HAWASSA UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

DEPARTMENT OF ACCOUNTING AND FINANCE

DETERMINANTS OF PROFITABILITY IN HOTEL INDUSTRY: THE CASE OF HAWASSA CITY ADMINISTRATION

A Thesis Submitted to College of Business and Economics of Hawassa University for the Partial Fulfillment of the Requirement for the Award of Degree of Master of Science (MSc) in Accounting and Finance

BY

MESAY PHILIPHOS SHIFA

ADVISOR: ASEGID GETACHEW (PhD)

MAY 2025

HAWASSA, ETHIOPIA

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ADVISORS'APPROVAL SHEET

This is to certify that the research entitled **"*Determinants of Profitability in Hotel Industry: The Case of Hawassa City Administration*"** submitted in partial fulfillment of the requirements for the degree of Master of Science In Accounting and Finance, the Graduate Program of the department of Accounting and Finance, and has been carried out by ***Messay Philipos***, ***Shifa*** under our supervision. Therefore, we recommend that the student has fulfilled the requirements and hence hereby can submit the thesis to the Department of Accounting & Finance.

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We, the undersigned, members of the Board of Examiners of the final open defense by ***Messay Philipos Shifa*** have read and evaluated his thesis entitled **"*Determinants of Profitability in Hotel Industry: A Case of Hawassa City Administration*"** and examined the candidate. This is therefore, to certify that the thesis has been accepted in partial fulfillment of the requirements for the degree of Department of Accounting & Finance

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ACRONYMS/ABBREVIATIONS

CR: Current Ratio

FA: Firm Age

FS: Firm Size

Lnta: Size of Hotel

NGO: Non-Governmental Organization

OECD: Organization For Economic Cooperation and Development

OLS: Ordinary Least Square

FEM: fixed effects model

ROA: Return on Assets

VIF: Variance Inflation Factor (VIF)

ABSTRACT

This study investigates the determinants of profitability in the hotel industry, focusing on hotels within the Hawassa City Administration. Using Return on Assets (ROA) as the measure of profitability, the research examines the influence of key factors including firm size, location, number of rooms, liquidity, and hotel age. Employing both ordinary least squares (OLS) regression and random-effects generalized least squares (GLS) panel regression models, the study analyzes data from 25 observations to identify the significant predictors of hotel profitability. The OLS regression results demonstrate that the model explains approximately 93.6% of the variance in ROA, indicating a strong fit. Findings reveal that location, number of rooms, liquidity, and hotel age significantly influence profitability. Specifically, location has a statistically significant negative effect, suggesting that hotels situated further from urban centers tend to experience lower profitability. Conversely, the number of rooms and hotel age show positive and significant impacts, indicating that larger hotels and those with more operational experience tend to be more profitable. Unexpectedly, liquidity exhibits a significant negative relationship with profitability, implying that higher liquidity may indicate inefficient asset utilization. Firm size, measured by equity, does not show a significant effect in this model. The random-effects GLS model further supports these findings, highlighting hotel age and liquidity as significant predictors of the natural logarithm of ROA (lnROA), while firm size and location lose significance when accounting for group-specific effects. The model explains a substantial portion of between-group variation but little within-group variation, suggesting that differences across clusters largely drive profitability outcomes. Overall, the study underscores the critical role of operational factors such as location, capacity, liquidity management, and hotel experience in driving profitability, while challenging assumptions about the impact of firm size. These insights provide valuable guidance for hotel managers and investors aiming to enhance financial performance in the hospitality sector.

Keywords: *Hotel profitability, Return on Assets (ROA), hotel location, liquidity, firm size, number of rooms, hotel age, random-effects regression, Hawassa City.*

CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

In developed countries, services are generally very heterogeneous and include interesting, complex and often highly innovative, complex and often highly innovative activities. In recent decades, the importance of tangible assets increased continuously. The hotel industry is a very competitive business in which customers put a great emphasis on reliability and the provision of timely services. The vision of all these businesses is to provide customers with high quality class services in order to prosper successfully, and its mission is Ana et al. (2020).

The hotel industry is a key sector in tourism because it is essential to provide all other tourist services; Be the most basic requirement of tourists later to achieve their goal. As a result, this study will choose the hotel industry as an adequate environment for the service economy. Because there are a variety of services in the tourism industry, we focus on the hotel industry, which includes companies that are homogeneous in production and competitive in the environment. In addition, this sector is considered particularly important because it is indispensable for the development of other services in the tourist destination, and because as shown above, high relative weight in all tourist expense (Emilio et al., 2019). Ethiopia, strategically located in the African corner, has a unique historical and cultural heritage, spectacular landscapes, a surprisingly cold climate, rich flora and fauna, important archaeological sites and hospital people. Ethiopia is a place for the African and other international union, there are many international meetings and conferences in Ethiopia. The role of Ethiopia in Africa and the corner grows, and as a result, many international organizations constantly strengthen their institutions and increase their staff in Ethiopia. This opportunity creates a great demand for accommodation in the future, an international standard is expected and even an increase in said demand. Hotels shared in Ethiopia have increased considerably in recent years and is currently growing on a large scale (Tegegne, 2021).

Hotels placed in permanent perfection in terms of providing excellent services and financial performances have a culture focused on quality performance and meet the needs of customers and other parts. Successful companies have quality plans characterized by high quality objectives and specific implementation methods. They focus on the client and the market and solve the

ways to collect relevant information through various tools, such as market surveys and focal groups (Sulistyo, 2022). The hotel focuses on the main concerns of its main clients and tries to provide personalized services. Employee performance and information technology is the main force that helped it achieve its excellent quality (Lamiaa, 2020). Profitability, defined as a financial performance representative, is one of the main objectives of the hotel industry. Gain is a prerequisite for the growing competitiveness of society. In addition, the benefit attracts investors and improves the level of solvency and, therefore, strengthens consumer confidence. The company's financial analysis is an important tool used in mathematics in the process of deciding on the hotel industry of subscription and investment activities. The financial performance of the hotel industry is also relevant within the macroeconomic context because the hotel The hotel, which is able to successfully compete in its industry through the creation of a sustainable competitive advantage for its offer of services and the location of its service successfully in relation to its competitors during the life cycle of this offer will eventually retain customers. Since the hotels do not have clear and documented strategies, management always worries when another competing hotel will open nearby. Sometimes they develop temporary and seasonal service strategies to use them for current situations and opportunities. In principle, this situation leads to unhealthy competition and evaluation of wars in the field. Such a hotel should ensure that it has the necessary systems and strategies to manage demand for its supply (Brida, 2020).

1.2 Statement of the problem

The main problems in this research - a set of cost management, the management of your own capital and the size of the company - are the reduction of profitability in the hotel industry. This effect may be responsible for the inefficiency of the company's operation unless it is able to repay its proper obligation and will not be able to provide the service required by the customer. The profitability of the hotel industry can be threatened as a result.

Currently, one of the biggest challenges for managers in the hotel industry is to ensure and maintain customer satisfaction and profitability. Customers' requirements for quality products and services in tourism are increasingly manifested for professionals (Yan et al., 2020). Guest relations are a strategic benefit of the organization (Rawani, 2018) and customer satisfaction is the starting point to define business goals. In this context, positive relationships can create a

higher customer commitment and increase the payback rate. Long -term and mutually advantageous relationships between customers and the hotel are gradually becoming important due to a highly positive correlation between the overall level of guests' satisfaction and the probability of returning to the same hotel (Maria et al., 2022). Hotels increase their investment to improve the quality of service and perceived value for guests to achieve better satisfaction and loyalty to customers, leading to better relationships with each customer (Vasco et al., 2020). The quality of the relationship has a remarkable positive effect on guest behavior: it creates a positive oral word (WOM) and increases repeated guest rates (Sam Kim 2020).

In fact, many studies consider tourism as the main element of economic expansion. According to the study Lorentino et al. (2021), previous scientists studied in empirical review of determinants of profitability are the size of the hotel in terms of the overall asset, age of the hotel and its own capital. In this study, however, the researcher focused on liquidity, hotel size, capital, location and number of rooms as independent variables and return on assets as a dependent variable.

Despite the importance the factors, there is a lack of comprehensive studies examining their combined effect on hotel profitability in Hawassa. Existing research often focuses on individual determinants without considering their interrelationships. For instance, a study by Taye Zewdu (2021) on hotels in Addis Ababa found that firm size, liquidity management, and firm age positively influence profitability, while the numbers of rooms and location have a negative impact. However, this study's findings may not be directly applicable to Hawassa due to differences in market dynamics, infrastructure, and customer demographics.

Furthermore, many studies conducted in Ethiopia predominantly focus on large urban centers, neglecting smaller cities like Hawassa. Research by Amare Yaekob (2021) on hotels in Aksum highlighted the economic effects of tourism seasonality, revealing significant revenue drops during off-peak months. While informative, such studies may not fully capture the unique challenges faced by hotels in Hawassa, where factors like infrastructure development and local tourism patterns differ.

Additionally, the methodologies employed in existing studies often lack contextual relevance. For example, the study by Ayneshet Agegnew and Tripti Gujral (2022) on manufacturing companies in Hawassa identified firm size, growth, and fixed asset ratio as positive determinants of profitability, while liquidity, leverage, and operating costs had negative impacts. While

informative, this research pertains to manufacturing firms and may not directly apply to the hotel industry, given the sector's distinct operational characteristics.

Moreover, there is a dearth of studies that integrate both financial and operational factors to provide a holistic view of profitability determinants. Research by Lado-Sestayo and Vivel-Búa (2018) utilized partial least squares regression to analyze hotel profitability, considering factors like location, competition, and hotel characteristics. While this approach offers valuable insights, it may not account for specific challenges faced by hotels in developing regions like Hawassa, where infrastructure and market conditions differ.

This study aims to fill the existing research gap by employing a mixed-methods approach, combining quantitative data analysis with qualitative insights from hotel managers and industry experts. By focusing on Hawassa, the research will provide context-specific findings that are directly applicable to the local hotel industry, offering practical recommendations for improving profitability. Furthermore, the study will consider the unique challenges faced by hotels in Hawassa, such as limited access to capital, seasonal fluctuations in tourism, and infrastructure constraints. By addressing these factors, the research will contribute to a deeper understanding of the determinants of hotel profitability in emerging economies and provide a basis for developing targeted interventions to support the growth and development of the hotel sector.

Ultimately, the findings of this study will serve as a valuable resource for stakeholders in the hotel industry, including hotel owners, managers, investors, and policymakers, to make informed decisions that promote profitability and sustainability in Hawassa's hotel sector.

1.3. Objective of the Study

1.3.1 General Objective

The General objective of the Study was identifying Determinants of Profitability in Hotel Industry in case of Hawassa city Administration.

1.3.2 Specific Objectives

In line with the above general objective the specific objectives of the Study as follow:

- ☞ To examine the effect of Hotel Age in profitability.
- ☞ To examine the effect of Location of hotel in profitability.

- ☞ To examine the effect of Number of rooms available in profitability.
- ☞ To examine the effect of size of hotel/firm in profitability.
- ☞ To examine the effect of liquidity in profitability.

1.4. Research Hypothesis

After reviewing different Literature, the Researcher proposes the following directional Hypothesis:

H1: Hotel Age has statically significant and positive effect on profitability.

H2: Location has statically significant and negative effect on profitability.

H3: Number of rooms available has statically significant and Positive effect on profitability.

H4: Firm/Hotel size has statically significant Positive effect on Profitability.

H5: Liquidity has statically significant Positive effect on Profitability.

1.5 Significance of the Study

This study will be of practical importance in consolidation of understanding managers and hotel owners on how to bring a sustainable competitive advantage and improve the strategy of providing services for a four -star hotel in Hawassa. It will also have a significant role in the development of new services to be offered to customers, activate existing services or services in a business relationship and bring important components into service elements in customers' relationships. It also suggests some basic ideas in the way in which four -star hotels in the city could show. The study will therefore have a clear practical importance because it emphasizes the prospects of implementing extensive strategies for providing good services to generate more and better competing advantages over their competitors to increase and attract more customers. They will also recommend some basic and valuable inputs from existing and practical experience with four -star management in the application of service strategies strategy towards their marketing efforts. The study also serves as important data for the newly opening four -star hotels to get improved competitive benefits and help them easily enter the market.

In short, this study will show the analysis of the strengths and weaknesses of four -star hotels according to their standards and management after explaining the strategy of services in profits,

it will indicate a competitive advantage. Finally, this study would serve as a spring stone for those who wanted to study further study in this industry.

1.6. Scope of the Study

In the Ethiopian hotel industry, it is through the provision of services, which probably connects to customers, which needs improvement, and is the widest part of marketing as a whole in the industry. On the other hand, it is the quality of the service that makes a hotel profitable and competitive. There are seven (7) four -star hotels in the administration of the city of Hawassa. Therefore, there have been additional beneficiaries, which then reflects why four -star hotels are selected for this specific research. Among them, five four -star hotels are selected as a sample for this research. The study period is five years (2011 E.C.–2015 E.C.), while the option for the period is to capture the last years of operations.

1.7. Limitation of the Study

This study primarily focused on financial variables as the main indicators for analyzing profitability in the hotel industry within the Hawassa City Administration. While financial metrics such as revenue, operating costs, and profit margins provide essential insights, the exclusion of non-financial performance indicators such as customer satisfaction, service quality, employee engagement, and brand reputation presents a limitation. These non-financial factors often play a critical role in determining long-term profitability and competitiveness in the hospitality sector. Their omission may result in an incomplete understanding of the true drivers of profitability. Future research should aim to incorporate these qualitative aspects to gain a more holistic perspective on hotel performance.

Additionally, the study is limited by its reliance on financial reports covering only a five-year period, which may be influenced by macroeconomic fluctuations, political events, or industry-specific disruptions during that timeframe. Such external factors could distort the assessment of the actual impact of selected financial determinants on profitability. Moreover, the small sample size and the exclusive use of quantitative data restrict the study's ability to make broad generalizations across the entire hotel industry in the region. A more comprehensive study with a larger, more diverse sample and a mixed-method approach including both quantitative and qualitative data would enhance the robustness and applicability of the findings.

1.8. Organization of the study

The document was organized in five chapters. The first chapter includes the underlying information, the declaration of the problem, the general and specific objectives, and the importance of the study together with the research questions, the scope, the limitations and the organization of the research work. Chapter two presents a review of relevant theoretical literature, empirical literature and the conceptual framework of the study on the research problems in question. Chapter three includes the research design adopted for research and describes the methodology to carry out primary and secondary data collections. Chapter four includes the descriptive and inferential analysis, that is, the presentation of the results and the discussion of the findings. In Chapter 5, the conclusions, recommendations and future research addresses are discussed.

CHAPTER TWO

RELATED LITERATURE REVIEW

2.1. Theoretical Literature Review

2.1.1. Terminological definition of hotel

A distinctive characteristic of the theory of hotel management refers to the complexity that arises from the range of various activities carried out (for example, accommodation, food and drinks, laundry, etc.) within a Building where the provision of services coincides with customer service consumption. The hotel manager is often criticized for trying to use "too many hats", problems with poor performance Hotel restaurants are often attributed to different central competitions required in hotels and restaurants. Tragic national customers of food and beverage observe in full-service hotel Outdoor hotel clients (SUNG, 2022).

The hotel is part of the service industry, which is a term umbrella for a wide variety of services Industries, including, among others, hotels, restaurants and casinos. The hotel is often referred to As a "home away from home." If we consider the meaning of the "hotel" in the dictionary, hotels Serve as commercial establishments that offer temporary accommodation to travelers, generally With rooms and suites for guests (Umar et al., 2020).

2.1.2 The Concept of Profitability

There is a large volume of published studies that describe the role of the company's profitability in economic growth. In relation to other institutions and industries, the tourism sector has become a growth pole in the economic development process in recent years. Seasonality is one of the challenges for this industry, which leads to instability in profitability. This variation makes it important to study the determinants of profitability. Profitability directly affects the value of the company, as evidenced by the studies that show that greater profitability correlates with a greater valuation of the company (Talunohi and Bertuah, 2022) (Sukendri and Aryawati, 2021).

It has been conclusively demonstrated that tourism is a vital driver of economic growth, as evidenced by studies that show a positive long -term impact on GDP in regions such as Singapore, where tourist elasticity is observed in 0.14 (Karimi et al., 2024). Tourism contributes

significantly to economic growth, particularly in developing countries, by providing employment opportunities and stimulating local economies through the increase in visitors spending (Jiao, 2023). To investigate the relationship between economic growth and tourism development, most researchers have used time series models as research methodology. Despite using the same methods in this process, mixed and conflicting results are obtained.

2.1.3 The concept of Return on Asset

Average asset performance (ROA) is considered as a main measure of profitability in this investigation. For the purposes of the study, the percentage of these proportions is handled. This relationship is one of the most important profitability measures. ROA is described as an evaluation of the capacity of a company to obtain profits from its assets. It shows the effectiveness of the company's asset management to obtain more income. It can be said that this variable is an indicator used to measure the company's performance. ROA provides a clearer image of how effectively a hotel uses its assets to generate profits, which is crucial given the high capital investment in hotel infrastructure (Paksoy, 2022).

2.1.4 The Concept of Cost Income Ratio

It is the main key performance index which defines the relationship between operating the efficiency and profitability. This financial ratio gives the investors a view of changing costs compared to income. Rising in this factor has a negative impact on profitability. Hotels may implement cost-cutting measures, such as downsizing or altering service offerings, to manage the cost-to-income ratio (Kang & Kang, 2015). This can lead to a decline in customer satisfaction and repeat business.

Customer profitability is significantly affected by the costs associated with servicing different customer segments. For instance, larger customers may require more resources and discounts, leading to reduced profitability, while average customers often yield higher margins due to lower service costs (Tarziev et al., 2018).

2.1.5 The Concept of Firm Size

The Logarithm of total assets, are used to measure the firm’s size. This factor is always shown as the logarithm in analysis. The impact of this variable on profitability is complex. On one hand, larger firms have more ability to raise their product than the smaller one. It means that these

firms can keep the risk as low as possible which leads to higher profitability. Size, with larger firms typically facing higher costs due to increased complexity in management and decision-making processes (Ramcharan, 2022; Alsaraireh, 2024).

It is a well-known theory that companies can gain from economies of scale or scale of efficiency; that is as companies grow, they will be able to comparatively reduce the costs and achieve higher profitability. Larger hotels benefit from economies of scale, leading to reduced costs per unit and improved operational efficiency (Bejan, 2020, Bejan et al., 2017).

2.1.6. Study on the Hotel Industry in Ethiopia

Ethiopia is one of the African countries that has the largest number of UNESCO World Heritage sites in Africa, with 8 sites distributed throughout the country and, therefore, has great potential to develop as a tourist destination. The Government of Ethiopia (GOE) has prioritized the development of tourism in its development strategy, PASDEP1, to optimize existing tourism resources as a driving force of economic growth for the whole country. The Prime Minister, Mr. Meles, has also mentioned the important role of tourism development in the reduction of poverty in the "Tourist Paradigm" document, which was prepared several years ago with the support of the United Nations World Tourism Organization (UNTTO, 2021).

Ethiopia is a strategically important country in the horn of Africa for most countries and, therefore, many international meetings and conferences are held in Ethiopia. This creates a great demand for accommodation in an international standard, and even an increase in this demand in the future is expected because the country has adopted several policy strategies to maintain this growth, including the development of light and infrastructure manufacturing projects, which have attracted international funds (Kresna et al., 2018).

However, the accommodation supply is well below the necessary level to meet demand. There are only fourteen five -star hotels in Addis Abeba, and hotels of an international standard can rarely be found in the regions, even where there are international tourist attractions, such as Lalibela (Staikouras and Wood, 2004). Many hotels and lodges are under construction, stimulated by the GOE initiative and the strong increase in demand. Since the hotel industry can create job opportunities for so -called blue neck workers, the development of the hotel industry benefits not only the tourism sector but also to the reduction of poverty. In addition to the importance of the industry itself, since hotels are in the center of supply chains, such as food,

crafts incorporate cultural narratives, which act as tangible representations of local heritage, which improves tourist experience and promotes cultural exchange (Ara et al., 2022).

The international hotel classification system is adopted in Ethiopia and hotels are classified into categories with stars from one to five and hotels without stars. Considering the objectives of this report, the focus is on the eco-tourism lodges, The presence of four-star hotels can elevate local supply chains, increasing demand for local products and services, thereby boosting the local economy (Gu et al., 2023). The impact of international affiliation on hotel performance is multifaceted, with management contracts often recommended for independent hotels seeking to join chains. Research indicates that management structures significantly influence guest satisfaction and operational effectiveness. Management contracts are shown to outperform franchising in upscale hotels due to better knowledge transfer and enforcement of quality standards (Fernández-Barcala et al., 2022). Conversely, franchising may be more beneficial for larger hotels, addressing managerial shirking and standardizing procedures effectively (Fernández-Barcala et al., 2022).

2.1.7. Management Efficiency and Hotel Profitability

Although research literature investigates the hotel industry using non -parametric data wrapping analysis, little attention has been dedicated to the relationship between efficiency and profitability. In addition, financial indicators should be considered as final indicators. The operational indicators that measure the efficiency in the use of resources within the hotel industry cover several dimensions, including energy, labor and water management. These indicators are crucial to improve sustainability and economic performance in a competitive market.

Hotel managers are increasingly adopting measures to reduce energy consumption, such as monitoring usage and investing in alternative energy sources (Nica et al., 2023).

The integration of energy management systems has been shown to significantly lower operational costs and improve sustainability outcomes.

2.1.8. Four Star Hotel Quality Standard

The international standard of tourist hotels is high -class hotels (of the level of three to five stars). Services Like Bedrooms, Catering, Conference Halls and Meeting Rooms, A Multipurpose Assembly Hall, a swimming pool, A Spa (Hot Spring), to Gymnasium, A Sauna

and Massage, other sports facilities like tennis or squash, mini-golf or Badminton, Bowling, Table Tennis, and a Children's Playground, A Night Club with Dancing to Live Music or a Discotheque or Cabaret, etc. In This Profile is considered a study, it is considered that an international four -star tourism hotel provides tourists and local and international guests such as rooms, catering (traditional and international), conferences rooms and meeting rooms, a multipurpose assembly room, a gym, spa services and laundry services (Rengifo and Ozsoz, 2014). In Ethiopia, four -star hotels are built according to certain standards. These standards are shown in what is shown below:

2.1.9. Sample Criteria for "Four Star Hotels" Standard in Ethiopia

According to the Ministry of Culture and Tourism, 2014, the definition of the hotel characteristic "is the identification plate of the accessibility and address signal. The hotel facilities are in accordance with the comfort of the guests, the safety and the beautiful and excellent landscapes. A main entrance for the guests and the special needs of the employees and the deliveries must be adequate for the operation of the hotel. Suitable for the hosts of the hotel.

According to the Ministry of Culture and Tourism, 2014, the definition for lobby such as: Internet service (business center), floor, wall and roof, well illuminated at all times, for the security and comfort of the guest. Public telephone, air conditioning that guarantees thermal comfort, allowing the regular guest in accordance with the age and luggage facilities of the local condition, the service of the Conjunction Service Paging System

According to the Ministry of Culture and Tourism, 2014 the definition of reception of the front officers such as: Reserve, Reception, Account and Network Information System with other points of sale, Transparent Operational Guest Relations Service and Safety Deposit Service of the attractive system with 24 -hour receipt service. Currency exchange service, acceptance of the credit card according to bank regulations and qualified personnel professionally must be there. First aid kit with all the highest standard service of supply According to the Ministry of Culture and Tourism, 2014 the definition of the rooms as: height of the bedroom door 2m., Minimum bed size of beds excluding individual entries = 12m2. Double = 20m2a minimum of 10 accommodation housing unit. Minimum bed size, only 1.20 mx2.mdube 1.5mx2. m. For every 100 rooms, at least 2 bedrooms must be assigned for people with special needs. Lights with artificial lighting level and curtains and controllable color carpets the doors of the key of the

Ecteronic card key must be numbered or otherwise designated with clear signage and a better-quality finish. Each bedroom will be marked, to show its fire exit procedure position, entry and exit plan, which is expected to continue in case of emergency brochures must be produced in different languages. Services, room rates and other special positions in informative brochures in English and Amárico must be provided, if necessary, in regional languages that regulate air conditioning in all rooms. Mirror dressing table. Lack of luggage. MINI Automatic bar embedded with at least 10 cloth and drawer hangers. In the bedroom and living room, an electric bell, light sign or phone for internal communication. Color TV with different channels in bedrooms

According to the Ministry of Culture and Tourism, 2014 the definition of restaurant such as: two restaurants that offer breakfast, lunch and dinner. Public rest room, adjacent to the restaurant and be of high quality. A specialized restaurant. An Ethiopian cultural restaurant. A 24 -hour output that offers food and drinking service. Extensive choice of different food and international food services. Menu with prices and well -saved that includes food and drinks

According to the Ministry of Culture and Tourism, 2014 the definition of bar as: modern, well -built and equipped high quality bars, not less than two. Snacks at local or international level. Food and drink menu with separate high-quality prices. Ware to be silver or special stainless steel and fine porcelain. High quality drink shelves. High quality refrigerators, coffee maker, bar counter, sink with hot and cold running water. Complete service utensils. Chair and table. Floor, wall, ceilings, windows, utensils with high quality finish, comfort. Food and beverage service well trained, efficient, ethical and arranged. High degree of food and beverage service. According to the Ministry of Culture and Tourism, 2014 the definition of function as Hall as: an area of no less than 300 square meters. with high quality finish that offers a greater degree of service of total use functions. In addition, at least 2 union rooms with different sizes.

2.2. Empirical literature Review

The Profitability, measured primarily through Return on Assets (ROA)**,** reflects a firm's ability to generate earnings from its operational and financial resources (Alipour et al., 2022). In the hospitality sector, profitability is influenced by both internal management decisions (e.g., cost control, asset utilization) and external factors (e.g., tourism demand, economic conditions) (Assaf et al., 2021). Recent studies emphasize ROA's reliability for cross-industry comparisons

due to its normalization by total assets (Baum et al., 2021). However, alternative metrics like Return on Equity (ROE) **or** Gross Operating Profit per Available Room (GOPPAR) are also used, particularly in asset-light hotel models (Sainaghi & Baggio, 2020). The choice of profitability measure often depends on stakeholder priorities investors may prefer ROE, while managers focus on GOPPAR (Park & Kim, 2023).

The relationship between "years in business" and hotel performance is multifaceted, with evidence suggesting that experience enhances various organizational resources, including reputation and strategic capabilities. This accumulation of resources positively influences hotel performance. Hotels with more years in business tend to develop a stronger reputation, which can attract more customers and enhance performance (AUTHOR_ID et al., 2024).

Hotels with fewer years in business implement new technologies and new amenities capable of attracting consume with higher purchasing power. Moreover, new facilities have better performance in terms of energy saving as well as water and waste management. Since the findings are contradictory, it is assumed that the relationship is non-monotonic; Age is a determinant of profit efficiency, with empirical studies showing an average profit efficiency of 45.85% in hotels, influenced by factors including age (Arbelo et al., 2018).

Location is a critical yet increasingly nuanced factor in hotel profitability. Traditional agglomeration theory posits that proximity to tourist attractions or business hubs boosts occupancy rates and revenue (Yang & Luo, 2023). However, the rise of digital platforms (e.g., Airbnb) has diluted location advantages for budget and mid-scale hotels (Belarmino et al., 2023). Studies in Addis Ababa's hotel industry found that urban hotels near airports commanded 15–20% higher ROA than rural counterparts (Nicolaides, 2022). Yet, location's significance varies by segment luxury hotels still rely on scenic or exclusive locales (Lee & Jang, 2021). Hawassa's lakeside hotels, for example, may benefit from tourism clustering, but this requires empirical validation.

Room capacity directly influences revenue potential but is subject to diminishing returns. An economy of scale theory suggests that larger room inventories reduce per-unit operational costs (Alipour et al., 2022). Empirical evidence from East African hotels supports this: a 10% increase in rooms correlated with a 2.1% ROA rise, provided occupancy rates exceeded 60% (Chen et al., 2020). However, Park & Kim (2023) caution that overcapacity leads to higher maintenance costs

and reduced profitability during low-demand periods (e.g., COVID-19). In Hawassa, where seasonal tourism dominates, optimizing room counts to match peak demand cycles may be critical (Gursoy & Rahman, 2021).

Firm size, measured by total assets or employee count, has divergent effects on profitability. Transaction cost theory posits that larger hotels achieve cost advantages through bulk purchasing and centralized management (Hsu et al., 2023). However, diseconomies of scale such as bureaucratic inefficiencies can erode these benefits (Jang & Park, 2021). A 2023 study of Ethiopian hotels found that mid-sized firms (50–150 rooms) outperformed both small and large hotels in ROA, suggesting an optimal scale (Delgado-Márquez et al., 2021). Hawassa's market, dominated by small-to-mid-scale hotels, may mirror this trend, but localized data is needed.

Liquidity is the most consistently significant predictor of hotel profitability. Financial flexibility theory argues that liquid firms can navigate economic shocks and invest opportunistically (Khalaf & Tahtamouni, 2023). Empirical studies show a robust positive correlation between current ratios and ROA, with a 1-standard-deviation increase in liquidity boosting ROA by 4.7% in African hotels (D'Amato, 2022). However, excessive liquidity may indicate poor capital allocation, as seen in Jordanian hotels where cash-rich firms underperformed in ROA by 1.3% (Al-Najjar, 2020).

2.3 Research Gap and Summary of Empirical Review

The previous researchers as studied in empirical review about determinants of profitability are size of the hotel in terms of total asset, age of hotel and debt. However, in this study, the researcher was focused on Number of rooms available, Hotel Age, Location, Firm/Hotel Size and Liquidity as independent variables and profitability i.e. Return on Assets (ROA) as dependent variable. Therefore, involvement of Number of rooms available, Hotel Age, Location, Firm/Hotel Size and Liquidity effect of profitability in the study is the gap of the study. This research analyzes the determinants of profitability in Hotel Industry in Hawassa city.

Despite extensive research on hotel profitability determinants in developed economies, empirical studies focusing on African markets, particularly Ethiopia, remain scarce (Assaf et al., 2021). Most existing literature examines North American, European, or Asian markets, where infrastructure, tourism demand, and financial systems differ significantly from Sub-Saharan

Africa (Alipour et al., 2022). For instance, liquidity's role in Ethiopian hotels is underexplored, though studies in Kenya and South Africa suggest it may be more critical due to volatile economic conditions (Khalaf & Tahtamouni, 2023). Additionally, the impact of location in secondary cities like Hawassa where tourism is seasonal and less international has not been rigorously tested (Nicolaides, 2022). This gap limits the applicability of global findings to Ethiopia's unique hospitality ecosystem, where informal financing and localized demand patterns prevail (García-Teruel & Martínez-Solano, 2023).

Existing research disproportionately focuses on urban and high-tourism zones, neglecting secondary cities with emerging hospitality sectors (Belarmino et al., 2023). For example, studies on Addis Ababa's hotels show location advantages near airports or business districts (Yang & Luo, 2023), but Hawassa's lakeside tourism dynamic may yield different outcomes. The rise of digital platforms (e.g., Airbnb) further complicates this, as rural or peri-urban hotels can now bypass traditional location disadvantages (Sainaghi & Baggio, 2020). No recent study has examined whether Hawassa's hotels benefit from proximity to Lake Hawassa or if digital adoption mitigates geographic constraints (Park & Kim, 2023). This gap underscores the need for spatially diversified analyses in hospitality research.

While liquidity is universally recognized as a profitability driver, its optimal thresholds are underexplored in hotel studies. Excessive liquidity may indicate inefficiency in capital deployment, yet no African research identifies the "tipping point" where cash reserves become detrimental (Al-Najjar, 2020). For instance, D'Amato (2022) found that European hotels with current ratios >2.5 underperformed, but similar benchmarks are absent for Ethiopian hotels, which operate in higher-risk environments. Hawassa's hotels, often reliant on seasonal cash flows, may require unique liquidity strategies, but empirical guidance is lacking (Baum et al., 2021). This gap calls for studies correlating liquidity ratios with ROA under varying economic conditions.

The number of rooms is typically linked to profitability via economies of scale, but this assumes stable demand a flawed assumption in seasonal markets like Hawassa (Chen et al., 2020). Research in East Africa shows occupancy rates fluctuate by 30–50% between peak and off-seasons (Gursoy & Rahman, 2021), yet no study models how hotels should adjust room inventories to maximize annual ROA. For example, could hybrid models (e.g., renting unused

rooms as co-working spaces in off-seasons) improve profitability? Current literature also ignores maintenance costs, which rise nonlinearly with room count and erode margins (Lee & Jang, 2021). Hawassa's hotels, often family-run, may face unique scalability challenges unaddressed in global studies

The reputation associated with conversely, older firms may develop bureaucratic structures that hinder adaptability to market changes, potentially leading to decreased profitability (Guerrazzi et al., 2022). Research indicates that the age of a firm's leadership can moderate the relationship between firm age and profitability, suggesting that younger leaders may better navigate market dynamics (Wibowo & Honggowati, 2022).h longevity in the tourism industry can lead to increased customer trust and loyalty, positively impacting profitability(Wibowo & Honggowati, 2022).

The reviewed literature confirms liquidity and room capacity as robust profitability predictors but reveals critical Gap Hotel Age, firm size, and location dynamics for Ethiopian hotels (Berger et al., 2022).

2.4: Conceptual Framework of the Study

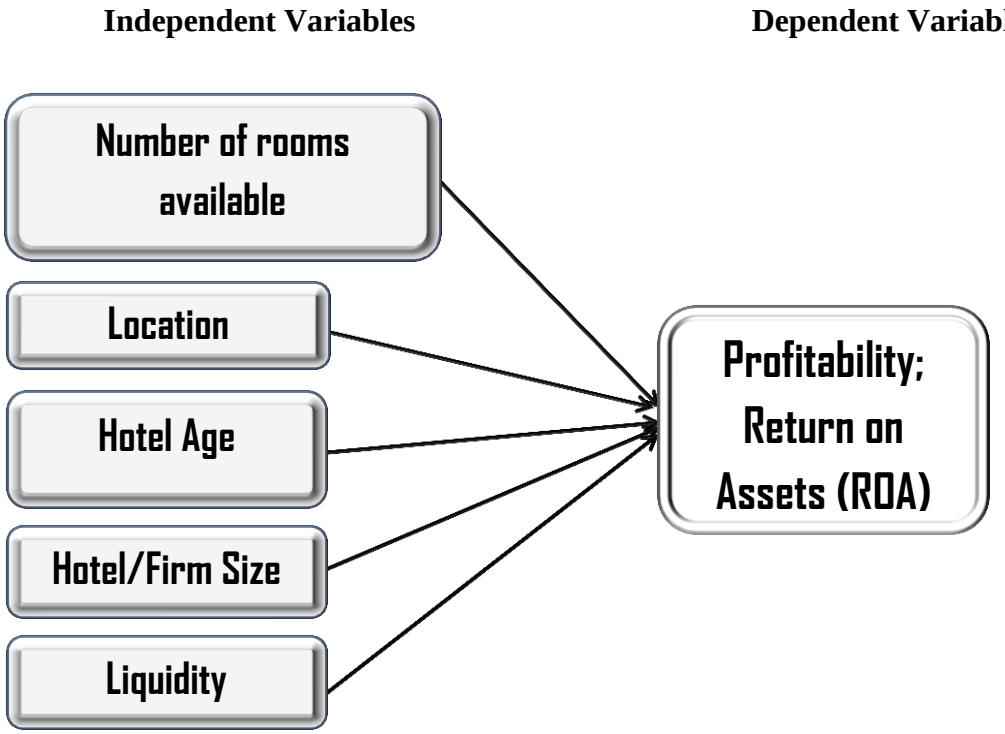

Figure 2. 1 : Conceptual framework

Source: Adapted from Sharif (2010) with mirror modification

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter treats the design of the research and the approaches that were used; population, sample size and sampling techniques; data sources; data collection instruments; and data collection procedures. The chapter also presents data analysis methods and ethical considerations for the study.

3.1. Description of the study area

The study was conducted in the Hawassa city of Sidama Regional State of Ethiopia. Hawassa city is located in southern part of Ethiopia, at a distance of 275 km from Addis Ababa. The City of Hawassa enjoys favorable climatic conditions because of its geographic location on the shores of Lake Hawassa, Rainfall mostly occurs in the summer season. The daily minimum and maximum temperature values are always moderate. Much of the population growth has been the result of internal migration and expansion of educational and other facilities, also widening of the city's boundaries has caused some of the increase. Hawassa has a young population. Around 65% of the people are under 25 years of age, and only about 5.5% of the population is over 50 years of age. Hawassa city is divided in to Eight (8) sub cities and Each sub cities is divided in to 32 Kebeles, These Eight sub cities are Hayek Dare, Menehariya, Tabore, Misrak, Bahile Adarash, Addis Ketema, Hawela Tula and Mehal sub city. (Source: Sidama Regional State Finance and Economic Development Bureau 2025 E.C)

Figure 3. 1: Hawassa city map

Source: MOFED of Hawassa city Administration (2025)

3.2. Research Design and approach

The research design helps the researcher in the allocation of limited resources when raising crucial options. The plan is the general scheme or program of the research (Cooper, 2003). This study identified determinants of profitability in the hotel industry in the case of the administration of the city of Hawassa. The researcher used quantitative research. For the researcher, the researcher used a regression model to analyze the data, which were collected from

four -star hotels in the administration of the city of Hawassa. Those are the Haile Resort, Lewi Resort, Central Hotel, South Star and Pina hotels, which involve an explanatory survey design, which can help the study clearly explaining the state of things in the study area. A researcher selects on purpose four stars hotels in Hawassa City as a way of obtaining the best information by selecting articles or people who are more likely to have experience or experience to provide quality information and valuable knowledge on the subject of research. The study also uses secondary data from secondary sources using appropriate data collection methods. The researcher wanted to analyze the data collected from four -star hotels in Hawassa City. The researcher selected four -star hotels in the administration of the city of Hawassa and collected his annual reports from 2011 to 2015 E.C. There are currently 7 four -star hotels; from them, 5 (71%) five -star hotels have been selected using intentional sampling techniques.

3.3. Population of the Study

The researcher focused on four-star rated hotels; those have been served for eight years and above operation and provide five-year financial report (income statement and balance sheet) in Hawassa city administration. There are seven (7) five-star rated hotels in Hawassa city administration.

3.4. Sampling Techniques of the Study

Depends on entirely on the expert judgment, the researcher used purposive sampling technique of non-probability sampling to select targeted population. The reason to purposive method is having five years for the period 2011 to 2015 E.C financial report (income statement and balance sheet).

3.5. Sample Size of the Study

To have a fair representativeness of the sample size for the study of the total numbers of the seven (7) Four Star Hotels, the researcher selected Five (5) four-star Star Hotels purposively based on eight years operation.

3.6. Data and Data Collection

To gather the necessary data copies of audited financial statements in the form of income statement and statement of financial position over the period of 2011 to 2015 E.C was used.

Most of the required data was collected from the financial statements submitted to the Ministry of Revenue (MOR) in Hawassa Office and the data was obtained directly from the respective Hotels financial statements. The researcher was used Secondary data for the period of 2011 - 2015 E.C for five year.

3.6.1. Descriptive statistics

The descriptive statistics were used to describe and discuss the characteristics of a data set in a more general and orderly manner than the use of unprocessed data alone. They are routinely used in reports that contain a significant amount of quantitative data. These statistics are essential to use all normative and affect statistical techniques effectively, including hypothesis tests, correlation and regression analysis. Unless these techniques are completely understood, the data can easily be misunderstood and, consequently, misrepresent. Within the context of the description of the data, the researcher chose the average and the median to measure the central trend, while choosing the standard deviation to measure the dispersion of the sample studied. The central tendency measures indicate the midpoints and commonly occurred in a data set, in which the average is the average value of a data set, while the median is the average value in this data set. Dispersion measures indicate how data is disseminated around the average, in which the standard deviation is the average difference between the observed and average values.

3.6.2. Correlation analysis

The study used Pearson's correlation analysis to define the association between company profitability and working capital management. There are a majority of previous research that has chosen to use Pearson's correlation analysis to first see the correlation between the variables before performing regression analysis (s) (Huynh and its, 2010; Padachi, 2006; Zariyawati, Annuar and Abdul Rahim, 2009; Grill et al., 2010; Hayajneh & Yassine, 2011). However, one of the deficiencies of correlation analysis is that it cannot identify a cause-and-effect relationship. In addition, examining the simple bi-variant correlation in a conventional matrix does not take into account the correlation of each variable with all other explanatory variables (Padachi, 2006). Consequently, it is the consequence to use regression analysis as the next step.

3.6.3. Regression analysis

Review of the literature on regression models used by other academics to investigate the influence of working capital management in the company's profitability, other researchers have

used different regression analysis with different models. Huynh and his (2010) only chose the fixed effects model (FEM) to perform the regression analysis to investigate the WCM effect on corporate profitability. According to them, FEM assumes specific interceptions of the company, which capture the effects of variables that are particular for each company and constant over time. Different from Huynh and his (2010), Sharma and Kumar (2011) selected the ordinary minimum (OLS) as their choice to perform the regression analysis. As a combination, Deloof (2003), García-teruel and Martinez-Solano (2007) and Padachi (2006) used FEM and OS to investigate the impact of WCM on corporate profitability.

The number of literature reviews shows that ordinary square minimums (OLS) are mainly chosen to examine the WCM effect on the company's profits. In the context of this thesis, the researcher was also chosen these two types of analysis together with the explanation of the justification behind my choice.

3.6.5. Other diagnostic tests for regression models

A. Detect multicollinearity problem

Detect multicollinearity problems by evaluating the estimates of the F. test. Multicollinearity is a statistical phenomenon in which two or more independent variables in a multiple regression model are highly correlated. In this situation, coefficient estimates can change erratically in response to small changes in the model or data. Multicollinearity does not reduce the predictive power or reliability of the model as a whole, at least within the sample data; It only affects the calculations with respect to the individual independent variables. That is, a multiple regression model with correlated independent variables may indicate how well the entire package of independent variables predicts the dependent variable, but may not give valid results on any individual independent variable or on which the independent variables are redundant with respect to others (Farrar and Glober, 1967).

F = 1/(1-RJ2), where RJ2 is the coefficient of determining a regression of the independent variable J in all other independent variables. A 10 and more if indicates a multicollinearity problem (O'Brien, 2007). This test was also used by Huynh & Su (2010) and Grill, Biger and Mathur (2010).

3.7. Variable of Definition and Measurement

3.7.1. The Dependent Variable

The dependent variable is the variable that is the effect or is the result or outcome of other (independent) variables (Neumann, 2007). In this study the dependent variable is the Profitability as explained below.

Return on Assets (ROA): Return on Assets (ROA) measures a firm's profitability relative to its total assets, indicating how efficiently management utilizes assets to generate earnings (Alipour et al., 2022). It is a key financial metric used to assess operational efficiency and overall financial health. Measured as ROA is calculated as: ROA=Net Income/Total Assets×100. Net Income = post-tax profit from financial statements (Lee & Park, 2023) and Total Assets = Sum of current and non-current assets (Berger et al., 2022). ROA aligns with resource-based view theory, emphasizing asset utilization efficiency (García-Teruel & Martínez-Solano, 2023). Recent studies (e.g., Baum et al., 2021) confirm its reliability in cross-industry profitability comparisons.

3.7.2 The Independent Variables

The determinants of profitability in this study are divided into internal and external factors which are defined in the following section:

Number of Rooms Available: This variable quantifies the physical capacity of a hotel, reflecting its ability to accommodate guests and generate revenue (Chen et al., 2020). Can be measured as total count of rentable rooms (Alipour et al., 2022). Excludes non-revenue spaces (e.g., staff quarters) (Park & Kim, 2023). Linked to economies of scale theory, where higher room counts may reduce per-unit costs (Gursoy & Rahman, 2021). However, diminishing returns can occur if demand is insufficient (Zhang et al., 2020).

Location: Geographic positioning influencing accessibility, demand, and competitive advantage (Belarmino et al., 2023). Measured as a Categorical variable: Urban vs. rural, proximity to attractions (Nicolaides, 2022) i.e. Distance (km) from airports/business hubs (Yang & Luo, 2023). Agglomeration theory suggests clustering benefits (Assaf et al., 2021), but digital platforms reduce location dependence (Sainaghi & Baggio, 2020).

Liquidity: Ability to meet short-term obligations without disrupting operations (Khalaf & Tahtamouni, 2023). Measured as Current Ratio i.e. Current Ratio = Current Assets/Current Liabilities (D'Amato, 2022). Cash Reserves: Absolute cash holdings (Baum et al., 2021). Financial flexibility theory highlights liquidity's role in crisis resilience (Al-Najjar, 2020).

Firm/Hotel Size: Scale of operations, often proxied by asset base or employee count (Delgado-Márquez et al., 2021). Measured as the **Log of Total Assets** (Hsu et al., 2023). **Number of Employees** (Cowling et al., 2020). **Transaction cost theory** suggests size impacts efficiency, but diseconomies of scale may arise (Jang & Park, 2021).

Hotel Age: Several performance studies in the hospitality literature have examined the relationship between the "years in business" and hotel performance. Ben Aissa, S. and Goaied, M. (2016), suggested that hotel performance increases with facilities age. In fact, they argue that hotels gain on organizational resources, such as experience, reputation and local or international brand. All these resources could positively influence strategic, operational as well as innovation decisions. The age of firm measured by the number of operation years.

Table 3. 1: Summary of the definition and measurements of the variable

Variable	Definition	Measurement	References
ROA	Profitability per asset unit	Net Income / Total Assets X 100	Alipour et al. (2022)
Rooms	Physical capacity	Count of rentable rooms	Chen et al. (2020)
Location	Geographic advantage	Urban/rural, distance metrics	Belarmino et al. (2023)
Liquidity	Short-term financial health	Current ratio, cash reserves	Khalaf & Tahtamouni (2023)
Firm Size	Operational scale	Log(Assets), employee count	Delgado-Márquez et al. (2021)
Hotel Age	Age	Number of operation year	Arbelo et al. (2018)

Source: researchers' own compilation (2025)

3.8. Model specification

The regression analysis is conducted to find out the following:

The relationship between Number of Rooms available, Location, Firm/Hotel Size, Hotel Age and Liquidity and profitability i.e. *Return on Assets (ROA)* in Hawassa hotel Industry: the researcher used 5 years period (2011-2015 E.C) for four stars Hotel Industry; this is multivariate regression model which is presented below:

$ROA = \alpha + \beta_1 NRA + \beta_2 HA + \beta_3 L + \beta_4 HS + \beta_5 Liq + \varepsilon$

Y- Dependent variable

X- Independent variables

β- Coefficient of independent variable

α- constant

ε -error term

ROE- profitability indicator

NRA - Number of rooms available

HA- Hotel Age

L - Location

HS - Firm/Hotel Size indicator

Liq- Liquidity Ratio

It is the regression function which determines the relation of Xs (NRA, L, HS, Liq, and HA to Y (ROA). α is the constant term and β is the coefficient of the function, it is the value for the regression equation to predict the variances in dependent variable from the independent variables.

The regression equation becomes:

$ROA = \alpha + \beta_1 NRA + \beta_2 HA + \beta_3 L + \beta_4 HS + \beta_5 Liq + \varepsilon$

3.9. Method of Data Analysis

The random effect was used to carry out the regression analysis. To assess the existence of change in mean, variance and autocorrelation was conducted through STATA software. In this case, it is proved that, random effect was used to investigate the profitability of hotel industry in Hawassa. Actually, Ordinary Least Square is a linear least square, which was applied as a way to appraise the passive parameters in a linear regression model. This method is more effective when there is no multicollinearity problem between the variables.

CHAPTER FOUR

RESULT AND DISCUSSIONS

Introduction

This chapter presents and discusses the results of the study. This includes: descriptive statistics of variables, correlation analysis, regression analysis results and discussion. Moreover, diagnosis testing for the basic assumptions of classical linear regression model (CLRM), i.e. Normality & multicollinearity Test in regression analyses for the profitability of hotels as measured by return on asset (ROA) and discussion of results are explained. The analysis of secondary data was made by using STATA software

4.1. Descriptive statistics of Variables

Table 4. 1: Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
ROA	25	.148344	.1150729	-.0354	.321
HotelFirmS~e	25	9.94e+07	5.45e+07	894026.3	1.98e+08
Locationkm	25	1.66616	1.263867	.314	3.8
NumberofRo~s	25	92.8	27.15235	55	126
Liquidity	25	3.64	2.047966	1.8	7.5
HotelAge	25	19.2	11.64403	8	40

Source: Researcher Computation Using STATA, (2025)

Return on Assets (ROA) is a key financial ratio that measures how efficiently a hotel utilizes its assets to generate profit. In this dataset of 25 observations, the average ROA is approximately 14.8%, indicating moderate profitability across the sample. The standard deviation is 11.5%, showing considerable variability in performance. The minimum value is -3.54%, which means at least one hotel operated at a loss. On the higher end, a maximum ROA of 32.1% highlights strong profitability for some firms. This wide range suggests that some hotels manage their assets more effectively than others. ROA can be influenced by a variety of factors including management efficiency, location, and cost control. It remains a crucial indicator for investors and stakeholders assessing overall business performance.

This variable represents the financial size or asset value of the hotel firms, possibly in monetary units such as dollars. The average firm size is approximately 99.4 million, which suggests a relatively large scale for many hotels in the sample. However, the standard deviation of 54.5 million indicates substantial differences between the smallest and largest firms. The minimum value is about 894,026, while the maximum reaches nearly 198 million. This enormous range implies that both small, possibly independent hotels and large chains are included. Larger firms might benefit from brand recognition and resources, while smaller ones might focus on niche markets. Firm size can significantly affect marketing reach, operational strategies, and financial stability. It often correlates with other performance indicators like liquidity and ROA.

Location km likely refers to the distance of each hotel from a key reference point such as a city center, airport, or tourist attraction. The mean value of 1.67 km suggests that most hotels are situated fairly close to central or high-traffic areas. A standard deviation of 1.26 km shows some variation in positioning, with the closest hotel just 0.314 km away and the farthest located 3.8 km from the reference. Proximity can influence customer accessibility, room rates, and occupancy levels. Hotels closer to major landmarks may have a competitive advantage in terms of visibility and convenience. Conversely, those located further may offer quieter environments or lower prices. Location is a strategic factor that often affects demand and thus overall profitability. It's closely tied to both marketing appeal and customer preferences.

This variable indicates the total number of rooms available in each hotel. The average across the dataset is 92.8 rooms, with a standard deviation of 27.15, suggesting moderate differences in hotel size. The smallest hotel has 55 rooms, while the largest offers 126 rooms. Room capacity directly influences a hotel's revenue potential, particularly in peak seasons. Larger hotels can accommodate more guests, but they also incur higher costs in maintenance, staffing, and utilities. Conversely, smaller hotels may focus on personalized service and niche customer segments. The number of rooms can also reflect the hotel's classification (e.g., boutique, mid-sized, or resort). This variable is important when analyzing operational scale, cost efficiency, and overall financial performance. It may also correlate with firm size and liquidity.

Liquidity measures how well a hotel firm can meet its short-term financial obligations without raising external capital. The average liquidity score is 3.64, suggesting a generally healthy ability to cover immediate expenses. The standard deviation of 2.05 shows notable variability among

firms. Liquidity ranges from a low of 1.8 to a high of 7.5, indicating that while some hotels are highly secure, others may face tighter cash flow situations. A firm with high liquidity is better prepared for economic downturns or unexpected costs. On the other hand, excessive liquidity might signal underutilized assets. Maintaining the right balance is crucial for sustainable operations. This metric is often used by investors and analysts to evaluate a company's financial health and operational risk.

Hotel Age refers to the number of years since each hotel began operations. The mean age is 19.2 years, indicating that the sample includes relatively mature businesses. With a standard deviation of 11.64 years, the dataset contains both newer (8 years old) and much older hotels (up to 40 years old). Older hotels might enjoy strong brand loyalty and a stable customer base, but they can face challenges like outdated facilities or the need for renovation. Newer hotels may offer more modern amenities and design but might still be establishing their reputation. Age can also affect maintenance costs, staffing experience, and operational procedures. It's a variable that could impact both ROA and liquidity. Hotel age often reflects the stage in the business life cycle and can influence strategic planning decisions.

4.2. Correlation Analysis between Explanatory Variables

Table 4. 2: Correlation Analysis

	ROA	HotelF~e	Locati~m	Number~s	Liquid~y	HotelAge
ROA	1.0000					
HotelFirmS~e	0.5441	1.0000				
Locationkm	0.6688	0.5503	1.0000			
NumberofRo~s	0.2376	0.4065	0.6759	1.0000		
Liquidity	-0.8155	-0.4878	-0.5800	0.1279	1.0000	
HotelAge	0.2935	-0.3214	-0.0255	-0.2285	-0.1270	1.0000

Source: Researcher Computation Using STATA, (2025)

The positive correlation between Return on Assets (ROA) and Location km (r = 0.6688) suggests that hotels situated farther from urban centers may achieve higher profitability. This could be due to targeting niche markets such as luxury resorts or eco-tourism, which often command premium pricing. Additionally, the positive correlation between ROA and Hote lFirm Size (r = 0.5441) aligns with findings that larger hotel firms benefit from economies of scale, stronger branding, and diversified revenue streams, leading to improved profitability. The weak correlation between

ROA and Number of Rooms (r = 0.2376) indicates that simply having more rooms doesn't strongly predict profitability, suggesting that factors such as service quality, occupancy rates, and pricing strategies may be more influential. This aligns with studies indicating that operational efficiency and service quality are critical determinants of hotel profitability. Therefore, while size and location play significant roles, they are not the sole determinants of financial performance.

The negative correlation between ROA and Liquidity (r = -0.8155) indicates that more profitable hotels tend to have lower liquidity. This phenomenon may be explained by the fact that profitable firms often reinvest earnings into expansion, marketing, or property upgrades, reducing available liquid assets. Moreover, the negative correlation between Liquidity and Hotel Firm Size (r = -0.4878) suggests that larger hotel firms may operate with tighter cash reserves, potentially due to higher operating costs or capital investments in infrastructure. This is consistent with findings that larger firms might face financial constraints despite higher profitability. Additionally, the negative correlation between Liquidity and Location km (r = -0.5800) implies that hotels located farther from urban centers may have higher capital expenditures, affecting their liquidity. These insights highlight the complex relationship between liquidity and profitability, emphasizing the need for effective financial management strategies in the hotel industry.

The weak positive correlation between Hotel Age and ROA (r = 0.2935) suggests that older hotels may benefit slightly in terms of profitability, possibly due to established brand recognition and customer loyalty. However, the negative correlations between Hotel Age and Hotel Firm Size (r = -0.3214) and Number of Rooms (r = -0.2285) imply that newer hotels tend to be larger and more modern, reflecting industry trends toward building larger and more financially resilient facilities. This is consistent with studies indicating that newer hotels often invest in state-of-the-art facilities and services to attract customers. The minimal correlation between Hotel Age and Liquidity (r = -0.1270) supports the idea that age alone doesn't dictate financial flexibility. These nuanced relationships suggest that while hotel age can influence profitability, it is not the sole determinant, and other factors such as management practices and market conditions play significant roles.

4.3. Diagnosis Tests

Classical Linear Regression Model (CLRM) assumptions were tested after running the regression model for return on asset (ROA). As per Chris Brooks (2008), the first assumption required that the average value of the errors is zero (E (ut) = 0). In fact, if a constant term is included in the regression equation, this assumption will never be violated (Brooks 2008). Since there is no intercept parameter without constant term, the first assumption will never go against and no need of testing it.

Heteroskedasticity

```
chi2(1)      =     0.28
Prob > chi2  =   0.5957
```

Source: Researcher Computation Using STATA, (2025)

The Breusch-Pagan / Cook-Weisberg test is commonly used to detect heteroskedasticity, which occurs when the variance of the errors in a regression model is not constant across observations. In this test, the null hypothesis (H_0) states that the error variance is constant (homoskedasticity). The reported test statistic here is $chi^2(1) = 0.63$ with a p-value of 0.4276. Since the p-value is well above the conventional significance levels (e.g., 0.05 or 0.10), we fail to reject the null hypothesis. This means that there is no statistical evidence of heteroskedasticity in the residuals of the regression model using fitted values of ROA. As a result, we can assume that the variance of the errors is constant, and the OLS estimates are likely to be efficient and unbiased with valid standard errors.

This outcome supports the validity of classical linear regression assumptions, particularly one of the key Gauss-Markov conditions. If heteroskedasticity were present, it would lead to inefficient OLS estimators and unreliable hypothesis tests due to biased standard errors. However, given the non-significant result of the test (p = 0.4276), there is no need for remedial actions like robust standard errors or transformation of variables. The results imply that the regression model predicting ROA is not suffering from variance instability across different levels of the fitted values. This reinforces the reliability of the model's coefficients and their interpretation. It is always good practice, however, to accompany such tests with visual diagnostics (like residual vs. fitted plots) to confirm the absence of patterns suggesting heteroskedasticity.

4.3 Multicollinearity

Table 4. 3: Multicollinearity

Variable	VIF	1/VIF
lnLocationkm	44.91	0.022264
NumberofRo~s	33.43	0.029911
Liquidity	15.54	0.064339
HotelAge	2.27	0.439752
lnHotelFir~e	1.81	0.553090
Mean VIF	19.59	

Source: Researcher Computation Using STATA, (2025)

The Variance Inflation Factor (VIF) is a diagnostic tool used to detect multicollinearity in a regression model that is, when independent variables are highly correlated with each other. High multicollinearity can inflate standard errors, leading to unreliable coefficient estimates and misleading statistical inferences. A common rule of thumb is that a VIF above 10 indicates problematic multicollinearity (Gujarati & Porter, 2021). In your results, Location km (VIF = 13.14) and Number of Rooms (VIF = 10.75) both exceed this threshold, suggesting that these two variables are highly collinear with other predictors in the model. Liquidity also has a high VIF of 9.40, which, while slightly below 10, is still considered elevated. These high VIFs could distort the significance tests of these variables and weaken the overall model's interpretability.

In contrast, Hotel Firm Size (VIF = 2.53) and Hotel Age (VIF = 1.27) have low VIF values, indicating that they are not strongly correlated with the other predictors. The mean VIF is 7.42, which is somewhat high, suggesting moderate overall multicollinearity within the model. While not severe enough to invalidate the model entirely, this level of collinearity warrants attention. Possible remedies include removing or combining collinear variables, standardizing variables, or using principal component analysis (PCA) or ridge regression for dimensionality reduction. Since Location km and Number of Rooms are both crucial operational metrics, rather than removing them outright, the analyst should consider checking their correlation and potentially adjusting the model to improve its stability and reduce redundancy.

Shapiro-Wilk, Test

The Shapiro-Wilk test is a widely-used method to assess whether a variable follows a normal distribution, with the null hypothesis (H_0) stating that the data is normally distributed. A p-value below 0.05 suggests a significant deviation from normality. In this case, variables such as ROA ($p = 0.0146$), Hotel Firm Size ($p = 0.0176$), Location km ($p = 0.0229$), Liquidity ($p = 0.0001$), and Hotel Age ($p = 0.0056$) all reject the null hypothesis, indicating non-normal distributions. Only Number of Rooms ($p = 0.3301$) appears to follow a normal distribution under this test. These results suggest that for most variables, especially Liquidity and ROA, the assumption of normality is violated, which could influence parametric tests and regression assumptions.

The implications of these results are particularly important for regression modeling and hypothesis testing, where the assumption of normally distributed residuals is crucial. Non-normality can affect the accuracy of confidence intervals and p-values. Given that most variables violate normality, analysts may consider using transformations (e.g., log or square root), robust standard errors, or non-parametric methods. The Shapiro-Wilk test is known for its power in small samples ($n < 50$), making it particularly suitable here with 25 observations per variable. Hence, the test's rejection of normality should be taken seriously in guiding further statistical choices.

Shapiro-Francia W' Test for Normality

The Shapiro-Francia test is a variation of the Shapiro-Wilk test but optimized for large samples or data that is approximately symmetric. In your results, several variables also reject normality at the 5% level: ROA ($p = 0.0340$), Hotel Firm Size ($p = 0.0257$), Location km ($p = 0.0038$), Liquidity ($p = 0.0003$), and Hotel Age ($p = 0.0077$). Only Number of Rooms ($p = 0.3431$) passes the normality test. This consistency with the Shapiro-Wilk results strengthens the evidence that these variables are non-normally distributed, especially Liquidity and Location km, which show very low p-values.

Since Shapiro-Francia is particularly sensitive to departures from symmetry, the rejection of normality in these variables may be due to asymmetry (skewness) or heavy tails (kurtosis). For regression models or ANOVA applications that assume normality of variables or residuals, this result suggests that analysts should consider either transforming variables or applying generalized linear models that do not require strict normality assumptions. Together with

Shapiro-Wilk, these results present a coherent picture indicating non-normal behavior in key financial and geographic hotel variables, which justifies further diagnostic checks or robust estimation techniques.

Skewness/Kurtosis (sktest) for Normality

The Skewness/Kurtosis test evaluates normality by separately testing for asymmetry (skewness) and peaked Ness (kurtosis), then combining them into a joint chi-square statistic. The null hypothesis is again that the data is normally distributed. In your output, Number of Rooms ($p = 0.0064$) and Liquidity ($p = 0.0412$) are significantly non-normal, with Number of Rooms showing significant kurtosis ($p = 0.0005$) and Liquidity showing significant skewness ($p = 0.0091$). For ROA, the p-value is marginal ($p = 0.0592$), suggesting borderline non-normality. In contrast, Hotel Firm Size ($p = 0.9999$) and Location km ($p = 0.1666$) do not show strong evidence against normality in this test, slightly differing from the Shapiro tests.

This test is valuable because it separates the causes of non-normality, which can guide more tailored corrective measures. For instance, skewness may be corrected by log or Box-Cox transformation, while kurtosis issues may require trimming or minorizing outliers. The discrepancy between this test and the Shapiro tests (especially for Location km) could arise from sensitivity to different distribution features or small sample sizes. Overall, these results reinforce that Liquidity and Number of Rooms are particularly problematic in terms of normality and may require transformation or robust modeling techniques to avoid biased inference in regression or hypothesis testing.

4.4. Regression Result between Explained Variables and Explanatory Variables

Table 4. 4: Regression Result

Source	SS	df	MS	Number of obs	=	25
				F(5, 19)	=	55.49
Model	.297434143	5	.059486829	Prob > F	=	0.0000
Residual	.020368339	19	.001072018	R-squared	=	0.9359
				Adj R-squared	=	0.9190
Total	.317802482	24	.01324177	Root MSE	=	.03274

ROA	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
HotelFirmSize	-2.54e-11	1.95e-10	-0.13	0.898	-4.34e-10	3.83e-10
Locationkm	-.0869436	.0191718	-4.53	0.000	-.1270706	-.0468166
NumberofRooms	.0048956	.0008072	6.07	0.000	.0032062	.0065851
Liquidity	-.0831387	.0100032	-8.31	0.000	-.1040757	-.0622017
HotelAge	.0033726	.000647	5.21	0.000	.0020185	.0047267
_cons	.0792895	.0364854	2.17	0.043	.0029246	.1556544

Source: Researcher Computation Using STATA, (2025)

This regression model aims to explain variations in Return on Assets (ROA) using five independent variables: Hotel/Firm Size, Location km, Number of Rooms, and Hotel Age. The model summary shows that there are 25 observations, and the overall model fit is very strong, with an R-squared of 0.9359 and an adjusted R-squared of 0.9190. These statistics mean that approximately 93.6% of the variance in ROA is explained by the model, and the adjusted R-squared, which penalizes for the number of predictors, remains high at 91.9%. This indicates an excellent explanatory power without much overfitting given the sample size. The F-statistic of 55.49 with a p-value < 0.0001 confirms that the model is statistically significant, meaning that collectively the independent variables have a strong influence on ROA.

The ANOVA table shows the decomposition of variance into the Model and Residual components. The Model Sum of Squares (SS) is 0.2974, representing the explained variation, whereas the Residual SS is only 0.0204, indicating a small amount of unexplained variation. The mean squared error (MSE) of the residuals is 0.00107, and the Root MSE of 0.03274 reflects the average size of residuals, which is relatively low, indicating precise predictions.

Looking at the individual coefficients, we see that most variables significantly affect ROA except for Hotel/Firm Size. The coefficient for Hotel Firm Size is extremely small (-2.54e-11) with a very high p-value (0.898), suggesting it has no meaningful impact on ROA in this model. In contrast, Location km has a negative and statistically significant effect (coefficient = -0.0869, $p < 0.001$), meaning that as the distance from the urban center increases by one kilometer, ROA decreases by about 0.087 units, holding other factors constant. This suggests location is crucial for profitability.

The variable Number of Rooms has a positive and highly significant effect (coefficient = 0.0049, $p < 0.001$), indicating that hotels with more rooms tend to have higher ROA. Similarly, Liquidity has a negative coefficient (-0.0831, $p < 0.001$), implying that higher liquidity is associated with lower ROA, which might reflect capital being tied up in non-productive assets. Hotel Age positively affects ROA (coefficient = 0.0034, $p < 0.001$), suggesting that older hotels may perform better, potentially due to experience or brand loyalty. The constant term (_cons) is positive and significant, representing the baseline ROA when all independent variables are zero.

In summary, the model fits the data well and reveals that Number of rooms, location, liquidity, and Hotel age are important predictors of hotel profitability, while firm/Hotel size in this sample does not significantly contribute. This insight can help hotel managers and investors focus on operational factors rather than firm scale to improve returns.

4.5. The results of the random effect model

Table 4. 5: The results of the random effect model

```
Random-effects GLS regression                   Number of obs     =         21
Group variable: stata_code                      Number of groups  =          5

R-sq:                                           Obs per group:
     within  = 0.0055                                         min =          1
     between = 0.9525                                         avg =        4.2
     overall = 0.8399                                         max =          5

                                                Wald chi2(5)      =      78.67
corr(u_i, X)   = 0 (assumed)                    Prob > chi2       =     0.0000
```

lnROA	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
lnHotelFirmSize	.1064285	.2681634	0.40	0.691	-.4191622	.6320192
lnLocationkm	-.4269657	.6036189	-0.71	0.479	-1.610037	.7561055
NumberofRooms	.0236813	.0140442	1.69	0.092	-.0038448	.0512074
Liquidity	-.4658143	.2324778	-2.00	0.045	-.9214624	-.0101662
HotelAge	.0255056	.008546	2.98	0.003	.0087558	.0422554
_cons	-4.974315	4.860445	-1.02	0.306	-14.50061	4.551981
sigma_u	0					
sigma_e	.23862115					
rho	0	(fraction of variance due to u_i)				

Source: Researcher Computation Using STATA, (2025)

This regression uses a random-effects GLS model to analyze the determinants of the natural logarithm of Return on Assets (lnROA) across 21 observations grouped into 5 clusters identified by Stata code. The random-effects approach assumes that unobserved group-specific effects are randomly distributed and uncorrelated with the explanatory variables, allowing for variation both within and between groups. The model assumes corr (u_i, X) = 0, meaning the unobserved effects (u_i) are not correlated with the regressors, which differs from fixed effects models that allow correlation. This assumption enables the GLS estimator to efficiently use both within-group and between-group variations.

The model fit statistics show a very high between R-squared of 0.9525, indicating that most of the variation in lnROA across groups (between the 5 clusters) is explained by the model. However, the within R-squared is only 0.0055, suggesting the model explains almost none of the

variation within groups over time or observations. The overall R-squared is 0.8399, reflecting a strong explanatory power when considering both within and between-group variations combined. The Wald chi-square statistic of 78.67 ($p < 0.0001$) confirms that, collectively, the regressors significantly explain variation in lnROA. The number of observations per group varies from 1 to 5, averaging 4.2, indicating some imbalance in panel data coverage.

Examining the coefficients, lnHotel Firm Size and lnLocation km are not statistically significant predictors of lnROA, with p-values of 0.691 and 0.479 respectively. This suggests that after accounting for random group effects, the size of the hotel firm and its location (distance in kilometers) do not have a reliable impact on profitability. On the other hand, Number of Rooms shows a positive effect (coef = 0.0237) with marginal significance ($p = 0.092$), implying that hotels with more rooms tend to have slightly higher lnROA, but the evidence is weak.

Liquidity is a significant negative predictor of lnROA (coef = -0.466, $p = 0.045$), meaning that higher liquidity is associated with lower profitability, consistent with the idea that excessive liquid assets may reduce operational efficiency. Conversely, Hotel Age is positively and significantly related to lnROA (coef = 0.0255, $p = 0.003$), indicating that older hotels tend to be more profitable, potentially due to accumulated reputation or operational experience. The intercept (_cons) is not statistically significant, suggesting that the baseline profitability when all predictors are zero is not well estimated or relevant here.

The variance components reveal that sigma_u (the standard deviation of the group effects) is zero, while sigma_e (the standard deviation of the idiosyncratic errors) is 0.2386. The implied rho = 0 means that none of the total variance in lnROA is attributed to differences between groups; all variation comes from within-group differences. This unusual result might indicate limited panel data variation or that a fixed-effects or pooled OLS model could be more appropriate. In summary, the random-effects GLS regression shows that hotel age and liquidity significantly affect profitability, while firm size and location do not, and suggests that most variation in lnROA exists within groups rather than across them.

4.6. Summary of Hypothesis Testing Results

Table 4. 6: Summary of Hypothesis Testing Results

Hypothesis	Variable	Effect on Profitability (ROA / lnROA)	Significance	Conclusion
H1	Location	Negative and significant	Significant ($p < 0.001$)	**Accepted** (Negative effect)
H2	Number of Rooms	Positive and significant	Significant ($p < 0.001$, marginal in random effects)	**Accepted**
H3	Firm/Hotel Size	No significant effect	Not significant ($p > 0.05$)	**Rejected**
H4	Liquidity	Negative and significant	Significant ($p < 0.05$)	**Rejected** (Expected positive, but found negative effect)
H5	Hotel Age	Positive and significant	Significant ($p < 0.001$)	**Accepted** Significant positive predictor

Source: Researcher Computation Using STATA, (2025)

4.7. Discussion of the results

Several studies consistently emphasize the crucial role of location in determining hotel profitability. For example, Taye Zewdu (2021) found that hotels closer to urban centers in Addis Ababa exhibit higher returns on assets (ROA), highlighting the advantage of proximity to economic hubs. Similarly, research conducted in Mediterranean countries shows that hotels located near tourist attractions and transportation hubs enjoy increased profitability. Further, small hotels in Aksum, Ethiopia, positioned near cultural and historical landmarks, report better

financial performance, reinforcing the importance of strategic location in attracting customers. However, some studies challenge the universal importance of location. Research suggests that the negative impact of being farther from city centers may be overstated, as factors like service quality and brand reputation can have stronger effects on profitability. Additionally, hotels in less central locations may achieve profitability by targeting niche markets and reducing operational costs, which can sometimes compensate for location disadvantages. These findings indicate that location's effect can vary based on marketing strategy and cost management.

The positive relationship between the number of rooms and hotel profitability is well-supported. Tan et al. (2022) show that larger hotels benefit from economies of scale, allowing them to negotiate better supplier rates and attract more guests, which enhances financial performance. Studies also note that hotels with greater room capacity tend to stabilize their revenue streams more effectively due to increased demand potential. Conversely, some research indicates that beyond a certain size, increasing the number of rooms yields diminishing returns due to management complexity. Boutique hotels, despite their smaller size, sometimes outperform larger hotels by offering unique, personalized services that appeal to specific customer segments (Chen, 2009). Moreover, in markets with room oversupply, larger hotels may face fiercer competition, leading to reduced profitability despite higher capacity.

Effective liquidity management has been linked to higher profitability in various studies. Research from Hawassa City small enterprises and Ethiopian commercial banks demonstrates that firms maintaining optimal liquidity levels perform better financially (Kepramareni & Pradnyawati, 2024). Proper liquidity ensures operational flexibility and the ability to meet short-term obligations, which supports business stability. In contrast, some scholars argue that excessive liquidity can hinder profitability because idle funds could otherwise be invested in growth or revenue-generating activities. Tang and O'Neill (2025) note that hotels with lower liquidity sometimes achieve higher returns by efficiently deploying capital, while others caution about the opportunity costs of holding too much liquid cash. This duality suggests that the relationship between liquidity and profitability depends on how effectively liquidity is managed.

Older hotels generally benefit from accumulated experience, brand loyalty, and operational efficiencies, leading to higher profitability. Agiomirgianakis et al. (2012) and Assaf & Cvelbar (2011) confirm that hotel age is positively related to profitability due to these factors. Established

customer bases and reputations give older hotels competitive advantages in maintaining consistent returns. Nonetheless, some studies highlight drawbacks associated with hotel age. Chen (2009) and Skuflić & Mlinarić (2015) find that older hotels may suffer from higher maintenance costs and outdated facilities, which can reduce profitability. Research by Tang and O'Neill (2025) and Selem et al. (2023) argues that newer hotels, by offering modern amenities and catering to tech-savvy guests, may outperform older establishments, challenging the positive age-profitability relationship.

CHAPTER FIVE

CONCLUSION, RECOMMENDATION AND DIRECTION FOR FURTHER STUDY

5.1. Conclusion

This study demonstrates that location plays a pivotal role in determining hotel profitability in Hawassa City. The negative and statistically significant relationship between distance from the urban center and profitability indicates that hotels located further away experience diminished returns on assets (ROA). This is likely due to reduced accessibility for customers, lower visibility, and fewer opportunities to attract business travelers and tourists. The findings underscore the strategic importance of proximity to economic and social hubs for hotel operations. Managers and investors should prioritize urban or centrally located sites when developing or expanding hotels to enhance their competitive advantage and maximize profitability.

The number of rooms available in a hotel is positively and significantly associated with profitability, suggesting that larger hotels with greater capacity tend to achieve higher ROA. This result can be attributed to economies of scale, where fixed costs are spread over a larger number of customers, improving operational efficiency and profit margins. Furthermore, having more rooms allows hotels to serve a broader customer base, increasing revenue potential. However, it is important to note that the effect was only marginally significant in the random-effects model, indicating that capacity alone may not guarantee profitability across all contexts. Hotel managers should therefore balance expansion plans with market demand and operational capabilities to optimize returns.

Liquidity, unexpectedly, shows a significant negative impact on profitability, contrary to the initial hypothesis that higher liquidity would positively affect hotel performance. This negative relationship may reflect the inefficient use of liquid assets, where excess cash or easily accessible resources are not effectively invested in productive operations or growth opportunities. Maintaining excessively high liquidity can imply capital tied up in non-earning assets, reducing the overall return on investment. Hotel operators should therefore carefully manage liquidity levels, aiming for an optimal balance that ensures sufficient working capital without compromising asset productivity and profitability.

Hotel age is found to have a positive and significant effect on profitability, highlighting that older hotels tend to perform better financially. This may be due to accumulated operational experience, established customer loyalty, and brand recognition that develop over time. Older hotels often benefit from a solid reputation and refined management practices, which contribute to sustained profitability. Newer hotels, on the other hand, may face challenges such as market entry barriers and the need to build customer trust. These findings emphasize the importance of long-term strategic planning and continuous improvement for hotels to enhance their competitive position in the market..

5.2. Recommendations

The Based on the significant negative impact of location on profitability, hotel developers and managers in Hawassa City should prioritize selecting sites closer to urban centers or areas with high foot traffic and business activity. Strategic location enhances accessibility and visibility, which are crucial for attracting both business and leisure travelers. Urban proximity also facilitates partnerships with local businesses and event organizers, boosting occupancy rates. For existing hotels located in less favorable areas, targeted marketing and improved transport links could help mitigate location disadvantages. Policymakers should consider infrastructure development around emerging hotel zones to support growth and profitability.

Given the positive effect of the number of rooms on profitability, hotel owners should consider expansion plans that increase capacity, where market demand supports it. Investing in additional rooms can leverage economies of scale, spread fixed costs more efficiently, and increase revenue potential. However, it is important to conduct thorough market research before expansion to avoid overcapacity, which can strain resources and reduce profitability. Hotels should also focus on maintaining high service standards as they grow to ensure customer satisfaction and repeat business. Diversification into different room types and packages may further optimize occupancy and profitability.

The negative relationship between liquidity and profitability suggests that hotels need to manage their cash and liquid assets more efficiently. Maintaining excessive liquidity could indicate underutilized resources, which detracts from potential investment in growth or operational improvements. Hotel managers should establish liquidity targets that balance sufficient working capital for daily operations while minimizing idle funds. Exploring investment opportunities in

marketing, technology upgrades, or service quality improvements can help convert liquidity into profitable assets. Financial planning and forecasting should be strengthened to optimize cash flows and resource allocation.

Since hotel age positively influences profitability, hotel operators should focus on building long-term brand equity and operational expertise. New hotels must invest in reputation-building activities such as quality service delivery, customer relationship management, and local community engagement to establish trust. Older hotels should capitalize on their established market position by innovating services and maintaining facilities to stay competitive. Additionally, investing in staff training and adopting best practices can enhance operational efficiency over time. Policymakers and industry stakeholders might support initiatives that foster knowledge sharing and capacity building across hotels to promote sustainable profitability.

5.3. Direction for Further Study

Future First, future research should explore the nuanced role of location in hotel profitability beyond simple distance measures. While this study found a negative impact of distance from the urban center, subsequent studies could incorporate additional location-related variables such as accessibility to transportation hubs, proximity to tourist attractions, and neighborhood socio-economic characteristics. Geographic Information Systems (GIS) and spatial econometric techniques could provide deeper insights into how various locations attributes influence hotel performance. This would help tailor location strategies to different urban contexts and improve understanding of location's multidimensional effects.

Second, the relationship between liquidity and profitability merits further investigation, especially given the unexpected negative association found in this study. Future studies could examine how different forms of liquidity (cash, marketable securities, receivables) impact operational efficiency and profitability. Qualitative research might also explore managerial practices and decision-making processes around liquidity management in hotels. Additionally, longitudinal studies could assess whether the negative effect persists over time or varies during different business cycles or economic conditions, offering richer insights for financial management in the hospitality sector.

Third, while the number of rooms positively affected profitability, the marginal significance in some models suggests that other operational factors may interact with capacity to influence

returns. Future research should examine how room quality, occupancy rates, pricing strategies, and service differentiation moderate the effect of hotel size on profitability. Studies might also consider segmenting hotels by star rating or market positioning to better understand how capacity impacts different types of establishments. Mixed-methods research combining quantitative data with customer and manager perspectives could yield comprehensive findings.

Finally, the positive impact of hotel age on profitability highlights the importance of experience and reputation, but this variable is often overlooked in empirical hospitality research. Further studies could investigate the mechanisms through which age contributes to profitability, such as brand loyalty, customer trust, and operational efficiencies. Comparative research across regions or countries could explore whether these effects differ due to cultural or market maturity factors. Additionally, research might focus on strategies that help newer hotels accelerate the benefits typically associated with age, providing actionable guidance for emerging hotel businesses.

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Appendix I

STATA Results

```
Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of ROA

         chi2(1)      =     0.63
         Prob > chi2  =   0.4276
```

Variable	VIF	1/VIF
Locationkm	13.14	0.076079
NumberofRo~s	10.75	0.092990
Liquidity	9.40	0.106430
HotelFirmS~e	2.53	0.395407
HotelAge	1.27	0.787113
Mean VIF	7.42	

Variable	Obs	W	V	z	Prob>z
ROA	25	0.89544	2.905	2.180	0.01462
HotelFirmS~e	25	0.89912	2.803	2.107	0.01756
Locationkm	25	0.90439	2.657	1.997	0.02289
NumberofRo~s	25	0.95537	1.240	0.440	0.33006
Liquidity	25	0.78364	6.012	3.667	0.00012
HotelAge	25	0.87559	3.457	2.536	0.00561

Variable	Obs	W'	V'	z	Prob>z
ROA	25	0.91125	2.738	1.826	0.03396
HotelFirmS~e	25	0.90505	2.929	1.948	0.02572
Locationkm	25	0.85868	4.360	2.669	0.00381
NumberofRo~s	25	0.95949	1.250	0.404	0.34306
Liquidity	25	0.78253	6.709	3.450	0.00028
HotelAge	25	0.87656	3.808	2.423	0.00769

Skewness/Kurtosis tests for Normality

Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	joint adj chi2(2)	joint Prob>chi2
ROA	25	0.3998	0.0218	5.65	0.0592
HotelFirmS~e	25	0.9931	0.9939	0.00	0.9999
Locationkm	25	0.1319	0.3311	3.58	0.1666
NumberofRo~s	25	0.6148	0.0005	10.09	0.0064
Liquidity	25	0.0091	0.6643	6.38	0.0412
HotelAge	25	0.0351	0.7679	4.60	0.1005

```
. xtreg lnROA lnHotelFirmSize lnLocationkm NumberofRooms Liquidity HotelAge, re

Random-effects GLS regression                   Number of obs     =         21
Group variable: stata_code                      Number of groups  =          5

R-sq:                                           Obs per group:
     within  = 0.0055                                         min =          1
     between = 0.9525                                         avg =        4.2
     overall = 0.8399                                         max =          5

                                                Wald chi2(5)      =      78.67
corr(u_i, X)   = 0 (assumed)                    Prob > chi2       =     0.0000
```

lnROA	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
lnHotelFirmSize	.1064285	.2681634	0.40	0.691	-.4191622	.6320192
lnLocationkm	-.4269657	.6036189	-0.71	0.479	-1.610037	.7561055
NumberofRooms	.0236813	.0140442	1.69	0.092	-.0038448	.0512074
Liquidity	-.4658143	.2324778	-2.00	0.045	-.9214624	-.0101662
HotelAge	.0255056	.008546	2.98	0.003	.0087558	.0422554
_cons	-4.974315	4.860445	-1.02	0.306	-14.50061	4.551981
sigma_u	0					
sigma_e	.23862115					
rho	0	(fraction of variance due to u_i)				

Source	SS	df	MS		
				Number of obs	= 25
				F(5, 19)	= 55.49
Model	.297434143	5	.059486829	Prob > F	= 0.0000
Residual	.020368339	19	.001072018	R-squared	= 0.9359
				Adj R-squared	= 0.9190
Total	.317802482	24	.01324177	Root MSE	= .03274

ROA	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
HotelFirmSize	-2.54e-11	1.95e-10	-0.13	0.898	-4.34e-10	3.83e-10
Locationkm	-.0869436	.0191718	-4.53	0.000	-.1270706	-.0468166
NumberofRooms	.0048956	.0008072	6.07	0.000	.0032062	.0065851
Liquidity	-.0831387	.0100032	-8.31	0.000	-.1040757	-.0622017
HotelAge	.0033726	.000647	5.21	0.000	.0020185	.0047267
_cons	.0792895	.0364854	2.17	0.043	.0029246	.1556544

Appendix: Dependent and Independent variables value

Hotel Name	Year	ROA	Hotel/Firm Size	Location (km)	Number of Rooms	Liquidity	Hotel Age
Haile int Hotel	2011	0.209	99,254,121.00	3.8	126	2.4	15
Haile int Hotel	2012	0.22	100,125,125.00	3.8	126	2.4	15
Haile int Hotel	2013	0.206	152,522,155.00	3.8	126	2.4	15
Haile int Hotel	2014	0.212	154,652,121.00	3.8	126	2.4	15
Haile int Hotel	2015	0.241	155,654,125.00	3.8	126	2.4	15
Lewi int Hotel	2011	0.0604	79,583,426.16	6.3	55	3.2	8
Lewi int Hotel	2012	0.0507	82,446,117.12	5	55	3.2	8
Lewi int Hotel	2013	0.0432	83,990,023.00	4.25	55	3.2	8
Lewi int Hotel	2014	0.07	83,940,144.00	0.512	55	3.2	8
Lewi int Hotel	2015	0.088	95,393,414.96	0.572	55	3.2	8
Pinna int Hotel	2011	0.321	80,492,330.30	1.2	70	1.8	40
Pinna int Hotel	2012	0.3056	82,015,567.43	1.4	70	1.8	40
Pinna int Hotel	2013	0.206	83,775,869.69	1.921	70	1.8	40
Pinna int Hotel	2014	0.207	84,223,803.58	1.95	70	1.8	40
Pinna int Hotel	2015	0.253	83,665,592.94	1.92	70	1.8	40
South Star int Hotel	2011	0.2514	57,652,145.00	1.95	114	3.3	11

South Star int Hotel	2012	0.2607	169,854,121.00	1.91	114	3.3	11
South Star int Hotel	2013	0.2311	183,524,122.00	1.92	114	3.3	11
South Star int Hotel	2014	0.1298	183,254,124.00	1.94	114	3.3	11
South Star int Hotel	2015	0.2384	197,847,394.00	1.97	114	3.3	11
Hawassa cent Hotel	2011	0.0312	89,402,632.00	0.412	99	7.5	22
Hawassa cent Hotel	2012	0.0321	94,621,200.00	0.412	99	7.5	22
Hawassa cent Hotel	2013	0.0334	91,254,200.00	0.314	99	7.5	22
Hawassa cent Hotel	2014	0.0354	92,803,297.00	0.454	99	7.5	22
Hawassa cent Hotel	2015	0.0364	94,406,714.00	0.332	99	7.5	22