horizontal development, being an effective form of compact development through reducing travel distance and carbon emission, and basically making significant studies in engineering and technology are those opportunities created by the development of high-rise buildings.

Research by (C. P. M. and S. L. Knox, 2021) with a main objective of exploring the impact of skyscrapers and corporate headquarters over a city economy, through exploring the economic advantages of constructing high-rise headquarters, emphasizing their positive impact on surrounding real estate, local economies, and basically on their corporate visibility. Overall, this study provides a detailed view of the economic value of high-rise headquarters. There are key findings of the study, like corporate performance regarding brand visibility and market positioning. Companies that invest in high-rise headquarters in major cities experience a positive effect, in that the buildings act as status symbols, which in response create a higher stock market performance, besides increasing investors' confidence, especially in competitive sectors like finance and technology. Economic spillovers by providing jobs throughout the building construction operation, these high-rise buildings contribute to the local economy. In addition to that, they contribute to the local economy by creating a rapid, active ecosystem of companies and workers in the area, which attracts businesses from other sectors. Urban development and real estate: construction of a landmark headquarters often provokes a ripple effect, stimulating further investment in urban development, such as retail spaces, residential areas, and transportation infrastructure, other than their role in increasing demand for surrounding real estate. The other finding of the study addresses that those parties planning to construct high-rise headquarters must carefully assess the location, size, and surrounding infrastructure to ensure the success of such projects, as well as CBA has to be performed attentively. Generally, the study points out that the high cost of construction and the challenges related to maximizing returns on investment should not be overlooked; on the other hand, it emphasizes the symbolic value of skyscrapers, their role in urban revitalization, and the economic ripple effects skyscrapers and high-rise headquarters create.

Research by (Barr & Luo, 2021) titled “Growing Skylines: The Economic Determinants of Skyscrapers in China” with the main objective of exploring the driving factors towards constructing skyscrapers and their frequencies in China, where the hypothesis of the study aims to identify whether they are results of economic incentives that compromise the fundamentals of rapid urbanization and demand for central locations, politically driven factors such as using the skyscrapers to increase municipal revenue and promote career advancement of local officials besides personal perks, or intercity competition. According to the findings of the study, GDP and population density were the key drivers of China’s unprecedented skyscraper construction as part of economic fundamentals; the ages of the city leaders are also another determinant for the construction of skyscrapers, where younger leaders appear to increase city skylines as part of political incentives. Alongside the finding that cities having more leader-based corruption construct more skyscrapers than others, as part of the intercity competition, small cities build skyscrapers to stand out and call attention to them-selves. Using spatial auto regression, the results of the study suggest that skyscrapers are strategic substitutes across the whole country.

Table 3: Overview of Empirical studies

Author and year	Title	Methodology	Result
Chaudhary, 2024	Construction of Skyscrapers: Boon or Bane from an Economic Perspective	a comprehensive and analytical review of literatures	<p>Accommodating the rapidly growing population in urban areas due to migration and other reasons, being local to globalization through high investment attraction ability, having a great value in maintaining public space and agricultural lands by minimizing horizontal development, being an effective form of compact development through reducing travel distance and carbon emission, and basically making a significant studies in engineering and technology are those opportunities created by development of high-rise buildings.</p> <p>The study summarizes that; tall buildings often come with high operational cost, tall buildings can have adverse effect on the microclimate due to wind funneling and turbulence around their base, their potential to create a public overcrowding the surrounding areas, their risk to isolate people from each other, and some issues of ensuring safety during emergency as a challenges of high-rise developments.</p>

Author and year	Title	Methodology	Result
C. P. M. and S. L. Knox, 2021	Skyscrapers, Corporate Headquarters, and Their Impact on City Economies	a spatial difference-in-differences methodology	The study points out that high cost of construction and the challenges related to maximizing returns on investment should not be overlooked on the other hand it emphasizes the symbolic value of skyscrapers, their role in urban revitalization, and the economic ripple effects skyscrapers and high-rise headquarters create. The study addresses that those parties planning to construct high-rise headquarters must carefully assess the location, size, and surrounding infrastructure to ensure the success of such projects, as well as CBA has to be performed attentively.
Barr & Luo, 2021	Growing Skylines: The Economic Determinants of Skyscrapers in China	Spatial auto regression	GDP and population density were the key drivers of China's unprecedented skyscraper construction as part of economic fundamentals, the ages of the city leaders is also another determinant for the construction of skyscrapers where Younger leaders appear to increase city skylines as part of political incentives alongside the finding that cities having more leader based corruption construct more skyscrapers than others.
Flyvbjerg, 2014	The Megaprojects Paradox	Longitudinal Case Studies Fuzzy-Set Qualitative Comparative Analysis Structural Equation Modeling (SEM)	Large-scale developments often promise transformative benefits but may fail to achieve them in practice. On the other hand large-scale projects may show short-term benefits but struggle to generate net long-term financial gains
Zewdu, 2021	Assessing the Challenges of project management practices in building construction: In the case of the commercial bank of Ethiopia head office project	Purposive sampling technique Descriptive statistics	Changing requirements late in the project, continuing change requests, project schedule delays, inaccurate time estimations, and cash flow difficulties were the most concerning among many challenging factors identified in the study
Shewafera, 2019	An assessment of project implementation practice of commercial bank of Ethiopia headquarter construction	Stratified sampling method Descriptive statistics	This project in general has a very good implementing practice in terms of project integration, project time management and project planning. The project implementing practice of Commercial bank of Ethiopia head quarter construction lacks to give priority to project management and communication with project team on a regular basis. The project delayed due to lack of specific schedule
Gelan, 2023	Green Building Concepts and Technologies in Ethiopia: The Case of Wegagen Bank Headquarters Building	Descriptive statistics for quantitative data and the qualitative data were analyzed through content and context analysis	The study revealed that some sustainable materials had been utilized for constructing this high-rise headquarters building. But the study illustrates that, besides numerous pulling factors in the country's construction industry, there has to be done a lot more regarding green building concepts and technologies

Source: Author.

2.8 Conceptual Framework

This study is based on a conceptual framework that connects the construction of high-rise bank headquarters with their wider economic, financial, and urban impacts. The framework is built on theories of urban economics, corporate real estate investment, and megaproject development, emphasizing how large-scale financial-sector projects influence both institutional performance and city growth.

At the center of the framework is the investment in high-rise bank headquarters, which acts as the independent variable. This investment is expected to generate both direct and indirect effects on the economy and the banking sector.

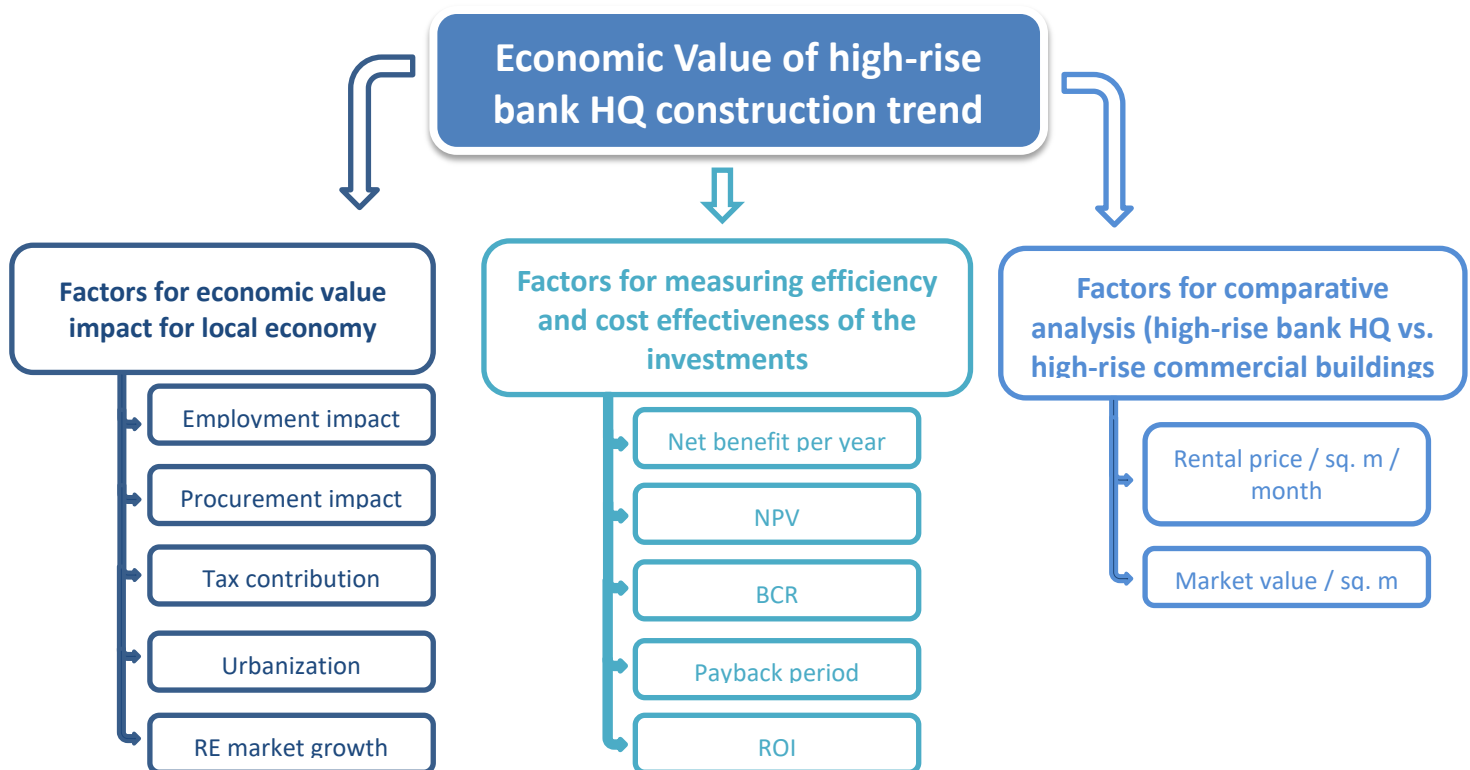


Figure 8: Conceptual framework of the study

Source: Author's formulation.

CHAPTER THREE: RESEARCH METHODOLOGY

Qualitative and quantitative research methods were used for this research paper through triangulation and integration in analysis, and some literature on the subject matter was studied to provide a fundamental introduction to the topic. The research instruments to collect data were a questionnaire survey, a semi-structured interview, observation, and secondary data.

Stratified random sampling was used to ensure representation from all relevant subgroups (strata), such as different banks, departments, customer demographics, and types of local businesses. Due to the need to obtain all respondents, which is required only in stratified random sampling, this study was conducted using purposive sampling to intentionally select specific individuals or groups most likely to provide valuable insights. Purposive sampling offers a strategic approach to participant selection, allowing researchers to target specific groups or individuals based on predetermined criteria.

3.1 Site Selection Criteria

In your day-to-day routine in Addis Ababa, you can observe vibrant construction activities everywhere you go, which may vary from the simplest to the mega-projects changing the posture and aesthetics of the city. Nowadays different parties (the government; through its large-scale public space urban projects, private projects; where some capable individuals are investing their resources and changing their business intention on constructing commercial and other sorts of buildings as having a reliable source of asset, real-estate companies; appearing to make an outstanding movement in the construction sector through their own styles in different areas of the city, and banks; regarding their limitless interest in having their own headquarters buildings) are responsible for the construction boom in the city. Among the parties taking part in the construction industry, the actions taken by the banks are catchy, as the scale of the construction is large and they are concentrated in the area referred to as the financial district of the city. So, the scale of construction, the characteristics of the area, and the owners of these assets were the main inspirations for the selection of this case area. The whole site selection criteria are as follows:

- High-rise bank HQs and comparative High-rise commercial buildings that are located in the CBD (Sengatera area and its surrounding), which is the financial district of the city

- Banks who had completed their own high-rise HQs since 2015 G.C
- Located on 0.8km radius from the CBD or Sengatera area
- Buildings that fulfill the AACPO 2017-2027 standards, under building height zone 1 and zone 2 which is more than 35 meters
- Buildings which are completed and providing service currently and also in 2024 G.C.



Figure 9: Study area (CBD, current financial district of Addis Ababa city)
 Source: Google maps, adapted by the author.

3.2 Research Design

The objective of the study focused on how to assess the economic value of erecting high-rise headquarters and its efficiency and effectiveness alongside a comparison with other similar commercial developments. To achieve this, it draws statistical, quantitative results and further

seeks to provide justifications on the established relationship with qualitative study; an explanatory research design method was used under this study, in that it responds to both the how and why aspects of the fundamental research question.

The questionnaires and semi-structured interviews were designed to address the three research objectives. The study aims to gather information from bank headquarters and high-rise commercial building owners through these questionnaires comprised of open-ended and closed-ended questions. Meanwhile, qualitative data were collected through structured and semi-structured interviews forwarded to various stakeholders having a connection with the study, including bank executives, government officials of three different administrative offices of the city, local business owners around the study area, and some real estate professionals having experience in the real estate sector.

3.3 Data Collection

Primary and secondary data sources were used to collect different data related to the study. The primary data were collected using surveys, structured questionnaires, semi-structured interviews, and field observation. While secondary data were collected from some written materials relevant to the study, books, banks' annual reports, financial reports, academic sources, real estate data, and some sources from the internet.

3.3.1 Primary Sources of Data

(a) Questionnaires

Relevant information on the study and other supplementary terms related to the study was built up through questionnaires. So as to get all the necessary information regarding the economic value of the emerging trend of constructing high-rise headquarters by Ethiopian banks, questionnaires were forwarded to parties that have an attachment with the scope of the study. Thus, the questionnaires were produced in two formats as per the type of respondents. The developed survey questionnaires were shared in printout format with respondents and they're attached as an appendix too.

Questionnaire for Banks which has already constructed their own high-rise HQs: This questionnaire format is for those six banks that have already constructed their own HQs and are providing service under them, which consists of three distinct parts. It was produced so as to get all the necessary information in a way that meets all three objectives of the study. There were

more than one respondent due to the structure of the questionnaire, which needed information from multiple departments.

The first part aimed to gather general information about respondents and the HQs that they represent (like that of the position and department of the respondent and some descriptive information about the HQs). The second part of the questionnaire was designed to gather necessary inputs regarding the economic value of their high-rise HQs to the local economy (employment opportunities created by the HQs during construction and currently, information on procurement from the local market, and tax contribution statistics by the HQs), and the third part of the questionnaire targets understanding the efficiency and cost-effectiveness of investing in high-rise HQs (through acquiring different expenses of erecting these high-rise HQs, operational and running costs and cost savings earned by the asset with some incomes generated by it alongside some qualitative questions).

Questionnaire for high-rise commercial building owners: The ultimate goal of this questionnaire format was to develop basic insights regarding the third objective of the study, which aimed to evaluate the high-rise HQ construction trend of Ethiopian banks in comparison with other commercial developments. Having two sections, where the first section tries to collect general information about the respondent, and the commercial property and the second section targets gathering necessary information on the economic impact of the building and financial performance analysis of the building in 2016 E.C., this questionnaire enhanced the depth of the data collected for the study.

(b) Interviews

Most of the qualitative data under this study were collected using interviews, which were presented in both structured and oral formats. Aligned with the broadness of the study, five types of interview questions were prepared for various individuals working in different sectors having a direct and indirect attachment with the theme of the study. For selecting interviewees purposive sampling technique through criteria's like degree of interaction with the study, position, experience, and type of service provided was utilized.

Bank executives, business owners around the study area, some government officials working in government offices that have the know-how supported with figures about what's going on

around the study area, property developers, and real estate agents were those parties taking part under the interview section of the study.

Oral interviews with selected individuals, bank officials, and other relevant bodies familiar with the study area and experienced in analyzing the scenario were an essential source of data for this research, providing additional information on the economic value of erecting high-rise buildings. Different open-ended and close-ended questions were forwarded for selected individuals having experience in the banking sector and overall economic activity of the country so as to obtain information, opinions, knowledge, and practices on the ground and the scheme over the study area. Some statistical information and the status of the real estate development in the case area were also other inputs for the study.

(c) Inspection and self-observation

Direct observation by the researcher was useful for examining the properties under the study, including aspects such as location, project scale, building characteristics, intended use spatial quality, functionality, aesthetics, cost, and current and potential economic value. It also allowed for comparison and contrast across different properties.

The study involved evaluating the physical characteristics of the area, including the extent and scale of the subject properties, and the location of the neighborhood. The construction details and design of the properties were examined to assess their financial value, while the functional utilization of spaces was analyzed. Selected properties were also inspected to align with the scope of the study. The inspection was helpful to verify the likely difficulties encountered in carrying out the exercise, as well as in making useful recommendations and suggestions on how to overcome the identified problems.

3.3.2 Secondary Sources of Data

The study drew on information obtained from published materials, annual reports, maps, and additional documents relevant to the research topic. The study used secondary data drawn from academic theses, books, physical maps, records, and annual reports of various banks and public institutions, as well as information reported in newspapers and scholarly journals. As a secondary source of data, financial statements and reports of banks, including NBE, were analyzed to understand the investment in high-rise headquarters and the return on investment. Data collection on real estate prices and trends in areas surrounding the high-rise headquarters

was the other task, alongside looking at relevant economic indicators such as employment rates, business activity levels, and property values in the vicinity of the HQs.

Conceptual terms on high-rise buildings and the banking sector in Ethiopia, alongside its history, headquarters, commercial buildings, value, economic value, and overall compressed terms on the study area, within some important concepts were described through secondary data.

3.4 Population and Sampling Method

3.4.1 Sampling frame

To identify the sample size, this research categorized the banks into four strata: (1) banks that have completed their high-rise HQs and are currently operating from them, (2) banks that have purchased buildings for their HQs, (3) banks that are constructing or planning to construct high-rise HQs in the short or long term, and (4) banks that have not initiated any HQs construction. In addition to these strata, other high-rise commercial buildings around the study area were included for comparative analysis.

Table 4: Category of Ethiopian Banks regarding their own headquarters construction status

Banks that had constructed their own HQs	Banks that had purchased buildings for their HQs	Banks constructing their own HQs / under a process to construct their HQs	Banks that have not initiated any HQs construction
<ol style="list-style-type: none"> 1. Awash Bank with Awash insurance 2. Wegagen Bank 3. Nib Bank 4. Dashen Bank 5. Hibret Bank 6. CBE 7. Zemen Bank 	<ol style="list-style-type: none"> 1. Abyssinia Bank 2. Oromia Bank 3. Siinqee Bank 4. Siket Bank 5. Hijra Bank 	<ol style="list-style-type: none"> 1. Tsedey Bank 2. Oromia Bank 3. Abay Bank 4. Global Bank Ethiopia 5. Abyssinia Bank 6. Awash Bank 7. COOP 8. Berhan Bank 9. Enat Bank 10. Buna Bank 11. Zamzam Bank 	<ol style="list-style-type: none"> 1. DBE 2. Lion Bank 3. Addis International Bank 4. Ahadu Bank 5. Amhara Bank 6. Tsehay Bank 7. Gadaa Bank 8. Goh Betoch Bank 9. Shabelle Bank 10. Rammis Bank

Source: Author.

Table 5: List of high-rise commercial Buildings around the study area

No.	Building	Description
1	Yobek Business Center	B+G+14 commercial building
2	Sengatera Traders Union SC	3B+G+23 commercial building
3	Biftu Building	2B+G+12 commercial building
4	KKare Tower (Kkare No.2)	4B+G+M+21 commercial building
5	Al-sam Towers (Al-sam Apartments)	2B+G+M+20 mixed-use building
6	Debre-work Tower	B+G+14 commercial building
7	Yiha City Center	2B+G+M+11 commercial building

Source: Author.

3.4.2 Target Population

The study's target population consisted of banks that have completed and presently occupy their own high-rise HQs, in addition to other high-rise commercial buildings situated within the study area. These groups were included to assess the economic value driven from constructing high-rise HQs, and focusing on these completed and operational buildings allowed the collection of comprehensive, accurate, and verifiable data. Consequently, the study included six banks with completed high-rise HQs and seven high-rise commercial buildings in the study area.



Figure 10: High-rise commercial buildings in the study area

Source: Author's photograph.



Figure 11: Ethiopian banks that have constructed their own high-rise headquarters
 Source: Author's photograph.

3.4.3 Sample Size

As indicated in the target population section, this study employed a census approach, in which the entire target population was included as the sample. Accordingly, all six banks that have completed their own high-rise HQs and all seven high-rise commercial buildings within the study area were considered, resulting in a total sample size of thirteen (13).

3.5 Methods of Data Analysis and Assessment

3.5.1 Data processing

The collected data were processed using IBM SPSS statistics version 25, a software package designed for quantitative data analysis. The program was used to generate descriptive and inferential statistics relevant to the study objective. Before analysis, the collected data was edited by checking the data for completeness and accuracy and coded by transforming the data

into numerical codes that can be analyzed using statistical software. Next, the data was entered into a computer database for facilitating analysis and storage. Any missing data or outliers were appropriately dealt with using imputation or exclusion techniques after checking the outliers, missing values, and other anomalies that might have affected the results.

3.5.2 Sampling technique

The stratified random sampling technique was employed to ensure representations of the different subgroups associated with the study, which is essential for comparative analysis among banks, commercial property owners, and other stakeholders involved in the construction of high-rise HQs. The study identified distinct, non-overlapping strata, including financial analysts, engineering and estimation professionals, planning and management divisions of banks, financial experts, management staff, and commercial property owners. These groups provide practical insights into the economic and functional aspects of their respective commercial properties.

3.5.3 Data analysis

This study employed a combination of quantitative and qualitative data analysis methods to examine the research objectives. Quantitative approaches and statistical techniques like descriptive statistics, the hedonic price model, linear regression analysis, and economic impact analysis, with qualitative methods such as content analysis and case studies, were utilized. As a tool for data analysis, comparative analysis, stakeholder analysis, and policy impact analysis were conducted. A secondary data analysis was included in order to come up with a set of results to achieve the stated objectives of the study. During data analysis and interpretation, qualitative and quantitative data were combined to explain, confirm, and enrich data for the approach. Hence, qualitative data obtained from informal interviews, financial reports, policy documents, and developing case studies on specific banks were used for analysis.

3.5.3.1 Descriptive analysis

To summarize the data collected from the questionnaire, including measures of central tendency (such as mean and median) and measures of variability (for instance, standard deviation and range), descriptive statistics were utilized in this study. Descriptive data analysis was utilized for analyzing the first and second objectives of the study, assessing the economic value impact of high-rise bank HQ construction for the local economy, and evaluating the efficiency and cost-effectiveness of high-rise HQ investments.

3.5.3.2 Inferential Statistics

To provide insights into the population using data from a sample, test hypotheses, and determine the statistical significance of observed differences or relationships, the study employed inferential statistics. In line with the third objective, a hedonic price model was applied to conduct a comparative analysis between high-rise bank HQs and high-rise commercial developments. The hedonic price model was estimated using linear regression analysis.

Linear regression analysis

Linear regression analysis was used to test the third objective of the study, which involved evaluating the efficiency of high-rise HQ investment in comparison with other high-rise commercial developments. The study utilized a hedonic price model incorporating multiple variables, quality indicators, and contextual factors, including proximity to the CBD and the age of the building, to enable a comprehensive comparative analysis.

CHAPTER FOUR: Results and Discussion

The raw data collected through questionnaires, structured interviews, and secondary sources in the data collection process are presented, analyzed, and interpreted under this chapter. Qualitative data analysis was performed using the thematic approach. In addition, quantitative data were analyzed using descriptive statistics and hedonic price model, which was estimated through linear regression, to address all specific objectives of the study.

Basically, the three research questions; assessing the economic value of high-rise headquarters construction by Ethiopian banks to the local economy, evaluating the efficiency and cost-effectiveness of investments in high-rise headquarters, and evaluating the high-rise headquarters construction trend of Ethiopian banks in comparison with other commercial developments are addressed in their sequence. The data also covers an introductory part highlighting the emerging trend of constructing high-rise headquarters by Ethiopian banks.

4.1 Quality of raw data

Data with Questionnaire

The study employed two questionnaire formats: one designed for high-rise bank HQs and the other for high-rise commercial buildings. The bank questionnaires were designed to answer all three objectives of the study, while questionnaires for high-rise commercial buildings were intended to respond the study's third objective.

Bank questionnaires: Questionnaires were forwarded for six banks that had constructed their own high-rise HQs since 2015 G.C.; among them, five questionnaires were filled, indicating a response rate of 83.33%. Each questionnaire contains 12 questions intended for collecting general information about the respondents and building characters, alongside 34 main body questions responsive to addressing the research objectives. One questionnaire was filled out by four to five heads or directors of different departments in each bank; the departments are the engineering department, facility and building administration, finance, procurement, and human resources. The bank questionnaire was responsible for addressing all three objectives of the study: assessing the economic value of high-rise headquarters constructed by Ethiopian banks to the local economy, evaluating the efficiency and cost-effectiveness of investments in high-rise headquarters, and evaluating the high-rise headquarters construction trend of Ethiopian banks in comparison with other commercial developments.

Questionnaires for High-rise commercial properties: Questionnaires were forwarded for seven high-rise commercial developments around the study area; among them, six questionnaires were filled, indicating a response rate of 85.7%. Each questionnaire contains a total of 26 questions, where 4 of them were for general information, 5 of them for building characters, and 17 of them intended for addressing the research objectives. All the questionnaires were filled out by building administrators. This questionnaire format was responsible for addressing the third research question, which is evaluating the high-rise headquarters construction trend of Ethiopian banks in comparison with other commercial developments.

Data with Interviews

Interview questions were forwarded for different officials of banks, various business owners around the study area, Addis Ababa city government administration officials from three government offices, property developers, and property agents who are experienced in the property market. The first research objective was addressed through interviews with bank directors and officials, interviews with business owners around the study area, and interviews with Addis Ababa city government officials. The second research objective was addressed through interviews with bank officials. While the third research objective was addressed through interview questions for property developers and interviews for real estate agents.

Interview questions for bank officials: Interview questions were forwarded for executives, department directors, or department officials of banks who have been part of the construction process of high-rise HQs of banks under this study. Two objectives of the research, assessing the economic value of high-rise headquarters constructed by Ethiopian banks to the local economy and evaluating the efficiency and cost-effectiveness of investments in high-rise headquarters, were addressed through these interview questions. The interviewees were professionals involved in the decision-making process of high-rise HQs or individuals representing banks as internal consultants and advisors during various stages of design and construction. There were nine data points collected through structured interview questions from five banks under this study.

Interview questions for business owners: This interview question format was utilized under this study so as to address the first research objective, assessing the economic value of high-rise headquarters constructed by Ethiopian banks to the local economy, where we can understand the impact of constructing high-rise HQs on the businesses around the study area. Data from thirteen

business owners working in various sectors around the study area were collected through this questionnaire format. Raw data was collected from service providers like restaurants, cafés, coffee houses, parking workers, and shoe shiners, while retail shops like bookstores, cosmetics shops, shoe stores, clothing stores, and home appliance stores were part of the study.

Interview questions for Addis Ababa city government officials: Officials from the Addis Ababa City Administration – the Office of the Mayor’s main Office, the Addis Ababa city Administration Plan and Development Bureau and city government of Addis Ababa Land Development and Administration Bureau were part of the interviewees. Five interviews were conducted to gather information on the government’s intentions and plans regarding high-rise bank HQs development in the city’s CBD. These interviewees specifically addressed the first research objective: assessing the economic value of high-rise headquarters constructed by Ethiopian banks for the local economy.

4.2 Economic value impact of high-rise bank headquarters to the local economy

The first objective of the study – assessing the economic value of high-rise headquarters constructed by Ethiopian banks for the local economy – was analyzed using the sections of the questionnaires that focused on the economic impact on the local economy. These questionnaires were administered to the five banks that have completed the construction of their own high-rise HQs. Quantitative data were collected through the bank questionnaires, which assessed the economic impact of high-rise HQs on the local economy. These data included factual information and responses measured through Likert scale. In contrast, qualitative data were obtained through interviews with bank executives, business owners in the study area, and officials from the Addis Ababa City Administration. Economic value impact for the local economy is assessed in terms of employment impact, local procurement, tax contribution, impact on land value, urbanization, and impact on business activities. The data was analyzed using descriptive statistics.

4.2.1 Result and discussion of quantitative data on economic value impact of high-rise headquarters to the local economy

To address the economic value impact of high-rise HQs on the local economy, the respondents from five banks that had completed constructing their own high-rise HQs were asked

quantitative questions focusing on these core factors: employment impact, local procurement, tax contribution, urbanization, brand and prestige, and also RE market growth.

i. Employment impact

The Ethiopian Statistical Service (ESS) estimates that Ethiopia’s working aged population grew from 56.19 million in 2018 to 61.7 million in 2024. According to ESS definitions, an employed person is anyone over ten years old who engages in a productive activity for at least one hour a day. ESS data also shows that Ethiopia’s employment-to-population ratio was 50.1% in 2018, which declined to 48.7% in 2022, while Addis Ababa recorded 48.1% in 2021 and 49.3% in 2022. According to NBE, employment in the banking sector increased from about 147,800 in 2022 to 192,843 in 2024.

According to the study’s analysis, the surveyed high-rise HQs made a very high contribution for temporary job creation during the construction phase, as indicated by a rating of 5 (very high) on the Likert scale. The respondents did not have the exact figure on the number of employees involved in the construction of the HQs, as these professionals and laborers were employed by the contractors, most of whom were international construction companies.

However, numerous job opportunities were created in the construction industry, ranging from skilled professionals such as engineers and architects to unskilled laborers. This finding aligns with McCann (2013), which states the multiplier effects of construction activities on urban economic systems. L. Larsen et al., (2019) also nuanced, that high-rise developments bring significant labor demand throughout the various stages of project lifecycles.

According to Table 7, the surveyed high-rise banks HQs employ a minimum of 810 and a maximum of 3,650 full-time staff, with a weighted average of 1643 employees. Par-time employees in the surveyed high-rise bank HQs range from 100 to 1,006, with a weighted average of 302.

Table 6: Employment impact in operational phase and number of employees

Description	Number of employees		
	Minimum	Maximum	Mean
Full time employees currently working under high-rise bank headquarters	810	3650	1643
Par time employees currently working under high-rise bank headquarters	100	1006	302
	Likert scale measurement (1=very low impact, 5=very high impact)		
Employment impact in operational phase	2	4	2.80

These findings indicate that high-rise bank HQs generate thousands of job opportunities. Regarding the overall employment impact during the operational phase, Likert scale result ranging from 2 (low impact) to 4 (high impact), with a weighted average of 2.80, indicating a moderate positive effect on employment. The results presented in Table 6 in general indicate that these high-rise bank HQs have a good employment impact in the operational phase.

Following the completion of the construction, enduring employment was maintained through building operations, and additional employment opportunities were presented for maintenance tasks. This finding support the conclusion of Kitila et al. (2023), which emphasizes the long-term integration of labor within the service sector. Bank executives also noted that during the operational phase, although the relocation of existing staff to the new HQs did not generate many new positions, the size and modern facilities of high-rise HQs created numerous additional job opportunities.

To estimate employment density within the sampled high-rise bank headquarters, this study considered how much of each building's total space is actually used for office functions and employee workspaces. Since detailed architectural data separating usable areas from service spaces was not fully available, a standard efficiency ratio was applied. This ratio helps convert the total gross floor area, which includes circulation spaces, restrooms, elevators, and mechanical areas, into the net usable floor area. According to international measurement standards established by the Royal Institution of Chartered Surveyors RICS (2015) and the Building Owners and Managers Association International BOMA (2021), high-rise office buildings typically have an efficiency ratio ranging between 70% and 85%, depending on their internal design and service configuration. Based on these global benchmarks and the observed design characteristics of bank HQs in Addis Ababa, this study adopted an average 77.5% efficiency assumption, meaning that roughly more than three-quarters of the total floor area is actively used for work-related functions.

$$\text{Net usable floor area} = \text{Gross floor area} * 77.5\%$$

Table 7 shows that the employment density of the surveyed high-rise HQs ranged from 381 to 657 employees per 1000 m² of a plot area, with a weighted average of 491 employees per 1000 m². In terms of building floor area, employment density ranged from 43 to 73 employees per 1000 m², with a weighted average of 53 employees per 1000 m².

Table 7: Employment density of Ethiopian Banks high-rise headquarters

Description	Employment density of high-rise headquarters, (employees/1000m ²)		
	Minimum	Maximum	Mean
Employment density of the site	.3815	.6565	.4908
Employment density of the building	.0431	.0725	.0534

The results (Table 7) indicate that these high-rise bank HQs exhibit relatively high employment, meaning that a large number of employees are accommodated within limited urban land. This finding highlights that high employment density in a building reflects greater job concentration, enhanced service, accessibility, and stronger linkage with nearby urban services (Ahlfeldt & Pietrostefani, 2019). Overall, the employment density results indicate high-rise bank HQs contribute meaningfully to urban economic intensity by accommodating dense employment clusters within constrained city spaces.

ii. Procurement impact

The results in Table 8 indicate that the procurement impact on the local market during the construction of high-rise HQs ranged from 6% to 25%, averaging 14.8%. The findings plainly show that these high-rise HQs consume only a small portion of locally supplied construction material.

Table 8: Procurement impact of high-rise bank headquarters during construction and operational phases

Description	Procurement impact (in %)		
	Minimum	Maximum	Mean
Procurement impact on local market during construction	6	25	14.80
Procurement impact on local market in operational phase	55	70	61.40

According to the analysis, high-rise HQs allocate between 55% and 70% of their operational spending to the local market, with a weighted average of 61.4%. These results, therefore, show more than half of the operational expenses of these high-rise HQs are spent on locally sourced goods, facilities, and services.

As per Table 8, high-rise bank HQs contribute little to local procurement during construction due to reliance on imported goods and services, but they generate a significant positive impact on local procurement during operational phase. This contradicts with the view of Guironnet and Halbert (2014), who describe high-rise construction as a driver of local supply chain

development in emerging cities. Similarly, Watson (2014) highlights how large-scale urban projects in Africa generate demand for local contractors and strengthen linkages in urban economies. Bank executives interviewed noted that the modest contribution of local procurement is attributable to imported materials offering better quality, precise sizing, and fewer procedural constraints than locally produced alternatives.

iii. Tax contribution

According to this study's survey, property tax contributions from high-rise HQs vary between 7.9 million ETB and 42.6 million ETB annually, with a weighted average of 16 million ETB. This indicates a substantial contribution of property taxes from these developments to the local economy.

This result and interview responses show high-rise bank HQs significantly contribute to public revenue through property tax, business tax, and employment-related charges. This finding is consistent with Peterson (2008), who highlights that commercial property developments expand municipal fiscal capacity. Similarly, Addis Ababa City Administration officials highlighted the contribution of these bank HQs to municipal finance (reliable revenue stream) through diverse taxation mechanisms, especially property tax, which began in 2024 GC and has become a crucial revenue source.

iv. Impact towards urbanization of the city

According to this study's survey result, the construction of high-rise bank HQs exert a very high impact on urbanization in Addis Ababa, as indicated by a maximum Likert scale score of 5. All measured values – including minimum, maximum, and weighted average – demonstrate a consistently strong effect on the city's urban development.

This result, together with the interview responses, collectively witnesses the significant role of these high-rise bank HQs in shaping Addis Ababa's skyline and urban landscape. These buildings act as landmarks of modernization and confidence by magnifying the identity of the study area as a financial hub, and also, their aesthetic inputs are magnificent. This finding reflects the role of skyscrapers as "urban icons" conveying stability and prestige for their owners (Al-Kodmany, 2022). They also correspond with the observation that iconic urban developments in African cities represent progress and global integration (Watson, 2014).

v. Contribution for the Real estate market growth

The values measured from the survey using the Likert scale on a scale of 1 (very low) to 5 (very high) indicate that high-rise bank HQs contributed strongly to real estate (RE) market growth, with scores ranging from 4 to 5 and a weighted average of 4.6. This contribution resulted in higher land values, improved land grading, increased rental rates, and greater attractiveness for commercial activities. Combined with the interview results, this survey results portray the subject.

High-rise bank HQs have catalyzed real estate market activity around the CBD through increased land values and rental rates in and around the study area. This finding aligns with Yirgalem (2018), who found that mixed-use high-rise developments in Addis Ababa significantly influenced neighborhood property markets. Similarly, Gyourko and Molloy (2015) indicated that large-scale urban investments elevate property values in surrounding areas.

4.2.2 Result and discussion of qualitative data on economic value impact of high-rise headquarters to the local economy

The qualitative part of the research offered valuable insights into how different stakeholders perceive the construction of high-rise bank HQs and their broader implications for the local economy.

The qualitative findings from interviews with bank executives, local business owners, and urban development officials reveal that the construction of high-rise bank headquarters in Addis Ababa is widely perceived as having significant positive economic and urban impacts. Most respondents highlighted that these projects generate substantial employment opportunities, both during the construction phase and in ongoing operations. This reflects the capacity of such large-scale developments to stimulate job creation not only in the construction sector but also across related industries such as engineering, logistics, and maintenance. Respondents consistently identified job creation as one of the most tangible benefits of high-rise HQ projects during construction and in the operational phase as well. This reflection portrays that high-rise projects in developing countries act as labor absorbers in both construction and service sectors (L. Larsen et al., 2019). McCann (2013) also emphasizes large-scale urban developments have strong multiplier effects on employment, stimulating a range of direct and indirect jobs. Collectively, these high-rise bank HQ investments play a crucial role in urban employment.

Participants further emphasized how these towering HQs reshaped the city's skyline, serving as architectural landmarks and symbols of modern urban identity. The buildings are seen as important structures enhancing the aesthetics of Addis Ababa, offering a sense of pride, and projecting an image of progress and innovation. City officials, in particular, noted that these developments promote efficient land utilization by accommodating more functions within limited urban space, which aligns with the goals of compact and sustainable city planning. Supporting insight from the literature, highlights the symbolic function of skyscrapers as urban icons that reshape how cities are perceived (Al-Kodmany, 2022). It also aligns with Watson (2014) discussion that iconic buildings are used to project modernity and attract global attention. Therefore, high-rise bank HQ investment contributes to the visual narrative of Addis Ababa, besides satisfying internal banking needs.

Interviewees also associated these high-rise HQs with an increase in government tax revenues and municipal income through property-related taxes, business licensing, and service charges, indicating a fiscal contribution to the public sector. Bank executives and city officials highlighted the significant role of high-rise bank HQs, as they increase national revenues through property taxes, business taxes, and payroll taxes. This reinforces Gyourko and Molloy (2015) finding on the fiscal impact of large-scale real estate investments and supports Peterson (2008) argument that commercial property developments strengthen fiscal capacity, enabling governments to expand public service delivery. Therefore, high-rise bank HQ investment enhances public finance sustainability through increasing routes of tax and revenue, other than benefiting private institutions.

Several respondents highlighted how the clustering of such high-rise structures in central business districts has accelerated the urbanization process, drawing new businesses, service providers, and investors into the area. This has led to a rise in land and property values, signaling growth in the real estate market and reinforcing the city's transformation into a vibrant financial hub. Being closer to these high-rise HQs enhances their visibility and attracts more customers, as emphasized by business owners, due to the fact that their existence created an increase in land value, rental price, and increased demand for rental spaces, as mentioned by interviewees. According to Yirgalem (2018), high-rise developments in Addis Ababa accelerate nearby housing and commercial market activity. Gyourko and Molloy (2015) further noted that

landmark developments raise surrounding property values. Thus, high-rise bank HQ investment stimulates local real estate market growth as evidenced by the qualitative evidence of the study.

The existence of high-rise bank HQs promotes other businesses in the surrounding, resulting increased customer flow, especially for service providers like shops, cafes, restaurants, and others, as mentioned by interviewees. Urban projects, as noted by Knox and Taylor (2005), and Markusen and Gadwa (2010), can transform neighborhood into vibrant commercial hubs while attracting economic clusters that boost demand for retail and service businesses. Therefore, high-rise bank HQ investment encourages entrepreneurship and local business ecosystems in Addis Ababa.

Beyond economic perspectives, several participants' highlighted knowledge and technology transfer as an important indirect benefit. The involvement of both local and international contractors, consultants, and professionals in these projects has helped raise technical standards and enhance the capabilities of domestic firms. Such exposure enables local professionals to gain practical experience in modern design, project management, and construction technologies, strengthening the country's human capital in the built environment sector. As per Flyvbjerg (2014), large projects often serve as learning platforms for local industries. The qualitative findings underline that high-rise bank HQ investment contributes a lot to Ethiopia's construction and real estate industries by providing exposure to international design standards, building technologies, and project management practices. This in response stimulates the construction sector and may enhance competitiveness in the industry.

4.3 Cost Benefit Analysis on high-rise bank headquarters investment

Evaluating the efficiency and cost-effectiveness of investments in high-rise headquarters is the second objective of the study. Upon the analysis of factual data collected from the data collection tools alongside the researcher's observation, the efficiency and cost-effectiveness of the high-rise HQs investment was analyzed using different tools and techniques of CBA. The CBA was specifically performed on banks that have already completed constructing their own high-rise HQs, where initially the researcher was planning to collect data from all six banks that had completed their high-rise HQs, but among them, the researcher was able to collect factual data from five of them and the CBA was performed only in these five high-rise bank HQs.

The collected factual data includes fixed investment costs like that of land acquisition, design and architectural fees, construction costs, consulting fees, furnishing, and interior fit-out expenses. Annual operational expenses, annual rental savings, rental income, and operational savings were all sorts of cost and benefit data collected for performing the CBA. Net annual benefit, NPV, BCR, payback period, and ROI were the CBA tools and techniques used in the study for assessing the efficiency and cost-effectiveness of the high-rise HQ investments.

4.3.1 Net benefit per year

In order to obtain the net benefit per year, the study utilized the total annual benefits and annual operational expenses in 2024 G.C. The net benefit per year is the difference between total annual benefits and annual operational expenses, from which we can measure the annual economic advantages of the investments.

Table 9: Net benefit per year of Ethiopian banks high-rise headquarters

	Net benefit per year (in ETB)		
	Minimum	Maximum	Mean
Net annual benefit in 2024	25,453,233.13	203,229,723.00	71,627,257.3580

According to the analysis, the minimum net benefit per year is 25.4 million ETB, the maximum net benefit per year is 203.2 million ETB, and the weighted average net benefit per year is 71.6 million ETB. The result manifests that all the results of net benefit per year are positive, which suggests that the project is financially viable in terms of net annual benefit.

The study found that these high-rise bank HQs bring more value than they cost, through rental savings and rental income from additional space in the building. This shows that these investments yield a positive net annual benefit. This supports Maas (1999), who argued that corporate real estate strategies often improve annual cost savings and operational efficiency. Conversely, it contradicts with Tadesse's (2016) views, who warns the large amount of capital locked into these projects could otherwise be used for lending or other productive investments, as such yearly benefits do not capture the bigger picture.

4.3.2 Net present value

In order to compute the NPV, the study utilized the average discount rate in Ethiopia for the last 15_years, during which the trend of constructing high-rise HQs started to appear in the country, the initial investment cost, current annual expenditures, and total annual benefits. The present

value of a series of future cash flows can be understood using NPV, which can suggest the profitability of a project in response. The study utilized the NPV formula:

$$NPV = \sum_{t=1}^n \frac{\text{Net Benefit}_t}{(1+r)^t} - \text{Initial Investment Cost}$$

Where:

- t = year
- n = analysis period
- r = discount rate

Table 10: Net present value of Ethiopian banks high-rise headquarters

	Net present value (in ETB)		
	Minimum	Maximum	Mean
Net present value of high-rise bank headquarters	-15,130,232,628.22	-659,150,221.40	-4,243,301,252.20

According to the analysis, the minimum NPV is -15.1 billion ETB, the maximum NPV is -659.1 million ETB, and the weighted average NPV is -4.2 billion ETB. The result manifests that all the results of NPV are strongly negative, which suggests that the project is financially unviable in terms of NPV.

The analysis revealed a negative NPV, indicating that when considering the time value of money, the projected returns may not fully cover the initial investments. Flyvbjerg (2014) describes this as part of the “megaproject paradox,” where large-scale projects may show short-term benefits but struggle to generate net long-term financial gains. The strikingly negative NPV results may also reflect a broader vulnerability in commercial real estate, as exemplified by London's Canary Wharf, where property values dropped sharply by USD 1.5 billion in a single year, driven by declining office demand and rising debt costs (Reuters, 2024). The result of the study suggests that although these high-rise headquarters may function as symbols of stability and modernization, but their long-term profitability remains uncertain.

4.3.3 Benefit-cost ratio

To get the BCR of the investments, the study tracks all the present values of benefits and all the present values of cost, where using the BCR, we can track the profitability and riskiness of an investment using the ratio of all the present values of benefits to all the present values of cost.

According to the analysis conducted, the minimum BCR is 1.75, while the maximum BCR is 1.97, and the weighted average BCR is 1.8558. The result clearly shows how these high-rise bank HQs generate a positive BCR greater than one, though not substantially so, indicating that the benefits and costs are roughly balanced. Overall, all BCR values being above one suggests that the project is financially viable and carries relatively lower risk. This supports Boardman et al. (2018), and Shively and Galopin (2014), indicating that a BCR above one reflects economic viability, while a value only slightly above one suggests marginal justification. According to Lizieri (2009) bank headquarters deliver symbolic and institutional benefits. In general, the study's result suggests that these high-rise headquarter investments are financially viable, but they are more beneficial in terms of institutional and symbolic benefits.

4.3.4 Payback period

To determine the payback period of the investments, the study considers the fixed (initial) investment cost in conjunction with the present value of all costs and benefits. Using this approach, the payback period is calculated as the number of years required to recover the initial investment, based on the ratio of the fixed investment cost to the average annual net benefit.

Table 11: Payback period of Ethiopian banks high-rise headquarters

	Payback period (in years)		
	Minimum	Maximum	Mean
Payback period of the investment	25	76	47

Accordingly, the minimum payback period is found to be 25 years, while the maximum being 76 years, and the weighted average stands at 47 years. This finding aligns with Knox (2021), who elaborates long payback horizons are common on skyscrapers and large corporate real estate projects globally. Other scholars raise a concern about whether or not investing scarce financial resources in Ethiopia's banking sector in high-rise HQ investments could be better than allocating them to lending and innovations (Tadesse, 2016; Zewdu, 2021). In this connection, the interviewed bank officials justify that these investments are long-term basically aiming at avoiding rental expenses for HQs, centralizing the bank's operation, minimizing operational expenses, and acquiring income through renting premises in their building if possible.

4.3.5 Return on investment (ROI)

In order to get the ROI, the study utilized the fixed (initial) investment cost, and the final value of the investment. ROI provides a measure of a project's profitability by expressing the ratio of net investment income to the investment cost, typically presented as a percentage or ratio.

Table 12: Return on investment of Ethiopian banks high-rise headquarters

	Return on investment (ROI) in %		
	Minimum	Maximum	Mean
Return on investment of high-rise bank headquarters	48.07	275.95	139.28
Annualized return on investment of high-rise bank headquarters	17.20	28.57	22.40

The analysis shows a minimum ROI of 48.07%, a maximum of 275.95%, and a weighted average of 139.28%, indicating that all the ROI values are positive and substantial, confirming the financial viability of the investments. The annualized ROI ranges from 17.20% to 28.57%, with a weighted average of 22.40 %.

The results in general indicate a positive and large ROI; the annualized ROI was modest, meanwhile showing the financial viability of the investment. Damodaran (2002) explains ROI as a measure of the relative efficiency of an investment in comparison to best available alternative investments. Schueler and Loveder (2020) also indicated that a greater ROI is a good expressive tool indicating whether an investment is beneficial or not.

4.3.6 Result and Discussion of qualitative data on efficiency and cost-effectiveness of high-rise headquarters investment

Insights from the interviews suggest that most bank executives and professionals view the construction of high-rise HQs as a sound long-term investment that serves both financial and strategic purposes. A common theme across responses was the effort to avoid the growing rental expenses that come with operating in leased buildings. By owning their own HQs, banks expect to reduce recurring costs and secure financial stability over time. Several interviewees explained these investments help create a reliable and appreciating fixed asset, which strengthens the banks' balance sheets and improves their overall asset quality.

As per the respondents, bringing departments together under one roof allows banks to streamline operations and improve efficiency by minimizing duplication and simplifying coordination.

Many interviewees linked this physical centralization to smoother communication, faster decision-making and better service delivery. Another strong theme that emerged was the positive effect of the work environment: participants felt that modern, spacious, and comfortable office spaces make employees more productive and motivated, which in turn enhances service quality and customer satisfaction. Beyond the functional benefits, high-rise HQs also serve as a symbol of prestige and trust. The buildings project an image of strength, confidence, and success, qualities that help to attract clients and build investor credibility.

The qualitative findings indicate these high-rise HQ investments provide efficiency in avoiding heavy rental expenses for HQs, centralizing operations, and even generating additional income through rented spaces; in addition, they are valued for their symbolic power, projecting strength and prestige in a highly competitive banking sector. The findings strengthen Lizieri (2009) observation that headquarters investments must be understood as both financial and symbolic decisions. Flyvbjerg (2014) also explained how globally HQs serve both financial and symbolic purposes, although the balance between these is rarely straightforward. Overall, the qualitative findings reveal that the efficiency and cost-effectiveness of these investments are not only about cutting expenses or improving balance sheets but also about reinforcing a bank's image, culture, and long-term sustainability.

4.4 Comparative Analysis of high-rise bank headquarters investment with high-rise commercial developments

Evaluating the high-rise headquarters construction trend of Ethiopian banks in comparison with other high-rise commercial developments is among the objectives of this study. Upon the analysis of factual data collected from the data collection tools alongside the researcher's observation, the economic value of the high-rise bank HQ investment was assessed in a comparative analysis with high-rise commercial buildings in the study area using a hedonic price model. This hedonic price model was specifically made for banks that have already completed constructing their own high-rise HQs and comparative high-rise commercial buildings found in the study area, where initially the research was planning to collect from all six banks that had completed their high-rise HQs and seven high-rise commercial buildings, but among them the researcher was able to collect factual data from five of the banks and six of the high-rise

commercial buildings. Therefore, the hedonic price model was applied using only eleven high-rise buildings.

The collected factual data includes the construction cost of the building, plot size or site area, built-up area gross floor area, number of stories, height, distance from the CBD, age of the building, floor finishing, electrical equipment, ceiling material, roofing material, wall, wall cladding and façade, mechanical parts and HVAC (Heating, ventilation, and air conditioning), elevator, stairs, parking, water tanker, septic tanker, security system, openings, compound, neighborhood, and infrastructure. Secondary data regarding land value was accessed from the Addis Ababa City Administration land lease auction winner's documents. There were two hedonic price models made for the study using the average rental value per sq. m. per month of each building and the market value per sq. m. of each building under this study. These two values were used as dependent variables, and there were other independent variables presented in three different categories. The first category was core structural variables like that of plot size, built-up area, gross floor area, number of stories, and height of the building. The second category contains quality variables such as parking, elevator, security system, HVAC, finishing quality, and view, which are expressed as dummy variables. Whereas the third category contains the relative distance to the CBD and the age of the building since it was inaugurated or completed. The data was analyzed using linear regression analysis.

Table 13: Summary of Core structural variables and quality variables for comparative analysis

High-rise Building	Bank HQ (1=Yes, 0=No)	Plot Size (in sq. m)	Built up area (in sq. m)	Gross floor area (in sq. m)	Number of stories	Building height (in m)	Distance to CBD (in m)	Age (in years)	Elevator (1=Yes, 0=No)	Parking availability (1=Yes, 0=No)	Security systems (1=Yes, 0=No)	Availability of HVAC & modern technological building amenities (1=Yes, 0=No)	Better quality of construction & finishing (1=Yes, 0=No)	Building has a best view (1=Yes, 0=No)	Occupancy rate (in %)	Average rental rate (ETB/sq. m/month)	.Market value or estimated market price per sq. m. (in ETB)
1	1	2,200	1,800	32,000	29	107	600	8	1	1	1	1	1	1	100	900	83,819.085
2	1	4,200	2,940	35,000	21	75	70	8	1	1	1	1	1	1	100	1,000	111,194.271
3	1	3,100	3,100	45,000	38	132	0	4	1	1	1	1	1	1	100	1,000	93,819.68
4	1	3,233	2,540	41,000	37	115.2	0	3	1	1	1	1	1	1	100	1,000	106,873.459
5	1	18,308	18,308	167,000	53	209.1	200	3	1	1	1	1	1	1	84	1,000	137,452.528
6	0	2,384	2,384	22,891	16	52	0	10	1	1	0	0	0	0	100	1,160	42,412.609
7	0	3,500	2,850	33,000	27	88	0	1	1	1	0	0	0	0	75	1,096	47,692.758
8	0	1,200	994	14,664	15	45	0	14	1	1	0	0	0	0	100	927	36,290.507
9	0	1,200	832	18,842	27	86	150	6	1	1	1	0	0	0	100	605	58,615.487
10	0	4,163	4,163	67,292	23	75	250	2	1	1	1	0	1	1	100	790	64,820.337
11	0	2,800	1,827	20,712	15	48	600	12	1	1	0	0	0	0	95	581	41,180.572

Source: Author.

- 1 - Wegagen Bank HQ
- 2 - Dashen Bank HQ
- 3 - Nib Bank HQ
- 4 - Hibret Bank HQ
- 5 - CBE HQ

- 6 - Yobek Commercial Center
- 7 – Sengatera Traders Union SC
- 8 – Biftu Business Center
- 9 – Kkare Tower (Kkare No.2)
- 10 – Al-sam Towers (Al-sam Apartments)
- 11 – Yiha City Center

4.4.1 Comparative analysis on the basis of rental price

The first hedonic price model of the study makes a comparative analysis between high-rise bank HQs investment and high-rise commercial buildings on the basis of average rental price per sq. m. per month. The average rental price per sq. m. per month of a building is a dependent variable, whereas three categories of independent variables, core structural variables, quality variables, and other variables like relative distance to CBD and age of the building were used for performing the analysis.

Table 14: Summary of comparative analysis on the basis of rental price

	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	T	Sig.
1 (Constant)	2204.579	667.331		3.304	.187
Plot size or site area (in sq. m.)	-.349	.230	-8.986	-1.521	.370
Built up area of the building (in sq. m.)	.388	.271	10.236	1.431	.388
Total floor area of all floors or gross floor area of the building (in sq. m.)	.000	.001	.037	.146	.890
Total number of floors in the building	-17.014	40.343	-1.068	-.422	.746
Height of the building (in meters)	-5.693	16.413	-1.450	-.347	.787
Is the building a bank HQ? (Dummy)	120.167	111.645	.338	1.076	.310
Building's relative distance to the CBD area or Sengatera (in meters)	-.496	.179	-.610	-2.767	.039
Age of building since completed and started operation (years)	-8.624	14.153	-.199	-.609	.575
Is modern security system available in the building? (Dummy)	-194.410	194.325	-.528	-1.000	.500
Do HVAC and modern technologies exist in the building? (Dummy)	120.167	111.645	.338	1.076	.310
Is the building's finishing of higher quality? (Dummy)	74.533	115.982	.209	.643	.536
Does the building have the best view? (Dummy)	74.533	115.982	.209	.643	.536

In the hedonic regression analysis of rental prices conducted, the model reveals that proximity to the central business district (CBD) is the sole statistically significant predictor ($B=-0.496$, $p=0.039$), indicating that buildings closer to the CBD command higher rents, consistent with the foundation of urban economic theory, as both Alonso (1964) bid-rent model and Fujita (2009) spatial equilibrium framework emphasizes that firms are willing to pay a premium for centrally located spaces that minimize accessibility, coordination, and transportation expenses and enhance economic opportunities. In this context, the relative distance of a building from the CBD exhibits a positive and statistically significant effect, implying that each additional kilometer

away from the CBD corresponds to an approximate decrease of 0.50ETB in the rental price per square meter.

Other structural attributes, such as, built-up area ($B=0.388$, $p=0.388$) and dummy variables for modern amenities like HVAC systems ($B=120.167$, $p=0.310$), exhibited positive direction as anticipated but lacked significance, potentially due to sample homogeneity or unmeasured market dynamics in the context. Similarly, negative but insignificant effects from age ($B=-8.624$, $p=0.575$) and security features ($B=-194.410$, $p=0.500$) suggest these factors may not differentiate rental values substantially here, underscoring the dominance of locational advantages in driving hedonic prices and implying policy focus on urban centrality for real estate valuation.

The comparative analysis of high-rise bank HQs and other similar high-rise commercial developments based on rental price per sq. m. revealed that high-rise bank HQs generally command higher rental rates. However, as previously noted, the regression result for all core structural and quality variables were statistically insignificant, except for the variable representing relative distance from the CBD. This suggests that, compared to other commercial high-rises, the difference in rental price per sq. m. for bank HQs is not substantial, and the proximity to CBD plays a more significant role in determining rental prices than simply being a bank HQS. This finding contradicts the “anchor institution” concept, which argues that large, reputable organizations create value for their surrounding environment (Porter, 2010). It also contradicts the finding of Knox and Taylor (2005), who argue that businesses are willing to pay higher rents to be situated in or near prominent urban landmarks.

In fact, this study also examined qualitative data collected from real estate developers and agents working within Addis Ababa’s CBD and surrounding high-rise clusters to gain deeper insights into how distance from the CBD and other factors included in the model influence development patterns.

According to the professionals, in terms of determining rental price, location outweighs all other property attributes in the CBD or financial district of Addis Ababa, especially around Sengatera and its surroundings. They explained that rental prices in these areas remain consistently high, regardless of variations in building structures, materials, or age, because demand for prime office and retail space is largely driven by visibility, accessibility, and association with major financial

institutions. Tenants often choose properties that enhance their business image or proximity to clients, even if physical quality differences are minor.

Developers further emphasized that the clustering of banks' high-rise headquarters has created a symbolic and economic magnet effect, giving nearby properties added prestige and stable demand. Once a building appears within this financial district, the area's reputation itself becomes a key factor that sustains high rental rates. This observation aligns with the view that institutional concentration in specific central urban areas stimulates business activity and enhance business attractiveness (Al-Kodmany, 2022; Porter, 2010). In short, the rental market in Addis Ababa's CBD, or financial district, is primarily location-driven, and the relative distance from these areas determines rental price more than the physical characteristics of a building.

4.4.2 Comparative analysis on the basis of market value

The second hedonic price model of the study makes a comparative analysis between high-rise Bank HQ investment and high-rise commercial buildings on the basis of market value per sq. m. The market value per sq. m. of a building is a dependent variable, whereas three categories of independent variables, core structural variables, quality variables, and other variables like relative distance to CBD and age of the building were used for performing the analysis. To determine the market value of each building, data collected through questionnaires on building characteristics were combined with the researcher's visual inspection findings. Addis Ababa city administration land lease auction winner's data were used for acquiring land value of the properties, and a manual of one of the Ethiopian banks was used to break down the construction cost per square meter of all the buildings under this study by considering the factual data collected through data collection tools and researchers' visual inspection; other than that, the manual is used for adjustment of land value. The variables considered for construction cost breakdown were expressed using various labels in accordance with the variable character. The variables and their labels used for the breakdown of the cost of construction are presented as follows (Table 15):

Table 15: Variables to be considered for acquiring cost of construction and their labels

Variables	Labels
Location	Best location, good location
Function	Bank HQ, Commercial, Residential
Height	In meters
Number of stories	In numbers
Floor finish	Average, Very good, Expensive
Wall	Average, Very Good, Expensive
Interior façade and partition	Average, Very Good, Expensive
Exterior façade	Average, Very Good, Expensive
Ceiling	Average, Very Good, Expensive
Openings	Average, Very Good, Expensive
Carpentry and metal work	Average, Very Good, Expensive
Stair	Average, Very Good, Expensive
Number of Elevator	In number
Electrical installation and fixtures	Average, Very Good, Expensive
Mechanical parts and HVAC	Not available, Average, Expensive
Parking	Not available, Average, Sufficient
Compound	Not available, Average, Sufficient
Water tank	Not available, Average, Sufficient
Septic tank	Average, Sufficient
Modern security system	Not available, Average, Very good

Source: Author.

As elaborated in Table 16, the regression analysis conducted indicates that the plot size or site area of a building increases market value levels approximately by 4.82 ETB ($B=4.82$, $p<0.05$). The plot size of a building has a positive and statistically significant effect, with each additional sq. m. of plot area associated with an approximate 4.82 ETB increase in market value per sq. m. The built-up area of a building also increases market value levels approximately by 4.55 ETB ($B=4.55$, $p<0.05$).

Table 16: Summary of comparative analysis on the basis of market value

	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	T	Sig.
2 (Constant)	50962.85	6602.320		7.719	.043
Plot size or site area (in sq. m.)	4.82	1.73	.681	2.786	.021
Built up area of the building (in sq. m.)	4.55	1.73	.659	2.630	.027
Total floor area of all floors or gross floor area of the building (in sq. m.)	1.64	.935	.704	2.976	.016
Total number of floors in the building	2366.56	561.46	.815	4.215	.002
Height of the building (in meters)	5940.90	133.02	.830	4.466	.002

	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	T	Sig.
Is the building a bank HQ? (Dummy)	58129.76	9604.84	.896	6.052	.000
Building's relative distance to the CBD area or Sengatera (in meters)	-14.192	49.161	-.098	-.297	.047
Age of building since completed and started operation (years)	-3767.181	2308.299	-.478	-1.632	.037
Is modern security system available in the building? (Dummy)	5190.52	1420.43	.773	3.654	.005
Do HVAC and modern technologies exist in the building? (Dummy)	5812.98	960.48	.896	6.052	.000
Is the building's finishing of higher quality? (Dummy)	5442.48	1177.23	.839	4.623	.001
Does the building have the best view? (Dummy)	5442.48	1177.23	.839	4.623	.001

The gross floor area of a building has a positive and statistically significant effect, with each additional sq. m. increasing market value by approximately 1.64 ETB (B=1.64, p<0.05). The number of stories of a building has a positive and statistically significant effect, with each additional story increasing market value by approximately 2366.56 ETB per sq. m. (B=2366.56, p<0.05). Each additional meter of a building's height is associated with an increase of approximately 5940.90 ETB per sq. m. in market value, indicating a positive and statistically significant effect (B=5940.90, p<0.05). Being a bank HQ has a positive and statistically significant impact, increasing market value by approximately 58129.76 ETB per sq. m. (B=58129.76, p<0.05).

The regression results of Table 16 show, an increase in a building's relative distance from the CBD is associated with a statistically significant decrease in market value of about 14.192 ETB per sq. m. per kilometer (B= - 14.192, p<0.05). Older buildings tend to be less valuable, with market value decreasing by about 3767.181 ETB per sq. m. for every unit increase in age (B= - 3767.181, p<0.05).

The presence of a modern security system in a building is associated with a statistically significant increase in market value, adding approximately 5,190.52 ETB per sq. m. (B= 5190.52, p<0.05). On the other hand, buildings equipped with an HVAC system see their market value increase by about 58,12.98 ETB per sq. m. (B=5812.98, p<0.05). Whereas, the quality of finishing and superior views in a building are associated with a statistically significant increase in market value, rising it by approximately 5,442.48 ETB per sq. m. (B=5442.48, p<0.05).

The analysis indicates that high-rise bank HQs outperform other similar commercial buildings in terms of market value per square meter. When examining market value per sq. m, the hedonic model showed a stronger positive effect from bank HQs compared to other high-rise commercial buildings. This highlights that high-rise bank HQs command a higher market value per sq. m. than other commercial high-rises, showing that their status as bank HQs positively influences value. This affirms the finding that large-scale developments boost nearby property values through spillover effects (Gyourko & Molloy, 2015). It also supports Guironnet and Halbert (2014) perspectives, who suggested that international-standard and iconic projects reshape local property markets and also they have a great role in creating a higher effect of rising values. Therefore, these high-rise bank HQ investments stand out not only for their size but also for the institutional weight they carry, making them more powerful and more valuable in the market than typical high-rise commercial developments.

The results of the hedonic price model based on market value, unlike those based on rental prices, indicate that all major variables – structural, design, quality, building age, and location – significantly affect market value. To better understand this finding, qualitative data were collected from real estate developers and agents working within Addis Ababa's CBD and surrounding high-rise clusters. Developers explained that, since ownership implies long-term commitment and financial stability, property buyers assess architectural quality, construction standards, and long-term durability.

Real estate agents added that modern design, advanced materials, and sustainability features often justify higher prices, as they enhance the building's long-term value and prestige. These professionals also pointed out that high-rise bank headquarters, which typically integrate better architecture and engineering quality, are perceived as a symbol of reliability and success, reflecting the institution's financial strength. This perception affirms the arguments of Al-Kodmany (2022) and Rechkemmer (2023) that well designed landmark buildings act as both economic and cultural assets in shaping a city's image and confidence.

Therefore, the qualitative results reinforce the quantitative findings that market value is determined by a combined effect of design, structural, quality, and location factors. In Addis Ababa's urban context, the quality of design, the superior construction standards, modern

facilities, and central positioning of bank headquarters collectively elevate their market value compared to other commercial developments. This finding supports Endale (2020) and Mosie (2022), who noted that high-rise developments are reshaping the city's spatial and economic character by increasing property values and urban density.

CHAPTER FIVE: Summary of findings and conclusion

This research focused on three specific objectives: assessing the economic value impact of high-rise bank HQ investment on the local economy, evaluating the efficiency and cost-effectiveness of high-rise HQ investments, and evaluating the high-rise headquarters construction trend of Ethiopian banks in comparison with other high-rise commercial developments. Under each of the specific objectives, the following findings and significant conclusions have been inferred and presented as follows:

5.1 Summary of findings

5.1.1 Assessing the economic value impact of high-rise bank HQ investment for the local economy

The study has found that employment impact during construction of high-rise HQs and the operational phase of the HQs, procurement impact during construction and the operational phase of high-rise HQs, tax contribution, impact towards urbanization of the city, and impact over RE market growth are potential impacts of high-rise HQ investment for the local economy.

The study found that the impacts of these factors vary from one another and have three different levels. Among these, the most significant impacts of high-rise bank HQ investments on the local economy were employment during construction, tax contribution, promotion of urbanization, and stimulation of RE market growth. Factors like local procurement impact in the operational phase and employment impact in the operational phase were recorded as the next impactful contributions that high-rise bank HQ investment brought for the local economy. While the lowest impact for the local economy was from the factor procurement impact during construction of these HQs.

The study found that creating job opportunities, creating an architectural signature for the city, enhancing urbanization and the aesthetics of the city, creating a landmark for the city, increasing tax contribution, stimulating the construction sector, and knowledge and technology transfer for local professionals and construction companies are the impacts that high-rise bank HQ investment brought for the local economy upon the qualitative data.

5.1.2 Evaluating the efficiency and cost effectiveness of high-rise HQ investment

Based upon the analysis of factual data regarding expenses and benefits of bank HQs, structured interviews, and also analysis of survey questionnaires the study found out that the efficiency and

cost-effectiveness of high-rise bank HQ investment is satisfactory. Through CBA performed using different tools and techniques, the result of the study found out that all the determinants of CBA except NPV showed positive results that suggest the investment is somehow financially viable. The findings of the CBA analysis are summarized as follows:

- The net benefit per year results show a minimum of 25.4 million ETB, a maximum of 203.2 million ETB, and a weighted average net benefit per year of 71.6 million ETB. This suggests that high-rise HQ investment is profitable.
- The NPV results show a minimum of -15.1 billion ETB, a maximum of -659.1 million ETB, and a weighted average NPV of -4.2 million ETB. This is a strongly negative value, suggesting that the investment is financially unviable.
- The BCR results show a minimum of 1.75, a maximum of 1.97, and a weighted average BCR of 1.8558. These BCR ratio values are more than one and suggest that the investment is profitable and financially viable.
- The payback period results show a minimum of 25 years, a maximum of 76 years, and a weighted average payback period of 47 years. This suggests that these investments are long-term investments.
- The ROI results show a minimum of 48.07%, a maximum of 275.95%, and a weighted average ROI of 139.28%. Whereas the annualized ROI results show a minimum of 17.20%, a maximum of 28.57%, and a weighted average annualized ROI of 22.40%. These results show that the investment has a very huge ROI rate as well as a good annualized ROI, which suggests that these investments are profitable and financially viable.

The study found out most of the results of CBA except NPV show a positive output for the high-rise HQ investment, which summarizes that the efficiency and cost-effectiveness of high-rise bank HQ investment is satisfactory. The strongly negative results of NPV may be due to a lack of sufficient raw data regarding operational savings resulting from the high-rise bank HQs, like that of centralized operation, improved technology and infrastructure, and energy efficiency of the new high-rise HQs.

5.1.3 Evaluating high-rise headquarters construction trend of Ethiopian banks in comparison with other high-rise commercial developments

Factual data regarding building characteristics was collected specifically on variables that are important for determining the market value of the buildings under this study. Researchers' site inspection results were utilized alongside Addis Ababa city administration land lease auction winner's list documents for adjustment of the land values. Two hedonic price models were used to compare high-rise bank HQs with other high-rise commercial developments. The two hedonic price models were performed using rental price per sq. m. and market value per sq. m. as dependent variables, while categories of independent variables like core structural variables, quality variables, relative distance from CBD, and age of the buildings were used. The results of the hedonic price models are summarized as follows:

- The study has found that being a bank HQ does not have that much impact on rental price per sq. m. when compared to other high-rise commercial developments, according to the first hedonic price model. All the core structural variables like plot size, built-up area, gross floor area, height of the building, number of stories, and quality variables like that of modern security system, HVAC, quality finishing, and best view, as well as relative distance from CBD and age of the building, have a positive impact on rental price per sq. m. of a building, but all result values of the analysis show insignificance except relative distance to CBD, which is significant. Therefore, these results show that being a bank HQ does not have that much impact on rental price per sq. m. when compared to other high-rise commercial developments.
- The study has found that being a bank HQ has a huge impact on market value per sq. m. when compared to other high-rise commercial developments, according to the second hedonic price model. All the core structural variables like plot size, built-up area, gross floor area, height of the building, number of stories, and quality variables like that of modern security system, HVAC, quality finishing, and best view, as well as relative distance from CBD and age of the building, have a positive impact on market value per sq. m., and all the result values were significant, which shows that being a bank HQ has a huge impact on market value per sq. m. when compared to other high-rise commercial developments.

The study has found that high-rise bank HQs have the highest market value of ETB 58,129.76 per sq. m. when compared to other high-rise commercial developments. While high-rise bank HQs has not – have that much difference in rental price per sq. m. when compared to other high-rise commercial developments, relative distance from CBD matters more than being a bank HQ resulting in approximately a 0.50 ETB decrease in rental price per sq. m. when we get a kilometer away from CBD.

5.2 Conclusion

This research aims to assess the economic value of the emerging trend of constructing high-rise headquarters by Ethiopian banks, a phenomenon that has recently transformed the skyline of Addis Ababa and reshaped the spatial and economic dynamics of the city's financial sector. The study gathered actual data from banks that had already completed the construction of their own high-rise HQs. The study also made a comparative analysis with other high-rise commercial developments to provide a deeper insight into the economic value of the high-rise HQ construction trend. Guided by three specific objectives; to evaluate the economic contribution of these projects to the local economy, assess their efficiency and cost-effectiveness, and compare them with other high-rise commercial developments, the study employed both quantitative and qualitative approaches to provide a comprehensive understanding of this growing trend.

The findings demonstrate that the construction of high-rise bank headquarters generates substantial economic benefits for the local economy. These projects have stimulated local employment both during construction and in ongoing operations, boosted procurement and service industries, and contributed significantly to taxes and revenues for the government. They have also enhanced the city's urban fabric by improving aesthetics, shaping Addis Ababa's modern image, and creating distinctive architectural landmarks that symbolize institutional confidence and national progress. Furthermore, these developments have contributed to real estate market growth and knowledge and technology transfer to local professionals and have acted as catalysts for business activity in surrounding areas. These outcomes are consistent with the arguments of Lizieri (2009) and Porter (2010), who highlight how major institutional investments can serve as anchors of urban economic vitality and innovation.

In terms of financial efficiency and cost-effectiveness of the investments, the results of the CBA suggest that while these investments are largely viable, their efficiency is mixed. Indicators such

as a positive net annual benefit, strong benefit-cost ratio (BCR), and high return on investment (ROI) affirm the short-to medium-term profitability of these projects. However, the negative net present value (NPV) and extended payback period raise concerns about long-term financial efficiency and the sustainability of these investments. This finding echoes Flyvbjerg (2014) megaproject paradox concept, which cautions that large-scale developments often promise impressive benefits but risk underperformance over time. This concern is also shared by Tadesse (2016) regarding Ethiopia's banking sector.

The comparative analyses with other commercial high-rise buildings further revealed that high-rise bank HQs have the highest market value per sq. m. relative to other high-rise commercial developments. However, rental prices per square meter do not significantly differ between the two, suggesting that factors such as location and proximity to the central business district exert a stronger influence on rental outcomes than building type alone. This finding underscores the importance of urban location dynamics in shaping real estate performance within Addis Ababa's high-rise property market.

Overall, the combined insights from both the quantitative and qualitative analyses lead to a clear conclusion: the growing trend of high-rise headquarters construction among Ethiopian banks has delivered meaningful economic value to the local economy. These projects have not only generated real economic value for the local economy but have also helped shape Addis Ababa's evolving identity as a modern financial city. At the same time, the findings remind us that such ambitious investments come with financial and strategic trade-offs that demand thoughtful planning and responsible management. If approached with a balanced understanding of economic efficiency, urban sustainability, and institutional strategy, this trend can continue to serve as a powerful driver of Ethiopia's financial modernization and urban transformation.

5.3 Contribution of the study

This study highlights that these high-rise HQs are not just offices but symbols of modernity, confidence, and urban transformation by focusing on the CBD of Addis Ababa city. The study emphasizes the role of these investments in redefining the city.

This study provides concrete evidence about the economic value and risks of investing in high-rise HQs instead of relying on assumptions or copying trends for Ethiopian banks, policymakers,

and the real estate sector. This enables the stakeholders to have a clearer picture for making wiser investment decisions.

As there was not that many studies that examine the economic value of high-rise HQ investment in the Ethiopia context, this study bridges that gap by making it a valuable reference for both academics and practitioners.

5.4 Recommendation

Based on the findings, the study makes the following recommendations for further researchers, for Ethiopian banks, and for the real estate sector:

- For future research: this study has highlighted both the strengths and risks of high-rise bank HQ investments. Future research could expand the scope by determining numerous factors that aligned with their specific study in a detailed manner for circumventing the limitation that this study faced.
- For Ethiopian banks: in regard to these projects' ability to carry real economic and symbolic value, banks must balance their desire for landmark buildings with strategies that ensure long-term financial sustainability and broader economic contribution. On the other hand, Ethiopian banks have to develop a habit of recording and producing important facts and data in an organized manner.
- For the real estate sector: as the findings of this study reveal that high-rise bank HQs raise surrounding property values and stimulate local businesses. The main actors of the RE sector should understand the momentum of these investments from time to time and have to make important decisions that can mitigate risks of gentrification and ensure that the wider population benefits from rising land values.
- In general, bank headquarters should not be seen just as institutional landmarks only, but also they have to be seen as drivers of wider economic and urban change.

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Appendix I: Bank headquarter questionnaires

Survey Questionnaire

Currently I am conducting a research study titled "**Assessing the Economic Value of the Emerging Trend of Constructing High-Rise Headquarters by Ethiopian Banks**" for the fulfillment of a MA degree in urban land and property valuation At EiABC. This study aims to evaluate the financial and strategic implications of this trend and its impact on the banking sector and the broader economy. Your insights and perspectives are highly valuable in understanding the rationale behind such investments and their long-term benefits. The information you provide will be used solely for academic purposes and will be treated with strict confidentiality. I sincerely appreciate your time and willingness to participate in this study.

In the first place, I would like to thank you for your cooperation in advance.

Part I

Note: This part of the questionnaire aims to gather information about the economic impact of your high-rise HQs on the local economy of Addis Ababa. Your responses will be kept confidential and used for academic research purposes only.

Section A: General Information

1. Name of Bank: _____
2. Title of Respondent: _____
3. Department of Respondent: _____
4. Experience in the sector: _____
5. Date of Completion: _____
6. Name of high-rise HQs _____
7. Site area _____
8. Built-up area _____
9. Gross floor area _____
10. Number of stories _____
11. Height of the building _____
12. Year of construction completion _____

Section B: Employment Impact

1. Number of employees currently working at this headquarters?
 - Full-time: _____
 - Part-time: _____
2. Did the construction of this headquarters create temporary jobs?
 - Yes No
3. How do you rate the employment impact of this high rise headquarters during construction and in operational phase?

Factors	1	2	3	4	5
Employment impact of this high-rise HQ during construction					
Employment impact of this high-rise HQ in operational phase					
1 = Very low 2 = Low 3 = Good 4 = High 5 = Very high					

Section C: Local Procurement Impact

1. In the last fiscal year, does your bank spent on goods and services procured for the operation of this headquarters from businesses located within Addis Ababa?
 - Yes No
2. Of the total amount of goods and services procured for the operation of this headquarters, what percentage was spent on goods and services from businesses located within Addis Ababa? _____
3. Please list the major categories of goods and services procured locally?

4. Have you consumed any construction materials from the local market for the construction of your HQs?
 - Yes No
5. If you consumed construction materials from the local market, approximately what was the total value (percentage) of construction materials and services sourced from the local market for the construction of this headquarters?

6. How do you rate the procurement impact of this high rise headquarters during construction and in operational phase?

Factors	1	2	3	4	5
Procurement impact of this high-rise HQ during construction					
Procurement impact of this high-rise HQ in operational phase					
1 = Very low 2 = Low 3 = Good 4 = High 5 = Very high					

Section D: Tax Contribution

1. What was the total amount of **property tax** paid to the Addis Ababa City Administration for this headquarters in the last fiscal year (in Ethiopian Birr)? _____
 2. What was the total amount of business tax (**if applicable**) paid to the Addis Ababa City Administration related to the operations at this headquarters in the last fiscal year (in ETB)? _____
-
3. How do you rate the tax contribution of this high rise headquarters?

Factors	1	2	3	4	5
Tax contribution of high-rise HQ					
1 = Very low 2 = Low 3 = Good 4 = High 5 = Very high					

Section E: Other factors

How do you rate the following factors which determine contribution of high-rise bank HQ for the local economy?

Factor	1	2	3	4	5
impact towards urbanization of the city					
Impact towards real estate market growth					
1 = Very low 2 = Low 3 = Good 4 = High 5 = Very high					

Part II

Note: This part of the questionnaire aims to gather information about the costs and benefits associated with the bank's high-rise HQ investment. Your responses will be kept confidential and used for academic research purposes only.

Section A: Cost Data

S/No.	Item	Cost (ETB)
I	Fixed Investment	
1.1	Estimated total cost of land acquisition for the HQ	
1.2	Estimated total cost of design and architectural fees	
1.3	Total cost of construction (including materials, labor, permits, etc.)	
1.4	Estimated total cost of Consulting service during construction	
1.5	Total cost of initial interior fit-out and furnishings	
1.6	Total financing costs incurred for the project (interest paid)	
II	Annual operational costs for the HQ, 2016 E.C.	
2.1	Utilities (electricity, water, telecommunication)	
2.2	Maintenance and repairs	
2.3	Security services	
2.4	Cleaning services	
2.5	Food and beverage/catering service	
2.6	Insurance	
2.7	Property taxes	
2.8	Others (please specify):	

Section B: Benefit Data

S/No.	Item	Value (ETB)
I	Cost savings obtained in operations (if any)	
1.1	Centralized operations	
1.2	Improved technology/infrastructure	
1.3	Energy efficiency	
1.4	Other (please specify):	
II	Cost savings obtained by the absence of rental expenses for HQs as a result of constructing own HQs building, since your bank started an operation under the new HQs	
III	Total rental income obtained from leasing premises of the HQ (If any), 2016 E.C.	
IV	Current estimated market value of the headquarters building (if available)	

4 What amount of money your bank pays currently for branches which are currently operating under rental spaces around the study area per square meter per month in average (in ETB)

5 Has the construction of this high-rise HQ led to an increase in the perceived value of your bank's brand or image? (Qualitative response)

6 Have you observed any improvements in employee morale or productivity that you attribute to the new HQs? (Qualitative response)

7 Are there any other benefits alongside the construction of the HQs? (Qualitative response)

Thank you for your time and valuable information!

Appendix II: Interview questions for bank executives

Interview Questions

Currently I am conducting a research study titled "**Assessing the Economic Value of the Emerging Trend of Constructing High-Rise Headquarters by Ethiopian Banks**" for the fulfillment of a MA degree in urban land and property valuation At EiABC. This study aims to evaluate the financial and strategic implications of this trend and its impact on the banking sector and the broader economy. Your insights and perspectives are highly valuable in understanding the rationale behind such investments and their long-term benefits. The information you provide will be used solely for academic purposes and will be treated with strict confidentiality. I sincerely appreciate your time and willingness to participate in this study.

In the first place, I would like to thank you for your cooperation in advance.

Part I

Note: This interview question section aims to gather general information about the respondent alongside information about the economic impact of your Banks high-rise HQs on the local economy of Addis Ababa. Your responses will be kept confidential and used for academic research purposes only.

Section A: General Information

1. Name of Bank: _____
2. Name of Respondent _____
3. Title of Respondent: _____
4. Experience in the sector: _____
5. Role during high-rise HQs construction _____
6. Date of Completion: _____

Section B: Main Interview Section

1. What were the key strategic reasons for investing in high-rise HQs in Addis Ababa?

2. Can you describe your bank's policies or practices regarding the procurement of goods and services from local businesses in Addis Ababa for this headquarters? What are the reasons behind these policies?

3. In your opinion, what are the broader economic benefits that this high-rise development brings to the city of Addis Ababa?

4. Have you observed any challenges or negative economic impacts associated with this development? If so, please describe.

5. How does the bank measure or track its contribution to the local economy through this headquarters, if any?

6. Are there any specific initiatives or programs related to this HQs that aim to support the local economy?

7. Any other information to add?

Part II

Note: This interview question section aims to gather information about the costs and benefits associated with the bank’s high-rise HQ investment. Your responses will be kept confidential and used for academic research purposes only.

Interview Questions

- 1. What were the key financial objectives and expected returns on investment for this high-rise HQ project?

- 2. How did you assess the project’s financial feasibility (e.g., Net annual benefit, NPV, BCR, Payback Period, ROI), and what were the main assumptions?

- 3. How do you get the actual costs compared to the original budget, and what factors account for any differences?

- 4. What metrics are you using to track both the financial and strategic benefits of this investment?

- 5. Overall, do you consider this investment financially efficient and strategically beneficial? Please share any additional insights?

Thank you for your time and valuable information!

Appendix III: Questionnaires for high-rise commercial developments

Survey Questionnaire

Dear Esteemed Respondents,

Currently I am conducting a research study titled "**Assessing the Economic Value of the Emerging Trend of Constructing High-Rise Headquarters by Ethiopian Banks**" for the fulfillment of a MA degree in urban land and property valuation At EiABC. This study aims to evaluate the financial and strategic implications of this trend and its impact on the banking sector and the broader economy. Your insights and perspectives are highly valuable in understanding the rationale behind such investments and their long-term benefits. The information you provide will be used solely for academic purposes and will be treated with strict confidentiality. I sincerely appreciate your time and willingness to participate in this study.

In the first place, I would like to thank you for your cooperation in advance.

Introduction: This questionnaire aims to gather information about the economic impact & financial performance of commercial high-rise buildings in Addis Ababa for a comparative study with Bank HQs. Your responses will be kept confidential and used for academic research purposes only.

Section A: General Information, Building Characteristics & Economic Impact

Item	Description
I. General Information	
Name of the building	
Type of commercial building (e.g., hotel, office, mixed-use)	
Name and Title of respondent	
Position/role of respondent	
Date of completion	
II. Building Characteristics	
Number of stories	
Built-up area (in square meters)	
Land (site) area (in square meters)	
Gross floor area (in square meters)	
Height of building	

Item	Description
Security system	
parking	
Date of construction completion	
Specific location	
Is the building primarily single-tenant or multi-tenant? (Single-tenant or Multi-tenant)	
III. Economic Impact of the building (2016 E.C.)	
Total number of tenants in this building currently	
Total Number of employees currently working in this building	
Total annual salary and wage expenditure estimated for employees in this building (ETB)	
Estimated Number of employees currently working in this including all tenants weather the building is single-tenant or multi-tenant	
Total annual spending estimated on local goods and services for the operation of this building (ETB)	
Total amount of property tax paid for this building (ETB)	

Section B: Financial Performance (2016 E.C. Estimates)

S/No.	Item	Cost /Benefit (ETB)
1.1	Estimated total construction cost of the building	
1.2	Total annual operational costs for the building	
1.3	Total annual rental income generated (if applicable)	
1.4	Average Rental price per sq. meter/month	
1.5	Current estimated market value of the building	
1.6	Average occupancy rate for the building (if applicable) _____ %	

Thank you for your time and valuable information!

Appendix IV: Interview questions for local business owners

Interview Questions

Deer Esteemed Respondents,

Currently I am conducting a research study titled "**Assessing the Economic Value of the Emerging Trend of Constructing High-Rise Headquarters by Ethiopian Banks**" for the fulfillment of a MA degree in urban land and property valuation At EiABC. This study aims to evaluate the financial and strategic implications of this trend and its impact on the banking sector and the broader economy. Your insights and perspectives are highly valuable in understanding the rationale behind such investments and their long-term benefits. The information you provide will be used solely for academic purposes and will be treated with strict confidentiality. I sincerely appreciate your time and willingness to participate in this study.

In the first place, I would like to thank you for your cooperation in advance.

Introduction: This interview questions aims to gather information about the economic impact of high-rise HQs of Ethiopian Banks on the local economy of Addis Ababa. Your responses will be kept confidential and used for academic research purposes only.

Section A: General Information

7. Name of Business: _____
8. Type of Business: _____
9. Name of Respondent: _____
10. Title of Respondent: _____
11. Experience: _____
12. This business situated here since _____
13. Date of Completion: _____

Section B: Main Interview Section

1. Have you noticed any changes in business activity in this area since the construction of the nearby high-rise bank headquarters? _____

2. Have you experienced any increase in customer traffic or revenue that you might attribute to the presence of the bank headquarters?_____

3. Have you had any opportunities to provide goods or services to the bank or its employees? If so, please describe.

4. Have you observed any indirect economic benefits or drawbacks for your business or the local community resulting from this development? (Such as changes in property values, infrastructure, traffic, etc.)

5. Any other information to add?

Thank you for your time and valuable information!

Appendix V: Interview questions for Addis Ababa City Administration officials

Interview Questions

Currently I am conducting a research study titled "**Assessing the Economic Value of the Emerging Trend of Constructing High-Rise Headquarters by Ethiopian Banks**" for the fulfillment of a MA degree in urban land and property valuation At EiABC. This study aims to evaluate the financial and strategic implications of this trend and its impact on the banking sector and the broader economy. Your insights and perspectives are highly valuable in understanding the rationale behind such investments and their long-term benefits. The information you provide will be used solely for academic purposes and will be treated with strict confidentiality. I sincerely appreciate your time and willingness to participate in this study.

In the first place, I would like to thank you for your cooperation in advance.

Introduction: This Interview question aims to gather information about the economic impact of high-rise HQs of Ethiopian Banks on the local economy of Addis Ababa. Your responses will be kept confidential and used for academic research purposes only.

Interview Questions

Section A: General Information

14. Name of Institution: _____
15. Name of Respondent _____
16. Title of Respondent: _____
17. Experience: _____
18. Date of Completion: _____

Section B: Main Interview Section

1. What is the city administration's perspective on the trend of high-rise bank HQs construction in Addis Ababa?

2. Have you observed any significant changes in local tax revenue or economic activity in the CBD (Sengatera area) that might be linked to these developments?

3. What are the city's policies or strategies regarding attracting and managing such large-scale bank HQs or other commercial developments?

4. Are there any specific assessments or studies conducted by the city on the economic impact of these types of developments (buildings)? If so, please describe/share.

5. What are the perceived benefits and challenges of having a concentration of bank headquarters in the CBD?

6. Any other comments to add?

Thank you for your time and valuable information!

Appendix VI: Publishable Manuscript

ASSESSING ECONOMIC VALUE OF THE EMERGING TREND OF CONSTRUCTING HIGH-RISE HEADQUARTERS BY ETHIOPIAN BANKS

Gemechis Fekadu¹ and Eyasu Kumera²

Abstract

Ethiopian banks are increasingly shaping Addis Ababa's skyline through the construction of high-rise headquarters. This thesis examines the economic value of constructing high-rise headquarters by Ethiopian banks focusing on three areas: the contribution of bank headquarters to the local economy, the efficiency and cost-effectiveness of such investments, and their comparison with other commercial high-rises in the city. Using a mixed-method approach that combines surveys, interviews, and cost-benefit analysis, the study finds that these investments generate notable economic benefits for the local economy. They create jobs during construction and operation, stimulate local procurement, increase tax contributions, and enhance the city's real estate market. Beyond their financial impact, they also strengthen banks' visibility, prestige, and customer trust. According to the findings of the study, the efficiency and cost-effectiveness of high-rise bank headquarters investment appear to be generally satisfactory. However, the research also uncovers risks that these investments may not always yield the most efficient returns compared to other investments. When compared with other commercial developments, bank headquarters stand out as symbols of institutional strength, as drivers of urban transformation, and as more valuable in the market. Overall, the study suggests that while these projects carry real economic and symbolic value, banks must balance their desire for landmark buildings with strategies that ensure long-term financial sustainability and broader economic contribution.

Key words: Ethiopian banks, Headquarter, High-rise, Economic value, Central Business District

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1. Introduction

1.1 Background of the study

Across the world, the construction of high-rise headquarters has become a symbol of modernization, economic power, and institutional confidence. These buildings are not only centers of management and coordination but also expressions of brand identity and prestige (Hayes, 2022; Kunisch et al., 2020). Headquarter buildings often serve dual purposes, functional efficiency and symbolic representation embodying the institution's strength, stability, and long-term vision (Al-Kodmany, 2022; Weber, 2002).

Driven by many economic and social factors, high-rise building construction in Addis Ababa has been growing. High-rise buildings are seen as a solution to accommodate the growing population within limited land space, particularly in the city center, where there is a very high demand for residential and commercial space due to rapid urbanization and demographic expansions (Endale, 2020; Mosie, 2022). In the development of high-rise buildings and skyscrapers in Addis Ababa, the role of Ethiopian banks is exceptional. Besides constructing their own HQs, they are providing necessary financing for numerous real estate developments. Among Ethiopian banks, CBE is a prime example, constructing a 209.5-meter-tall skyscraper in Ethiopia (Graetz et al., 2016; Mosie, 2022).

Despite this impressive growth, there remains limited empirical understanding of the actual economic and financial value generated by these investments. While bank headquarters visibly contribute to city image and institutional branding, it is less clear whether they deliver proportionate returns or cost-effective performance. As (Flyvbjerg, 2014) cautions through his concept of the

megaproject paradox, large-scale iconic projects often bring prestige and political visibility but may fall short in terms of efficiency and measurable economic benefit.

Assessing the true value of these investments therefore requires considering both their tangible and intangible impacts, including job creation, tax contribution, urban development, and real estate market stimulation, alongside financial feasibility indicators such as net present value (NPV), benefit–cost ratio (BCR), payback period, and return on investment (ROI) (Gangwar, 2023).

1.2 Statement of the problem

The competition within the country's banking industry is getting stiffer, despite the fact that Ethiopia's private banking sector is still young. In recent years, the construction of high-rise bank headquarters has become one of the most visible features of Addis Ababa's urban transformation. These landmark projects are often presented as a symbol of institutional strength, modernity, and national progress. Due to the skyrocketing cost of rent in major cities, as a result of interbank competition and the pursuit of corporate prestige as well as its opportunity for leasing spare office space and generate revenue banks are scrambling to construct their own high-rise headquarters. Currently, some private banks in the country, alongside the state-owned CBE, have completed constructing their own high-rise headquarters; some of them are on the verge of completing their headquarters, while others are under construction and in a rush to acquire their headquarters, which are either high-rises or skyscrapers ranging from 20 stories up to more than 60 stories (Tadesse, 2016). However, despite their prominence, there is limited empirical evidence on whether such investments generate proportional economic and

financial value for both the banks and the local economy.

Hence, most banks in the country, including some of those that have recently grown from regional microfinance institutions to banks, are planning to construct their own high-rise headquarters, and some of them are already undergoing the construction. While banks justify these projects as strategic investments that reduce rental costs, centralize operations, and enhance corporate image, the enormous capital required raises questions about their cost-effectiveness and long-term return. At the same time, the potential economic spillovers such as job creation, tax revenue, real estate stimulation, and knowledge transfer remain largely unquantified. As (Flyvbjerg, 2014) notes in the megaproject paradox, large-scale developments often promise transformative benefits but may fail to achieve them in practice.

There have been some existing studies in Ethiopia conducted on and around banks that had constructed high-rise headquarters in the city. Like that of the study on assessing the challenges of project management practices in building construction: In the case of the commercial bank of Ethiopia head office project by (Zewdu, 2021), a study on green building concepts and technologies in Ethiopia: In the case of Wegagen bank headquarters building by (Gelan, 2023), and a study on an assessment of project implementation practices of the commercial bank headquarter construction project by (Shewafera, 2019). Based on the previously conducted studies, we can understand that there is a gap observed in addressing the economic advantages and disadvantages of these banks' actions over headquarters construction. There is also a gap in addressing the efficiency and cost-

effectiveness of high-rise headquarters investment by Ethiopian banks. This gap leaves uncertainty about whether the current trend of constructing bank headquarters is a sound economic choice or a prestige-driven phenomenon with limited tangible return.

Therefore, this study seeks to address this gap by assessing the economic value of the emerging trend of constructing high-rise bank headquarters in Ethiopia. It examines whether these investments truly contribute to the local economy through job creation, tax revenue, and real estate market stimulation; evaluates their efficiency and cost-effectiveness using cost-benefit and financial performance measures; and compares their market performance with other commercial high-rise developments in Addis Ababa. The findings will provide insights into whether this construction trend represents a sound strategic investment or a prestige-driven expansion with uncertain returns.

1.3 Objective

1.3.1 General objective

Assessing the economic value of the emerging trend of Ethiopian banks' high-rise headquarters construction alongside comparing these valuation outputs with other commercial high-rise developments was the general objective of this study.

1.3.2 Specific objectives

- ❏ Assessing the economic value of high-rise headquarters constructed by Ethiopian banks to the local economy
- ❏ Evaluate the efficiency and cost effectiveness of high-rise headquarter investments
- ❏ Evaluate high-rise headquarters construction trend of Ethiopian banks in comparison with other high-rise commercial developments

2. Literature review

The construction of high-rise bank headquarters has gained increasing attentions as both an architectural and economic phenomenon, especially in emerging economies like Ethiopia. Beyond their visual prominence, these buildings represent strategic investments that combine financial efficiency, urban modernization, and institutional prestige.

Economic value refers to the worth of a good based on the benefits it provides or the willingness to pay for those benefits (Banton, 2023a; Mathur, 2022). In the context of bank headquarters, value creation occurs through both direct and indirect channels. Directly, these projects generate employment, stimulate the construction and the real estate sectors, and establish durable fixed assets that strengthen a bank's financial position (McCann, 2013). Indirectly, they influence broader economic activity by attracting business investments, raising property values, increasing tax revenues, and improving the urban image and functionality of central business district (Al-Kodmany, 2022; Porter, 2010). For financial institutions, owning headquarters also reduce rent expenses, supports operational efficiency, and enhances corporate reputation which as a result reinforces institutional credibility and competitiveness (Jeffrey A Kenoff and Peter Gross, 2007; Rechkemmer, 2023).

Several theoretical perspectives help explain how high-rise headquarters create this layered economic value. The urban agglomeration theory argues that clustering economic activities within dense urban cores improves productivity and knowledge exchange (Ahlfeldt & Pietrostefani, 2019; Glaeser & Maré, 2001). In Addis Ababa, the concentration of bank headquarters in the

central business district mirrors this dynamic, creating a financial hub that stimulates service networks and local business linkages. Similarly, the special efficiency theory emphasizes vertical developments as a rational solution to land scarcity in fast-growing cities (Dupré, 2001; UN-HABITAT, 2016). High-rise headquarters align with this logic by consolidating administrative operations within limited plots, maximizing land utility, and supporting sustainable urban densification.

From an economic perspective, the multiplier effect theory explains how large construction investments circulate through the economy, generating multiple rounds of income and employment (McCann, 2013; Porter, 2010). Every bite of money spent on constructing a bank headquarters cascades through contractors, suppliers, and service providers, amplifying the projects economic impact. However, the megaproject paradox theory (Flyvbjerg, 2014) provides an important counterpoint by highlighting that large and prestige-driven projects, through promising significant benefits, often face risks such as cost overruns, delayed returns, and questionable long-term efficiency. These risks are particularly relevant for Ethiopian banks, whose large-scale investments in fixed assets can strain liquidity or divert funds from core financial operations (Tadesse, 2016).

Overall, the literature suggests that high-rise bank headquarters contribute to economic growth, employment creation, and urban transformation while simultaneously reflecting institutional ambition. Yet, their long-term economic efficiency depends on how well banks' balance prestige-oriented investment with sound financial management. In Ethiopia, where the construction of high-rise bank headquarters

continues to reshape Addis Ababa's skyline, these projects symbolize both the modernization of the financial sector and the broader evolution of the city's urban economy.

3. Materials and methods

A combination of quantitative and qualitative data analysis methods was used to analyze this research. Quantitative approaches and statistical techniques like descriptive statistics, the hedonic price model, linear regression analysis, and economic impact analysis with qualitative methods such as content analysis and case studies were utilized. As a tool for data analysis, comparative analysis, stakeholder analysis, and policy impact analysis were

conducted. A secondary data analysis was included in order to come up with a set of results to achieve the stated objectives of the study. During data analysis and interpretation, qualitative and quantitative data were combined in explaining, confirming, and enriching data to the approach. Hence, qualitative data was obtained from informal interviews, financial reports, policy documents, and developing case studies on specific banks.

The study area is the central business district (CBD), which is the current financial district of the city (Sengatera area and its surroundings), stretching in a 0.8km radius up to Goma-kuteba in the north, Al-sam chelelek in the west, the Kkare area in the south, and Stadium in the east direction.

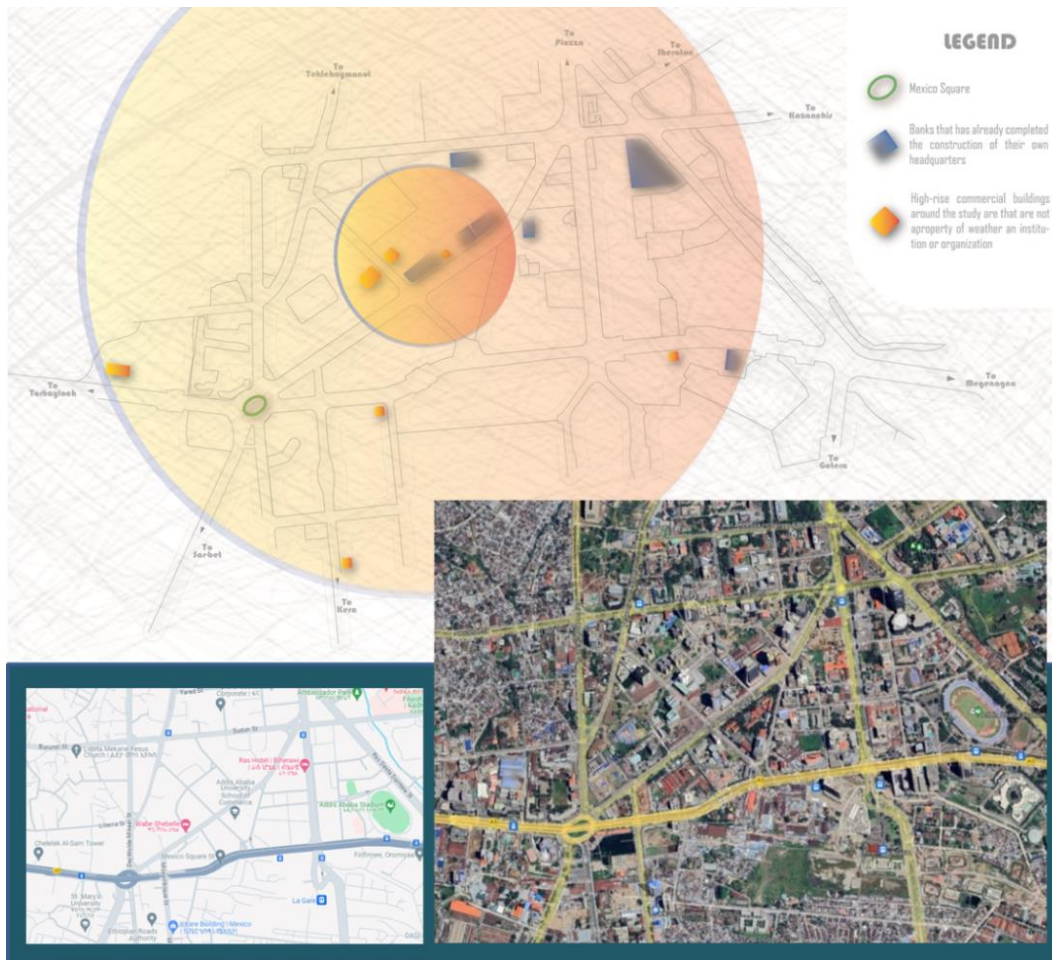


Figure 12: Study area (CBD, current financial district of Addis Ababa city)

Source: Google maps, adapted by the author.

For identifying the sample size, this research categorized the banks into four strata's: banks that have already completed their HQ construction and are currently undergoing service in their high-rise HQs, banks that purchased buildings for their HQs, banks that are undergoing construction of their own high-rise HQs or which are heading to

construct their own high-rise HQs in long-term and short-term plan, and banks that have not made any action regarding HQ construction. Besides these categories, other high-rise commercial buildings around the study area were other strata in order to make a comparative analysis.



Figure 13: comparable High-rise commercial buildings in the study area
Source: Author's photograph

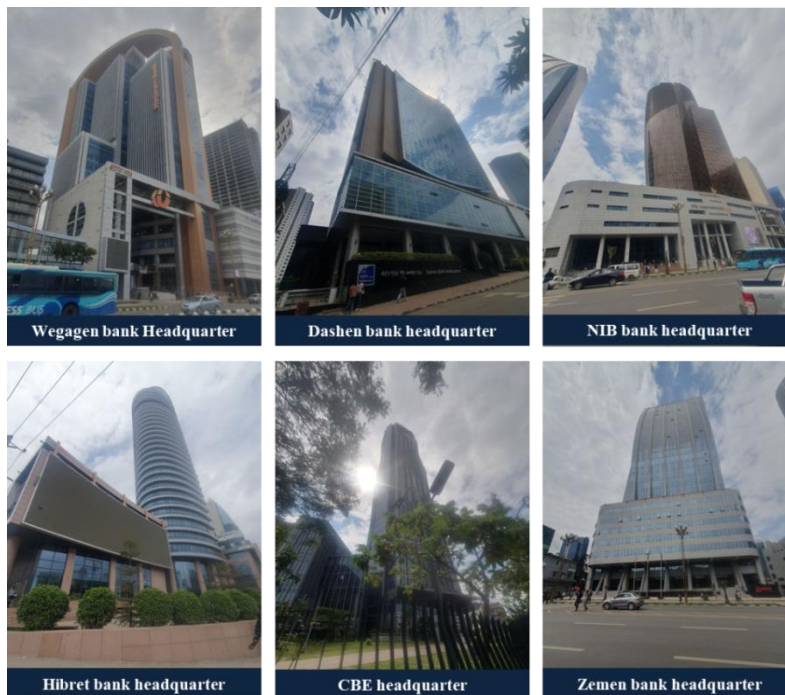


Figure 14: Ethiopian banks that have constructed their own high-rise headquarters
Source: Author's photograph

4. Result

4.1 Economic value impact of high-rise bank headquarters to the local economy

4.1.1 Result of quantitative data on economic value impact of high-rise headquarters to the local economy

To address the economic value impact of high-rise HQs on the local economy, the respondents from five banks that had completed constructing their own high-rise HQs were asked quantitative questions focusing on these core factors: employment impact, local procurement, tax contribution, urbanization, brand and prestige, and also RE market growth.

i. Employment impact

According to the study's analysis, the surveyed high-rise HQs made a very high contribution for temporary job creation during the construction phase, as indicated by a rating of 5 (very high) on the Likert scale. The respondents did not have the exact figure on the number of employees involved in the construction of the HQs, as these professionals and laborers were employed by the contractors, most of whom were international construction companies.

Table 1: Employment impact in operational phase and number of employees

Description	Number of employees		
	Minimum	Maximum	Mean
Full time employees currently working under high-rise bank headquarters	810	3650	1643
Par time employees currently working under high-rise bank headquarters	100	1006	302
	Likert scale measurement (1=very low impact, 5=very high impact)		
Employment impact in operational phase	2	4	2.80

According to Table 1, the surveyed high-rise banks HQs employ a minimum of 810 and a maximum of 3,650 full-time staff, with a weighted average of 1643 employees. Part-time employees in the surveyed high-rise bank HQs range from 100 to 1,006, with a weighted average of 302.

These findings indicate that high-rise bank HQs generate thousands of job opportunities. Regarding the overall employment impact during the operational phase, Likert scale result ranging from 2 (low impact) to 4 (high impact), with a weighted average of 2.80, indicating a moderate positive effect on employment. The results presented in Table 6 in general indicate that these high-rise bank HQs have a good employment impact in the operational phase.

Table 2: Employment density of Ethiopian Banks high-rise headquarters

Description	Employment density of high-rise headquarters, (employees/1000m ²)		
	Minimum	Maximum	Mean
Employment density of the site	.3815	.6565	.4908
Employment density of the building	.0431	.0725	.0534

Table 2 shows that the employment density of the surveyed high-rise HQs ranged from 381 to 657 employees per 1000 m² of a plot area, with a weighted average of 491 employees per 1000 m². In terms of building floor area, employment density ranged from 43 to 73 employees per 1000 m², with a weighted average of 53 employees per 1000 m². These results indicate that these high-rise bank HQs exhibit relatively high employment, meaning that a large number of employees are accommodated within limited urban land.

ii. Procurement impact

The results in Table 3 indicate that the procurement impact on the local market during the construction of high-rise HQs ranged from 6% to 25%, averaging 14.8%. The findings plainly show that these high-rise HQs consume only a small portion of locally supplied construction material.

Table 3: Procurement impact during construction and operational phase

Description	Procurement impact (in %)		
	Minimum	Maximum	Mean
Procurement impact on local market during construction	6	25	14.80
Procurement impact on local market in operational phase	55	70	61.40

According to the analysis, high-rise HQs allocate between 55% and 70% of their operational spending to the local market, with a weighted average of 61.4%. These results, therefore, show more than half of the operational expenses of these high-rise HQs are spent on locally sourced goods, facilities, and services.

As per Table 3, high-rise bank HQs contribute little to local procurement during construction due to reliance on imported goods and services, but they generate a significant positive impact on local procurement during operational phase.

iii. Tax contribution

According to this study's survey, property tax contributions from high-rise HQs vary between 7.9 million ETB and 42.6 million ETB annually, with a weighted average of 16 million ETB. This indicates a substantial contribution of property taxes from these developments to the local economy. This result and interview responses show high-rise bank HQs significantly contribute to

public revenue through property tax, business tax, and employment-related charges.

iv. Impact towards urbanization of the city

According to this study's survey result, the construction of high-rise bank HQs exert a very high impact on urbanization in Addis Ababa, as indicated by a maximum Likert scale score of 5. All measured values – including minimum, maximum, and weighted average – demonstrate a consistently strong effect on the city's urban development.

This result, together with the interview responses, collectively witnesses the significant role of these high-rise bank HQs in shaping Addis Ababa's skyline and urban landscape. These buildings act as landmarks of modernization and confidence by magnifying the identity of the study area as a financial hub, and also, their aesthetic inputs are magnificent.

v. Contribution for the real estate market growth

The values measured from the survey using the Likert scale on a scale of 1 (very low) to 5 (very high) indicate that high-rise bank HQs contributed strongly to real estate (RE) market growth, with scores ranging from 4 to 5 and a weighted average of 4.6. This contribution resulted in higher land values, improved land grading, increased rental rates, and greater attractiveness for commercial activities. Combined with the interview results, this survey results portray the subject.

High-rise bank HQs have catalyzed real estate market activity around the CBD through increased land values and rental rates in and around the study area.

4.1.2 Result of qualitative data on economic value impact of high-rise headquarters to the local economy

The qualitative part of the research offered valuable insights into how different stakeholders perceive the construction of high-rise bank HQs and their broader implications for the local economy.

The qualitative findings from interviews with bank executives, local business owners, and urban development officials reveal that the construction of high-rise bank HQs in Addis Ababa is widely perceived as having significant positive economic and urban impacts. Most respondents highlighted that these projects generate substantial employment opportunities, both during the construction phase and in ongoing operations. This reflects the capacity of such large-scale developments to stimulate job creation not only in the construction sector but also across related industries such as engineering, logistics, and maintenance. Respondents consistently identified job creation as one of the most tangible benefits of high-rise HQ projects during construction and in the operational phase as well.

Participants further emphasized how these towering HQs reshaped the city's skyline, serving as architectural landmarks and symbols of modern urban identity. The buildings are seen as important structures enhancing the aesthetics of Addis Ababa, offering a sense of pride, and projecting an image of progress and innovation. City officials, in particular, noted that these developments promote efficient land utilization by accommodating more functions within limited urban space, which aligns with the goals of compact and sustainable city planning.

Interviewees also associated these HQs with an increase in government tax revenues and

municipal income through property-related taxes, business licensing, and service charges, indicating a fiscal contribution to the public sector. Bank executives and city officials highlighted the significant role of high-rise bank HQs, as they increase national revenues through property taxes, business taxes, and payroll taxes.

Several respondents highlighted how the clustering of such high-rise structures in central business districts has accelerated the urbanization process, drawing new businesses, service providers, and investors into the area. This has led to a rise in land and property values, signaling growth in the real estate market and reinforcing the city's transformation into a vibrant financial hub. Being closer to these high-rise HQs enhances their visibility and attracts more customers, as emphasized by business owners, due to the fact that their existence created an increase in land value, rental price, and increased demand for rental spaces, as mentioned by interviewees.

The existence of high-rise bank HQs promotes other businesses in the surrounding, resulting increased customer flow, especially for service providers like shops, cafes, restaurants, and others, as mentioned by interviewees. Beyond economic perspectives, several participants' highlighted knowledge and technology transfer as an important indirect benefit. The involvement of both local and international contractors, consultants, and professionals in these projects has helped raise technical standards and enhance the capabilities of domestic firms. Such exposure enables local professionals to gain practical experience in modern design, project management, and construction technologies, strengthening the country's human capital in the built environment sector.

4.2 Cost-benefit analysis on high-rise bank headquarters investment

The collected factual data includes fixed investment costs like that of land acquisition, design and architectural fees, construction costs, consulting fees, furnishing, and interior fit-out expenses. Annual operational expenses, annual rental

savings, rental income, and operational savings were all sorts of cost and benefit data collected for performing the CBA. Net annual benefit, NPV, BCR, payback period, and ROI were the CBA tools and techniques used in the study for assessing the efficiency and cost-effectiveness of the high-rise HQ investments.

4.2.1 Net benefit per year

Table 4: Net benefit per year

	Net benefit per year (in ETB)		
	Minimum	Maximum	Mean
Net annual benefit in 2024	25,453,233.13	203,229,723.00	71,627,257.3580

According to the analysis, the minimum net benefit per year is 25.4 million ETB, the maximum net benefit per year is 203.2 million ETB, and the weighted average net benefit per year is 71.6 million ETB. The result manifests that all the results of net benefit per year are positive, which suggests that the project is financially viable in terms of net annual benefit. The study found that these high-rise bank HQs bring more value than they cost, through rental savings and rental income from additional space in the building.

4.2.2 Net present value

In order to compute the NPV, the study utilized the average discount rate in Ethiopia for the last 15_years, during which the trend of constructing high-rise HQs started to appear in the country, the initial investment cost, current annual expenditures, and total annual benefits. The present value of a series of future cash flows can be understood using NPV, which can suggest the profitability of a project in response.

Table 5: Net present value

	Net present value (in ETB)		
	Minimum	Maximum	Mean
Net present value of high-rise bank headquarters	-15,130,232,628.22	-659,150,221.40	-4,243,301,252.20

According to the analysis, the minimum NPV is -15.1 billion ETB, the maximum NPV is -659.1 million ETB, and the weighted average NPV is -4.2 billion ETB. The result manifests that all the results of NPV are strongly negative, which suggests that the project is financially unviable in terms of NPV.

The analysis revealed a negative NPV, indicating that when considering the time value of money, the projected returns may not fully cover the initial investments.

4.2.3 Benefit-cost ratio

According to the analysis conducted, the minimum BCR is 1.75, while the maximum BCR is 1.97, and the weighted average BCR is 1.8558. The result clearly shows how these high-rise bank HQs generate a positive BCR greater than one, though not

substantially so, indicating that the benefits and costs are roughly balanced. Overall, all BCR values being above one suggests that the project is financially viable and carries relatively lower risk.

4.2.4 Payback period

Table 6: Payback period

	Payback period (in years)		
	Minimum	Maximum	Mean
Payback period of the investment	25	76	47

According to the analysis, the minimum payback period is 25 years, while the maximum payback period is 76 years, and the weighted average payback period is 47

years. The result suggests that most of these investments need a longer period of time to earn back the initial investment cost.

4.2.5 Return on investment (ROI)

Table 7: Return on investment (ROI)

	Return on investment (in %)		
	Minimum	Maximum	Mean
Return on investment of high-rise bank headquarters	48.07	275.95	139.28
Annualized return on investment of high-rise bank headquarters	17.20	28.57	22.40

The analysis shows a minimum ROI of 48.07%, a maximum of 275.95%, and a weighted average of 139.28%, indicating that all the ROI values are positive and substantial, confirming the financial viability of the investments. The annualized ROI ranges from 17.20% to 28.57%, with a weighted average of 22.40 %. The results in general indicate a positive and large ROI; the annualized ROI was modest, meanwhile showing the financial viability of the investment.

Insights from the interviews suggest that most bank executives and professionals view the construction of high-rise HQs as a sound long-term investment that serves both financial and strategic purposes. A common theme across responses was the effort to avoid the growing rental expenses that come with operating in leased buildings. By owning their own HQs, banks expect to reduce recurring costs and secure financial stability over time. Several interviewees explained these investments help create a reliable and appreciating fixed asset, which strengthens the banks' balance sheets and improves their overall asset quality.

4.2.6 Result of qualitative data on efficiency and cost-effectiveness of high-rise headquarters investment

As per the respondents, bringing departments together under one roof allows banks to streamline operations and improve efficiency by minimizing duplication and simplifying coordination. Many interviewees linked this physical centralization to smoother communication, faster decision-making and better service delivery. Another strong theme that emerged was the positive effect of the work environment: participants felt that modern, spacious, and comfortable office spaces make employees more productive and motivated, which in turn enhances service quality and customer satisfaction. Beyond the functional benefits, high-rise HQs also serve as a symbol of prestige and trust. The buildings project an image of strength, confidence, and success, qualities that help to attract clients and build investor credibility.

4.3 Comparative analysis of high-rise bank headquarters investment with high-rise commercial developments

Upon the analysis of factual data collected from the data collection tools alongside the researcher's observation, the economic

value of the high-rise bank HQ investment was assessed in a comparative analysis with high-rise commercial buildings in the study area using a hedonic price model. This hedonic price model was specifically made for banks that have already completed constructing their own high-rise HQs and comparative high-rise commercial buildings found in the study area, where initially the research was planning to collect from all six banks that had completed their high-rise HQs and seven high-rise commercial buildings, but among them the researcher was able to collect factual data from five of the banks and six of the high-rise commercial buildings. Therefore, the hedonic price model was applied using only eleven high-rise buildings.

4.3.1 Comparative analysis on the basis of rental price

The first hedonic price model of the study makes a comparative analysis between high-rise bank HQs investment and high-rise commercial buildings on the basis of average rental price per sq. m. per month.

Table 8: Summary of comparative analysis on the basis of rental price

	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	T	Sig.
1 (Constant)	2204.579	667.331		3.304	.187
Plot size or site area (in sq. m.)	-.349	.230	-8.986	-1.521	.370
Built up area of the building (in sq. m.)	.388	.271	10.236	1.431	.388
Total floor area of all floors or gross floor area of the building (in sq. m.)	.000	.001	.037	.146	.890
Total number of floors in the building	-17.014	40.343	-1.068	-.422	.746
Height of the building (in meters)	-5.693	16.413	-1.450	-.347	.787
Is the building a bank HQ? (Dummy)	120.167	111.645	.338	1.076	.310
Building's relative distance to the CBD area or Sengatera (in meters)	-.496	.179	-.610	-2.767	.039
Age of building since completed and started operation (years)	-8.624	14.153	-.199	-.609	.575
Is modern security system available in the building? (Dummy)	-194.410	194.325	-.528	-1.000	.500

	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	T	Sig.
Do HVAC and modern technologies exist in the building? (Dummy)	120.167	111.645	.338	1.076	.310
Is the building's finishing of higher quality? (Dummy)	74.533	115.982	.209	.643	.536
Does the building have the best view? (Dummy)	74.533	115.982	.209	.643	.536

In the hedonic regression analysis of rental prices conducted, the model reveals that proximity to the central business district (CBD) is the sole statistically significant predictor ($B=-0.496$, $p=0.039$), indicating that buildings closer to the CBD command higher rents. In this context, the relative distance of a building from the CBD exhibits a positive and statistically significant effect, implying that each additional kilometer away from the CBD corresponds to an approximate decrease of 0.50ETB in the rental price per square meter.

Other structural attributes, such as, built-up area ($B=0.388$, $p=0.388$) and dummy variables for modern amenities like HVAC systems ($B=120.167$, $p=0.310$), exhibited positive direction as anticipated but lacked significance, potentially due to sample homogeneity or unmeasured market dynamics in the context. Similarly, negative but insignificant effects from age ($B=-8.624$, $p=0.575$) and security features ($B=-194.410$, $p=0.500$) suggest these factors may not differentiate rental values substantially here, underscoring the dominance of locational advantages in driving hedonic prices and implying policy focus on urban centrality for real estate valuation.

The comparative analysis of high-rise bank HQs and other similar high-rise commercial developments based on rental price per sq. m. revealed that high-rise bank HQs generally command higher rental rates. However, as previously noted, the regression result for all core structural and

quality variables were statistically insignificant, except for the variable representing relative distance from the CBD. This suggests that, compared to other commercial high-rises, the difference in rental price per sq. m. for bank HQs is not substantial, and the proximity to CBD plays a more significant role in determining rental prices than simply being a bank HQS.

In fact, this study also examined qualitative data collected from real estate developers and agents working within Addis Ababa's CBD and surrounding high-rise clusters to gain deeper insights into how distance from the CBD and other factors included in the model influence development patterns.

According to the professionals, in terms of determining rental price, location outweighs all other property attributes in the CBD or financial district of Addis Ababa, especially around Sengatera and its surroundings. They explained that rental prices in these areas remain consistently high, regardless of variations in building structures, materials, or age, because demand for prime office and retail space is largely driven by visibility, accessibility, and association with major financial institutions. Tenants often choose properties that enhance their business image or proximity to clients, even if physical quality differences are minor.

Developers further emphasized that the clustering of banks' high-rise headquarters has created a symbolic and economic magnet effect, giving nearby properties

added prestige and stable demand. Once a building appears within this financial district, the area's reputation itself becomes a key factor that sustains high rental rates.

4.3.2 Comparative analysis on the basis of market value

The second hedonic price model of the study makes a comparative analysis between high-rise Bank HQs investment and high-rise

commercial buildings on the basis of market value per sq. m. The market value per sq. m. of a building is a dependent variable, whereas three categories of independent variables, core structural variables, quality variables, and other variables like relative distance to CBD and age of the building were used for performing the analysis.

Table 9: Summary of comparative analysis on the basis of market value

	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	T	Sig.
2 (Constant)	50962.85	6602.320		7.719	.043
Plot size or site area (in sq. m.)	4.82	1.73	.681	2.786	.021
Built up area of the building (in sq. m.)	4.55	1.73	.659	2.630	.027
Total floor area of all floors or gross floor area of the building (in sq. m.)	1.64	.935	.704	2.976	.016
Total number of floors in the building	2366.56	561.46	.815	4.215	.002
Height of the building (in meters)	5940.90	133.02	.830	4.466	.002
Is the building a bank HQ? (Dummy)	58129.76	9604.84	.896	6.052	.000
Building's relative distance to the CBD area or Sengatera (in meters)	-14.192	49.161	-.098	-2.297	.047
Age of building since completed and started operation (years)	-3767.181	2308.299	-.478	-1.632	.037
Is modern security system available in the building? (Dummy)	5190.52	1420.43	.773	3.654	.005
Do HVAC and modern technologies exist in the building? (Dummy)	5812.98	960.48	.896	6.052	.000
Is the building's finishing of higher quality? (Dummy)	5442.48	1177.23	.839	4.623	.001
Does the building have the best view? (Dummy)	5442.48	1177.23	.839	4.623	.001

The gross floor area of a building has a positive and statistically significant effect, with each additional sq. m. increasing market value by approximately 1.64 ETB (B=1.64, p<0.05). The number of stories of a building has a positive and statistically significant effect, with each additional story increasing market value by approximately 2366.56 ETB per sq. m. (B=2366.56, p<0.05). Each additional meter of a building's height is associated with an

increase of approximately 5940.90 ETB per sq. m. in market value, indicating a positive and statistically significant effect (B=5940.90, p<0.05). Being a bank HQ has a positive and statistically significant impact, increasing market value by approximately 58129.76 ETB per sq. m. (B=58129.76, p<0.05).

The regression results of Table 16 show, an increase in a building's relative distance

from the CBD is associated with a statistically significant decrease in market value of about 14.192 ETB per sq. m. per kilometer ($B = -14.192$, $p < 0.05$). Older buildings tend to be less valuable, with market value decreasing by about 3767.181 ETB per sq. m. for every unit increase in age ($B = -3767.181$, $p < 0.05$).

The presence of a modern security system in a building is associated with a statistically significant increase in market value, adding approximately 5,190.52 ETB per sq. m. ($B = 5190.52$, $p < 0.05$). On the other hand, buildings equipped with an HVAC system see their market value increase by about 58,12.98 ETB per sq. m. ($B = 5812.98$, $p < 0.05$). Whereas, the quality of finishing and superior views in a building are associated with a statistically significant increase in market value, rising it by approximately 5,442.48 ETB per sq. m. ($B = 5442.48$, $p < 0.05$).

The analysis indicates that high-rise bank HQs outperform other similar commercial buildings in terms of market value per square meter. When examining market value per sq. m, the hedonic model showed a stronger positive effect from bank HQs compared to other high-rise commercial buildings. This highlights that high-rise bank HQs command a higher market value per sq. m. than other commercial high-rises, showing that their status as bank HQs positively influences value.

The results of the hedonic price model based on market value, unlike those based on rental prices, indicate that all major variables – structural, design, quality, building age, and location – significantly affect market value. To better understand this finding, qualitative data were collected from real estate developers and agents working within Addis Ababa's CBD and surrounding high-rise clusters. Developers

explained that, since ownership implies long-term commitment and financial stability, property buyers assess architectural quality, construction standards, and long-term durability.

Real estate agents added that modern design, advanced materials, and sustainability features often justify higher prices, as they enhance the building's long-term value and prestige. These professionals also pointed out that high-rise bank headquarters, which typically integrate better architecture and engineering quality, are perceived as a symbol of reliability and success, reflecting the institution's financial strength.

Therefore, the qualitative results reinforce the quantitative findings that market value is determined by a combined effect of design, structural, quality, and location factors. In Addis Ababa's urban context, the quality of design, the superior construction standards, modern facilities, and central positioning of bank headquarters collectively elevate their market value compared to other commercial developments.

5. Conclusion

This research aims to assess the economic value of the emerging trend of constructing high-rise HQs by Ethiopian banks, a phenomenon that has recently transformed the skyline of Addis Ababa and reshaped the spatial and economic dynamics of the city's financial sector. The study gathered actual data from banks that had already completed the construction of their own high-rise HQs. The study also made a comparative analysis with other high-rise commercial developments to provide a deeper insight into the economic value of the high-rise HQ construction trend. Guided by three specific objectives; to evaluate the economic contribution of these projects to the local economy, assess their efficiency and cost-

effectiveness, and compare them with other high-rise commercial developments, the study employed both quantitative and qualitative approaches to provide a comprehensive understanding of this growing trend.

The findings demonstrate that the construction of high-rise bank HQs generates substantial economic benefits for the local economy. These projects have stimulated local employment both during construction and in ongoing operations, boosted procurement and service industries, and contributed significantly to taxes and revenues for the government. They have also enhanced the city's urban fabric by improving aesthetics, shaping Addis Ababa's modern image, and creating distinctive architectural landmarks that symbolize institutional confidence and national progress. Furthermore, these developments have contributed to real estate market growth and knowledge and technology transfer to local professionals and have acted as catalysts for business activity in surrounding areas. These outcomes are consistent with the arguments of Lizieri (2009) and Porter (2010), who highlight how major institutional investments can serve as anchors of urban economic vitality and innovation.

In terms of financial efficiency and cost-effectiveness of the investments, the results of the CBA suggest that while these investments are largely viable, their efficiency is mixed. Indicators such as a positive net annual benefit, strong benefit-cost ratio (BCR), and high return on investment (ROI) affirm the short-to medium-term profitability of these projects. However, the negative net present value (NPV) and extended payback period raise concerns about long-term financial efficiency and the sustainability of these investments. This finding echoes Flyvbjerg

(2014) megaproject paradox concept, which cautions that large-scale developments often promise impressive benefits but risk underperformance over time. This concern is also shared by Tadesse (2016) regarding Ethiopia's banking sector.

The comparative analyses with other commercial high-rise buildings further revealed that high-rise bank HQs have the highest market value per sq. m. relative to other high-rise commercial developments. However, rental prices per square meter do not significantly differ between the two, suggesting that factors such as location and proximity to the central business district exert a stronger influence on rental outcomes than building type alone. This finding underscores the importance of urban location dynamics in shaping real estate performance within Addis Ababa's high-rise property market.

Overall, the combined insights from both the quantitative and qualitative analyses lead to a clear conclusion: the growing trend of high-rise HQs construction among Ethiopian banks has delivered meaningful economic value to the local economy. These projects have not only generated real economic value for the local economy but have also helped shape Addis Ababa's evolving identity as a modern financial city. At the same time, the findings remind us that such ambitious investments come with financial and strategic trade-offs that demand thoughtful planning and responsible management. If approached with a balanced understanding of economic efficiency, urban sustainability, and institutional strategy, this trend can continue to serve as a powerful driver of Ethiopia's financial modernization and urban transformation.

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