



ADDIS ABABA UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS
DEPARTMENT OF ACCOUNTING AND FINANCE

DETERMINANTS OF PROFITABILITY OF HOTELS IN ADDIS ABABA:
THE CASE OF STAR 1 AND 2 HOTELS

A Thesis Submitted to College of Business and Economics of Addis Ababa
University for the Partial Fulfillment of the Requirement for the Award of Degree
of Master of Science in Accounting and Finance

By

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April, 2021

Addis Ababa, Ethiopia

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Tekalign Nega (PhD)	_____	_____
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Declaration

I, Taye Zewdu declare that this thesis entitled “Determinants of Profitability of Hotels in Addis Ababa: The case of star 1 and 2 hotels” submitted in partial fulfillment of the requirements for the Degree of Master of Science in Accounting and Finance, is outcome of my own effort and study and that all sources of materials used for the study have been duly acknowledged. I have produced it independently with only guidance and suggestion of the thesis Advisor. The study complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

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Confirmed by Advisor:

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Statement of Certification

This is to certify that **Taye Zewdu** has carried out his research work on the topic entitled: **“Determinants of Profitability of Hotels in Addis Ababa: The case of star 1 and 2 hotels”** is his original work and suitable for submission for the award of Degree of Master of Science of Accounting and Finance.

Advisor: Tekalign Nega (PhD): _____

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Date

Acknowledgement

First, I would like to thank my advisor Dr. Tekalign Nega, for his fruitful support, encouragement and for his invaluable comments to improve the quality of the work. So, I remain grateful and thankful always. My thank also goes to employees of selected hotels in general and those working in finance section for their help in providing me with the necessary data without which I would not have been able to accomplish this.

I add a special note of admiration and gratitude to my families ,colleagues and friends for their priceless moral and material. Finally, I would like to express my appreciation to Fetlework Gizaw, for her invaluable encouragement.

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List of Acronyms

AAHOTSA	Addis Ababa Hotel Owners Trade Sectorial Associations
CR	Current ratio
FA	Firm age
FS	Firm size
LO	Location
MOCT	Ministry of Culture and Tourism
NGO	Non-Governmental Organization
NR	Number of rooms
ROA	Return on asset
SL	Star level
VIF	Variance inflation factor (VIF)

ABSTRACT

The purpose of this study was to investigate determinants of hotel profitability in Addis Ababa particularly to star 1 and 2 hotels by using panel data of 31 star 1 and 2 hotels from year 2015 to 2019. The study employed an explanatory type of research and secondary financial data were used. The regression model was applied to investigate the impact of firm size, liquidity management, number of rooms available, location (distance of the hotel from the central part of the city), firm age and star level on profitability. Return on assets (ROA) was used as a measure of profitability. The major findings of the study show that firm size, liquidity management and firm age have statistically significant and positive relationship with return on asset of star 1 and 2 hotels. On the other hand, variables like number of rooms available and location have statistically significant and negative relationship with return on asset of star 1 and 2 hotels. However, the relationship for star level and return on asset of star 1 and 2 hotels is found to be statistically insignificant. The result implies that hotels which are large and old have more profit. In addition hotels, which follow effective liquidity management practice, are profitable. The study recommended that managers of hotels to develop effective strategies to raise firm sizes and manage its liquidity in a proper way. The study also recommended that managers and prospective investors should give emphasis to hotel location in time of incorporation and to horizontal integration with older hotels to ensure that hotels are in a position where they can enhance their profitability.

Key Words: *Hotels, Determinants, Profitability*

CHAPTER ONE

1. Introduction

1.1. Background of the Study

Ethiopia is the seat for the African Union and other international organizations thus there are many international meetings and conferences held in Ethiopia. According to Dessalegn et al. (2008) in Addis Ababa, there are more than 217 local and international NGOs which have been implementing different projects. This opportunity creates a huge demand for accommodations at an international standard and even an increase in such a demand is expected in the future.

Ethiopia has several sophisticated ancient hotels that have breathtaking views and unique architectural designs. The first modern hotel in Ethiopia, Itegue Taitu Hotel was built in 1906 GC in the middle of the city (Piassa). It was named after its founder Empress Taitu Betul, the wife of Emperor Menelik II. It was built mainly for the purpose of providing service to foreigners as a cozy place to rest and dine. The building of Etege Taitu Hotel is essentially a museum filled with old furniture's and decorated high ceilings. The ancient hotel has 264 historic bedrooms, equipped with various important facilities.

The Abreha Castle is another ancient hotel, was built in 1906 by Dejat Abraha Araya who was the ruler at the time. It is located on the hills of Mekelle. The hotel has eight luxurious rooms which offer unforgettable experience. Its construction resembles a medieval castle of Europe taking you a century back. This place is now a hotel under the Ghion hotel chains.

Hilton is also another fabulous Ethiopian hotel which opened its door over four decades ago. It was opened in 1969 by Emperor Haileselassie. Together with the exquisite garden wing extension, the complex offers a total of 402 rooms. The architectural design is based on the Lalibela Cross, one of the most popular tourist attractions in Ethiopia which is also as considered the 8th wonder of the world. Blending traditional Ethiopian cultures with contemporary style, Hilton Addis Ababa was designed to mirror the famous Lalibela Cross.

The 1974 revolution was the starting point to flourish the hotel industry, even though there was strict government regulation. Thus, the Ethiopian Tourism Commission was authorized to

reorganize the newly nationalized and existing government hotels under an independent enterprise called Ethiopian Hotels and Spas Corporation.

In 1991, the Ethiopian People's Revolutionary Democratic Front (EPRDF) government took a counter measure in privatization of earlier nationalized and government owned hotels. After 1991, the construction of hotels continued to boom under private sector.

In Ethiopia hotel industry is becoming one of the fastest growing economic and business sectors that generates foreign currency, offers job opportunities for the youth. Addis Ababa has many magnificent features and due to that diplomats and corporate clients are coming each year to the capital city of Ethiopia, Addis Ababa. According to the World Bank collection of development indicators, compiled from officially recognized sources, International tourism, number of arrivals in Ethiopia was reported at 600,000 800,000 849000 in 2012,2016 and 2018 respectively. In terms of receipts, Ethiopia collects \$1.98, \$2.138 and \$3.548 billion in 2012, 2016 and 2018 respectively. According to the recent projections made by tourist promoters online, Ethiopia is among the seven countries that have a potential to become major tourist destinations in a post- covid world.

The stock of hotels in Ethiopia particularly in Addis Ababa has increased sharply over the last few years and currently is growing at a large scale and still a big room for new entrants. The hotel business is booming in Addis Ababa in the last decade. According to Ministry of Culture and Tourism (MOCT) Tourism Statistics Bulletin of 2009, the total number of hotels in Addis Ababa in the year 2009 was 80. According to Addis Ababa Hotel Owners Trade Sectorial Associations annual hotel guide bulletin of 2018/2019 the total number of hotels in the capital city reached 138 with stars from one to five and hotels without stars.

Due to the large number of prospective investors and other stakeholders interested in the overall hospitality industry, it is vital to identify factors that create variation in overall profitability of hotels in Addis Ababa.

1.2. Statement of the problem

The profitability of any business has received significant attention from researchers in various segments of businesses. Since profitability of firms has imperative effect on organization's health and survival. According to Naser and Mokhtar (2004), high performance reflects management effectiveness and efficiency in making use of firm's resources and this in turn contributes to the country's economy at large.

For the success of any business, measuring and understanding factors that determine profitability is the most important task. A business that is not profitable cannot survive. Conversely; a business that is highly profitable has the ability to reward its owners with a large return on their investment. Understanding the key factors determining profitability assists managers in developing an effective profitability strategy for their company.

According to Nguyen (2006) ,Profitability is one amongst the most vital objectives in financial management that results in maximization of owners' wealth. No business is profitable without effectively managing their risks.

According to Elias (2014), Addis Ababa is experiencing the opening on average of one hotel per month which is an indicator that the industry has attracted the authorities“ and the prospective investors. According to AAHOTSA annual hotel guide bulletin of 2018/2019, the hotel sector is marked by four fundamental problems that need a thorough fix: unmet demand, poor hospitality, unpractical building technicalities and an overrated price.

Several researchers perform a research to identify factors that determine profitability of hotel industry. The researchers identified the factors as internal to the firm and external to the macroeconomic environment; internal, because firms have to decide every day on the correct way to operate, to allocate resources etc in order to manage business functions and reach goals: external, because firms compete in sectors and markets which influence strategy and results (Bresciani et al., 2012).Star ratings, distance to central business district, number of rooms, congress spaces, firm age, firm size and liquidity are among the major internal factors that determine profitability of hotels. According to Agiomirgianakis et al. (2012), external factors such as economic crisis, government policies, economic growth, political situation, terrorist

attacks and other economic and non-economic factors influence performance and profitability of hotel companies.

A study of Samrawit (2015) tried to analysis the service quality strategies of the four star hotels in Addis Ababa. However, the researcher used quality of service, service strategy and differentiation as a determinant of hotel profitability and found that service quality strategies are significant determinants of profitability. Therefore, it seems essential to study determinants of profitability of star one and two hotels since they account more than 50 percent from the total hotels by increasing the number of variables based on the previous studies in order to enhance the validity and of the study.

Even though globally, all these and other researchers conducted study on the determinants of profitability in the hotel industry, the determinants of profitability in the hotel industry is still unknown in Addis Ababa.

According to the author knowledge there are few studies conducted in Addis Ababa regarding hotel industry such as Samrawit (2015) and completely ignored factors affecting hotel profitability. The absence of empirical studies in Addis Ababa concerning determinants of hotel profitability is then what motivated the researcher to put his own contribution in identifying factors that affect hotels financial performance. Taking in to account the absence of empirical research on the internal and external factors affecting hotel profitability, the researcher attempts to work on internal Factors that affect profitability of hotels in Addis Ababa. Therefore, the study will fill the gap identified by the researcher.

1.3. Objectives of the Study

1.3.1. General Objective

The objective of the study is to investigate the determinants of profitability of star 1 and 2 hotel in Addis Ababa and presents empirical evidence on the contribution of determinants on performance.

1.3.2. Specific Objective

Specifically, this study addressed the following objectives;

1. To examine the significance of firm size on the financial performance, return on asset, of star 1 and 2 hotels in Addis Ababa.
2. To determine the impact of liquidity management on financial performance, return on asset, of star 1 and 2 hotels in Addis Ababa.
3. To investigate the effect of number of rooms available on the financial performance, return on asset, of star 1 and 2 hotels in Addis Ababa.
4. To determine the impact of hotels location on the financial performance, return on asset, of star 1 and 2 hotels in Addis Ababa.
5. To examine the effect of firm age on the financial performance, return on asset, of star 1 and 2 hotels in Addis Ababa.
6. To explore the impact of star level on the financial performance, return on asset, of star 1 and 2 hotels in Addis Ababa.

1.4. Research questions

Based on the objectives, the research provides answer for the following research questions:

1. What is the relationship between firm size and profitability?
2. What is the effect of liquidity on hotel profitability?
3. What is the relationship between number of rooms available and profitability?
4. What is the effect of location on hotels profitability?
5. What is the relationship between firm age and hotel profitability?
6. What is the relationship between star levels and profitability?

1.5. Hypotheses of the Study

The following hypotheses are formulated based on the factors that determine hotels profitability to be taken into account in this study. The hypotheses of the study are derived from literature. Accordingly, the study attempt to test the following major hypotheses:

Hypothesis 1: Firm size has positive and significant effect on return on asset of star one and two hotels.

Hypothesis 2: Current ratio has positive and significant effect on return on assets of star one and two hotels.

Hypothesis 3: Number of rooms available has positive and significant effect on return on asset of star one and two hotels.

Hypothesis 4: Location has negative and significant effect on return on asset of star one and two hotels.

Hypothesis 5: Firm age has positive and significant effect on return on asset of star one and two hotels.

Hypothesis 6: Star level has positive and significant effect on return on asset of star one and two hotels.

1.6. Significance of the Study

This study has a great importance for the management of hotels and prospective investors through identifying significant determining factors of profitability in hotel industry. Furthermore, the study has a great significance for external stakeholders such as investors, creditors and government. The study also expected to serve as additional reference on the issue of hotels profitability as the existing researches are insufficient.

1.7. Scope of the Study

Even though there are internal and external determinants of hotel profitability, the study focus only on the internal or firm specific determinants of profitability of star 1 and 2 hotels in Addis Ababa. It would have also been very useful, if it includes all stars and external factors of profitability. However, due to the constraints, the researcher is forced to limit the study on

this small concern. The profitability determinants that carried out in this study are those frequently described in conventional different studies and literatures. The research is bound to focus on profitability determinants of star one and two hotels in Addis Ababa.

The necessary data pertaining to the study gathered from 31 selected hotels operating in Addis. The researcher tried to look into their profitability and see how these internal factors have an impact on these hotels in the period of 2015-2019(5years).The period is selected for research manageability and the question has not been extensively studied in recent years.

1.8. Organization of the Study

The organization of the rest of the paper is as follows. In chapter two, Ethiopian hotels history and types of hotels addressed and finally the empirical research on hotels'' profitability is reviewed by presenting findings of research. Chapter three introduces the research design and methodology. The data analysis and discussion of results described in chapter four. Chapter 5 presents the conclusion and recommendation of the regression analysis described in chapter four.

CHAPTER TWO

2. Literature Review

2.1. Introduction

The first chapter introduced the problem that expected to be investigated in this research along with purpose and research hypothesis. In this chapter, the profitability and the determinants influencing reviewed in order to put the study within the context of the existing literature. The subsequent sections of this chapter present the theoretical review on factors affecting profitability, knowledge part from literature were seen in order to conduct the study.

2.2. Overview of Hotel Industry

According to Freeman and Felsenstein (2007), hotel refers to all places constituted to receive the payment from travelers or people who quest for lodging or temporary stay. According to Kasavana and Brooks, quoted in Lubeck (2003,P.115),a hotel may be defined as an establishment whose primary business is providing lodging facilities for general public, and which furnishes one or more services such as food and beverage services, room attendant service, uniformed service, and the laundering of linens.

When the first roads were built in Britain, merchants and other wealthy travelers journeyed to various parts of the country. At points on their journeys shelter, food and drink were to be found at road side taverns. Later on monasteries provided hospitality to raise money for the church. Large manor houses scattered throughout the country provided services to travelers. When the manor houses began to be taxed the lords of the manors began converting their homes into inns. An inn could provide rest but a tavern could provide only food and drink. Gradually the inns and taverns improved in quality and standard.

The first inn located in America was recorded in the year 1607 and lead the way with many other firsts in the hospitality industry. The first publicly held hotel (the city hotel) opened in New York in 1792. The first modern hotel named Tremont opened in Boston 1809 and the first business hotel (the Buffalo Statler) opened in 1908. From there a surge of hotels flooded American and the rest of the World with prominent names such as Radisson, Marriot and Hilton.

The most unique attribute of hotel investment relates to the large up-front cost of construction. This dictates a particular form of developer behavior. Heavy initial costs generate considerable dependence on the future revenue streams expected to cover this initial outlay. The need to create a revenue stream is immediate and this creates instability especially when demand is volatile. Hotel investment is therefore characterized by a 'high operating leverage'. The cost composition of hotels includes a large component of fixed costs and a small share of variable (operating) costs. Hotels with a high operating leverage will therefore be volatile in their profit levels (Freeman and Felsenstein, 2007).

The returns to hotel investment are inextricably linked to tourist demand (local and foreign). Therefore, the relationship between the hotel industry and the wider tourism industry is two directional. Without tourists there can be no hotel industry and without hotels there can be no tourism industry. This symbiotic relationship is reflected on the supply side as well. Local and foreign investment in the hotel sector can be stimulated by public incentives for construction, expansion etc.

2.3. Types of Hotels

According to Freeman and Felsenstein (2007), hotels can be classified in many categories as follows:

A) Commercial or Transient Hotel

Commercial hotels usually situate in the Down Town with the business concourse. Businessmen are content to accommodate in this type of hotels, because it is convenient in the business contact, with no need for long travels, passing all the traffic jam. It is convenient because this type of hotels are fully and conveniently accommodated, such as the food servicing, the swimming pool, the exercise room, the tennis lawn, karaoke room, dancing room, and the conference room.

B) Resort Hotel

This is a resting hotel for tourists. These hotels would situate in the tour sources or in the resting sources such as on the seashores, the mountains, on the riverside, near the golf course, etc. Therefore, the conservation of natural beauty is a significant matter, because guests require

contacting the beautiful nature, and at the same time, they also need to all the conveniences and facilities. Therefore, this type of hotel must be fully prepared for the conveniences and facilities, because the guests only wish to rest.

C) Residential Hotel

Residential Hotel refers to the resident and not for commercial. Therefore, the residential hotel is the lodging, with a tenant contract and conditions between guests and the proprietor, where there would be an accommodation for a short time, or a long time. This length of time may take a month long, or a yearlong. However, there might be a condition that in the case of long term tenant, should the guest be absent for a long time.

D) Motel

Motel is the combination of the words „Motel“ to „Hotel“. This is usually in town, where the traffic was congested and jammed, with no parking space. In this case, the motel must find all the facilitation for tourists, with a parking service right next to the bedroom, or sometimes, under the bedroom. Usually, motels do not have room services, because guests usually come to rest for only one night, before commencing on the travel in the next morning. Motels usually situate on the highways, and the accommodation service is executed for 24 hours.

E) Motor Hotel

The format of the Motor Hotel is the medium hotel with 30 rooms to 300 rooms, accommodated with parking spaces. The parking is free to compete with hotels that collect parking spaces. Moreover, there may be other services, such as the coffee shop, cocktail lounge, conference room, and swimming pool.

F) Budget Hotel

The Budget Hotel or the Economy Hotel is to serve travelers who like the economy, cleanliness and modernity. This is usually a small size hotel, with limited rooms. Quite a number of travelers prefer the economy hotels, especially in countries with high cost of living, where some groups of tourists are unable to accommodate in hotels with high services.

G) Condominium Apartment, Flat

The condominium is a suit condominium that is similar to an apartment or flat. The difference is that the owner of a condominium or the particular suit has an absolute tenure right, through the affirmative document under the agreed rules and regulations. Presently, condominiums have a character of temporary rent, rather than a permanent residence. This is the type of long renting for months or for years.

2.4. Determinants of hotel profitability

Tourism activities have become key activities in many regions and cities. According to Ryu et al. (2013) demand in the hospitality industry is dependent on a range of many different possible factors, from natural catastrophes and political instability to changing economic conditions, such as recessions or high volatility in the exchange rate. The profitability of the hospitality industry is strongly dependent on revenue changes caused by changes in demand or the increase in supply. According to Zervas et al. (2015) hotels are characterized by the importance of fixed costs in their cost structure and a lower marginal cost. This means, a reduction in revenues usually implies a greater reduction in net income.

Profitability in the hotel industry depends on many factors, some internal and external. Sainaghi (2010) has reviewed the academic literature, summarizing the main explanatory factors in the profitability of hospitality that has been considered. Most of the studies use internal factors as explanatory variables for hotel performance. According to Brander and McDonnell (1995) even though mostly managers use financial indicators, the usage of non-financial indicators to evaluate business performance, has been increasing. In the sample of papers published in the international journals analyzed by Sainaghi (2010), 83% of empirical studies use internal factors as the dependent variables to explain hotel performance and just 9% use external variables, with the number of papers that mix internal and external ones being a minority.

Some studies confirmed that external factors such as economic crisis, government policies, economic growth, political situation, terrorist attacks and other economic and non-economic factors influence performance and profitability of hotel companies. According to Agiomirgianakis et al. (2012) empirical investigation the economic crisis strongly and negatively affects the tourism sector. After the global financial crises, hotels experienced

decreased revenue per room, room occupancy and average daily rate. Sami and Mohamed (2014) found that terrorist attacks strongly and negatively affected the Tunisian tourism.

Other studies analyzed the impact of internal factors on hotel profitability, such as, size, age, financial structure, liquidity management, number of rooms available ,star level, innovation, managers „education, location, etc. Here after the main internal determinant of hotel profitability presented as proved by different researchers:

1) Firm size and hotel profitability

The size of the company measured by the volume of sales has a significant effect on hotel profitability. There are a number of empirical studies investigating the impact of hotel size on hotel profitability. There are mixed findings with regard to this impact. Accordingly Nunes et al. (2009) Proved that firm size has a significant and positive impact on the profitability of hotels in Portugal, which implies that larger companies achieve higher profitability levels due to economics of scale and easier and cheaper access to funding. Mesut (2014) and Agiomirgianakis et al. (2012) also found that there is a positive relation between firm size and hotel profitability, i.e. profitability of the firms“ increases as their sales increase. On the other hand, Lazar (2016) found that firm size exerted negatively on firm performance on listed non-financial companies in Romania Bucharest Stock Exchange. Sami and Mohamed (2014) also found that hotel profitability is negatively influenced by hotel size. The impact of firm size on performance in manufacturing sector is also investigated. According to Taymaz (2005) empirical research larger manufacturing firm size has a positive effect on technical efficiency and firm“s profitability.

2) Liquidity and hotel profitability

Liquidity is one of the areas reflecting company s performance. Maintaining the current assets and current liabilities balance on a proper level is an important condition for improving performance of the company. Liquidity management is crucial managerial areas within the processes of financial management which, if performed successfully, may help the company achieve its goals on the way to excellence.

With regard to the hotel industry specifically, the liquidity measures the hotel“s ability to convert certain types of assets to cash. As the most important element of hotel operation, higher

ability to sell assets to cash will reduce the hotel's borrowing, the resulted decrease in the borrowing cost is supposed to increase the profitability. However, higher liquidity reduces the hotel's opportunity to invest the money into relevant long-term projects, which is supposed to generate higher returns. In other words, this reduction in the opportunity will have a negative impact on the hotel income and profitability.

Liquidity management and profitability are very important issues in the growth and survival of business and the ability to handle the trade-off between the two a source of concern for financial managers. According to McLaney (2006), if firms manage its liquidity in a proper way, then it can pay off these debts within a short period of time and a higher return on asset. Ajanthan (2013) investigated the relationship between liquidity and profitability of listed companies in Sri Lanka from 2008 to 2012 and found that a significant relationship exists between liquidity and Profitability. In addition to that, Arikan (2017) also proved that liquidity affects hospitality firms in the U.S.

3) Number of room and hotel profitability

Some authors use the presence of rooms, congress spaces and other conference facilities as additional measures of performance. As the number of rooms available increase, the revenue generated from renting of those rooms will increase. The higher number of the rooms available, the higher the profitability of the hotel. According to O'Neill and Mattila (2006), a hotel's size (that is, number of rooms) and location (urban or highway) influence net operating income. In other studies, Urtasun and Gutiérrez (2006) find a correlation between the range of rooms and hotel profitability.

4) Location and hotel profitability

Location or destination affects hotels profitability. Spatial positioning of a hotel has interrelated effect on profitability. The determinants that increase hotel profitability could differ from one location to another. A number of empirical testing of performance determinants cannot neglect the spatial location of the hotel because important differences among locations were found. When establishing a new hotel evaluating and assessing a location site is crucial so as to secure long-term objectives. Among the researchers, Shoval et al. (2011) found the hotel industry generally recognizes the advantages of a central district location, resulting in higher

demand, pricing ability, and profitability. Yang et al. (2012) emphasized that the location is one of the most important factors for a new hotel establishment.

5) Firm age and hotel profitability

There are many studies investigating the impact of hotel age on their profitability and the findings are mixed. Several researches suggested that hotel profitability increases with its age due to the impact of reputation and loyalty. According to Ofuan et al. (2016) and Agiomirgianakis et al. (2012) since older firms have an advantage of being trustable and have an effective relation with other firms, suppliers, financial environment, young firms are better but the higher the age, the more profit the firm is expected to generate. Ofuan et al. (2016) finds a positive relation between profitability and firm age since older firms can reach resources more easily than younger firms and their reputations and experiences in the sector will help to connect with suppliers, business network, and finance sector more easily. On the other hand, Akben's (2016) empirical work claims that there is a negative correlation between firm age and profitability since younger hotels are usually more modern and prone to implementation of new technologies and services with which they can easily attract more guests, especially those of higher purchase power. That means, firm performance diminishes with the age of the firm and that older firms have a lower level of profitability.

6) Star rating and hotel profitability

Star rating is recognized as symbol of quality and a necessary requirement to provide precise assessment of accommodation status of hotels. In star rating, certain attributes are used as benchmark for accommodation standards of hotels. According to MOCT regulation number 172/2002, there are 6 critical areas namely hospitality, service, bedrooms, bathrooms, cleanliness and food facilities which are mandatory to reach a particular star level in Ethiopia. According to Ye et al. (2009), property star rating influence Internet marketing usage as well the revenue of a hotel. Wei et al. (2001) indicated that hotels can be regarded as lowly graded or highly graded. In this instance, one to two star hotels are regarded as lowly graded, and three to five star hotels are regarded as highly graded hotels.

According to Ingram and Roberts (2000) Star rating (Stars) are among internal factors that have often found positive correlation between the number of stars and performance (profitability).

Naragajavana and Hu (2008) studied the star rating and hotel performance for a sample of 306 hotels in Thailand and found that star ratings positively influence hotel profitability

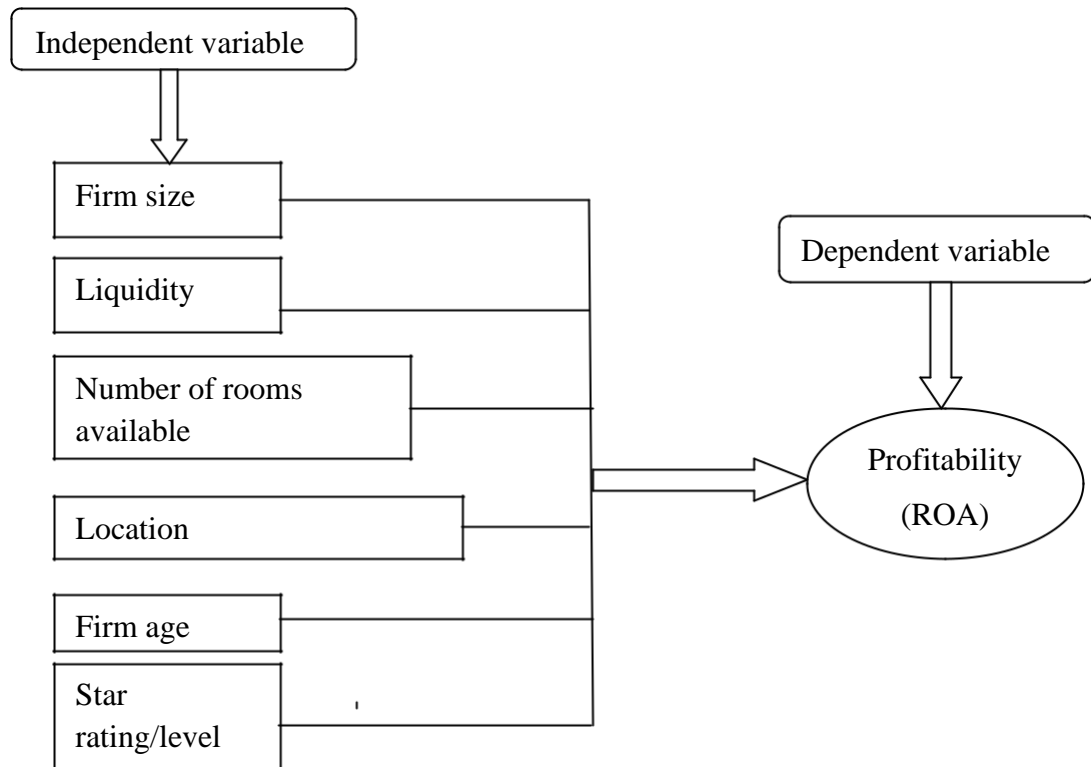
2.5. Conceptual Framework

A conceptual framework depicts a relation that exists between study variables. The study will identify determinants of hotel profitability in Addis Ababa hence independent variables will include firm size, liquidity (current ratio), number of room available, location, firm age and star rating. The dependent variable will be profitability expressed in terms of return on asset.

As per literature, the effects of those variables were stated as firm size, current ratio, number of rooms available, firm age and star level have positive effect on hotel profitability while location has negative effect on hotel profitability.

The conceptual framework of the research, which describes the relationship of explanatory and explained variables, is presented in the following diagram.

Figure 1 - The relationship between explained and explanatory Variables



Source: Compiled from literature

2.6. Research Gap

Research has been undertaken on hotels on different part of the world to investigate the determinants of hotel profitability. The researchers identified the determinants as internal to the firm and external to the macroeconomic environment. Some of the global research includes; Dimitric et al. (2019) conducted a study on profitability determinants of hotel companies in selected Mediterranean countries to examine the determinants influencing profitability of hotel companies in selected Mediterranean countries. Sami and Mohamed (2014) on the title of “Determinants of tourism, hotel profitability in Tunisia” that aimed at determining the factors affecting hotel profitability. Adam and Amuquandoh (2013) conducting analysis of Hotel characteristics and location decisions in Kumasi to examine the effect of the internal determinants on hotel profitability. Agiomirgianakis et al. (2012) conducted a study on determinants of profitability and the decision-making process of firms in the tourism sector: the case of Greece to examine the determinants of profitability in the tourism sector of Greece.

However, few researches have been undertaken in Ethiopia particularly in Addis Ababa regarding the hotel industry. Henok (2015) conducted a research on the role of private sector in the development of the tourism industry in Addis Ababa to assess their contribution to economic growth and development. Samrawit (2015) also conducted a research on hotel industry on the title of “the analysis of the service quality strategies of the four star hotels in Addis Ababa”.Ebisa and Andualem (2013) research on the title “hotel sector investment” aims at investigating the overall performance of the hotels industry in Ethiopia.

The absence of empirical studies in Addis Ababa concerning determinants of hotel profitability created a research gap that this study seek to fill by investigating the internal factors that affect the hotel industry particular to Addis Ababa’s star one and two hotels. .

CHAPTER THREE

3. Research Design and Methodology

Introduction

This chapter specifically gives a brief description of the research method that is employed to capture determinant of profitability of star 1 and 2 hotels in Addis Ababa. This include a detail description of quantitative research design tools which embrace research approaches and design adopted, sample design of the study, data type, source and the data collection mechanism, variable definition and hypothesis development, empirical model specification, type of data analysis and link between hypothesis and data source are also discussed.

3.1. Research Design

This study has employed explanatory type of research design to establish causal relationship between dependent and independent variables. The researcher has used panel data of 31 star 1 and 2 hotels operating in Addis Ababa, to examine the impact of independent variables (firm size, current ratio, number of rooms available , location, firm age and star level) over the dependent variable (Return on Asset) for the period 2015-2019.

3.2. Population and Sampling Techniques

The target population of this study included star 1 and 2 hotels registered by MOCT and operating in Addis Ababa. According to MOCT 2019 reports, the number of star one and two hotels operating in Addis Ababa equals 75. Of the 75 hotels 42 were star one and 33 were star two. However, because of lack of 5 years" data and unwillingness of hotels owners and managers to provide financial statement that is required for the analysis purpose, the researcher used only 31 hotels (16 star one and 15 star two) from the required 36 sample hotels. The study employed non-probability purposive sampling technique based on the age and accessibility of complete audited financial statements. The rationale behind selecting purposive sampling techniques than others is, it considered more appropriate when the universe happens to be small and the variables characteristic need that type of sampling techniques.

3.3. Data Source and Collection Methods

In order to achieve the research objectives mentioned in section 1.3, the study used audited financial statements. The data set used cover a period of 5 years starting from 2015 to 2019, involving of 31 hotels in Addis Ababa for 5 consecutive years. The study employed secondary data. The secondary data were collected from annual reports and audited financial statements of the selected hotels. The website of each of the hotels also visited to collect necessary data for the study.

3.4. Methods of Data analysis

The collected panel data were analyzed by using descriptive statistics, correlations, and multiple linear regression analysis. The secondary data was analyzed by using STATA software package. Basically, descriptive statistical tools were used to analyze the mean, standard deviation, minimum and maximum values of the study. Correlation analyses were used by taking all variables to determine the degree of relationship among the variables. Finally after the diagnostic test applied, the regression output explained the relationship between the dependent variable, return on asset, and multiple independent variables.

3.5. Model Specification

From the research methodology, the model was containing Return on asset(ROA) indictors of hotels profitability as the dependent variables; the explanatory variables include firm size(FS), liquidity(LI), number of rooms available(NR), location(LO), firm age(FA) and star level(SL) were the independent variables. Hence, based on the relationship among the above stated hotel profitability indictors, the following functional forms serve as the basis for the investigation:

$$ROA=f (FS, LI, NR, LO, FA, SL) \dots\dots\dots 1)$$

Equation 1 can be transformed into an econometric model as follows:

$$ROA_{i,t}=\beta_0+\beta_1(FS)_{i,t}+\beta_2(LI)_{i,t}+\beta_3(NR)_{i,t}-\beta_4(LO)_{i,t}+\beta_5(FA)_{i,t}+\beta_6(SL)_{i,t}+\varepsilon$$

Where: $ROA_{i,t}$ is the dependent variable as a proxy for hotels profitability, for hotel i at time

t . B_0 -constant

B_1-6 —coefficients of the regression model

ε –Error term

3.6. Model Assumptions and Data properties

The following diagnostic tests were carried out to ensure that the data fits the basic assumptions of linear regression models;

Heteroskedasticity Test

Heteroskedasticity occurs when the variance of the error term is not constant across observations. The study employed Breusch Pagan heteroskedasticity test. It is used to test for heteroskedasticity in a linear regression model and assumes that the error terms are normally distributed.

Multicollinearity Test

Multicollinearity occurs when there are high correlations between two or more predictor variables. An easy way to detect multicollinearity is to calculate correlation coefficient for all pairs of predictor variables. The study employed Variance inflation factor (VIF) as a measure of the amount of multicollinearity in a set of multiple regression variables.

Normality Test

Normality test was carried out to verify if the error terms are normally distributed. The Jacque-Bera (JB) test was employed to ascertain this assumption. The test was based on the null hypothesis that the residuals are normally distributed.

3.7. Definition of Variables and Construction of Hypothesis

3.7.1. Dependent variables

Various researchers have employed different profitability proxy measures to determine the factors affecting firms' profitability. And some of the measures that are used to measure profitability include return on asset, return on equity, return on capital employed and earnings per share.

In this study, hotel profitability, typically measured by the return on assets (ROA), as a function of internal determinants.

Return on Asset (ROA)

Return on asset is one of the major proxies of the profitability of firms that indicates how capable the management of the firm has been in converting assets into net earnings. ROA is an indicator that shows the profitability of the company in relation to its total assets. Financial information on net income divided by total assets considered to estimate ROA for this particular study. ROA indicates the profit earned per unit asset employed and shows the management's ability to utilize the firm's resources to generate profits. Therefore, ROA is considered as more significant and a better profitability measure and dependent variable.

3.7.2. Independent variables

Firm size

Firm size is the size of a company in a given industry at a given time. Many researchers used production capacity and total sales as measure of firm size. In hotel industry, there are a number of hotels of varying sizes and the total annual sales in these hotels of different sizes vary. In this study the size of the company measured by the volume of annual sales. Natural logarithm of total sales is used as a proxy to measure hotels firm size.

Hypothesis 1: Firm size has positive and significant effect on return on asset of star one and two hotels.

Liquidity

Liquidity is the simplicity with which any asset can be converted into ready cash either to spend or to invest. The lower the time taken to convert the assets to cash, the more liquid the asset. In this study, Current ratio used as a measure of firm's liquidity management effectiveness. Current ratio is the comparison of current assets to current liability and calculated by dividing current assets by current liability.

Hypothesis 2: Current ratio has positive and significant effect on return on assets of star one and two hotels.

Number of rooms available

The number of rooms available in hotel industry is the total number of rooms at the hotel, including occupied rooms and non-occupied rooms, actually available for use on a given day. In this study, the total of occupied rooms and non-occupied rooms in the selected sample hotel from 2015-2019 used as a measure of total number of rooms available.

Hypothesis 3: Number of rooms available has positive and significant effect on return on asset of star one and two hotels.

Location

Location in the hotel industry is the place where a particular hotel exists. In this study, distance of the hotels from the central part of the city (Piassa) is used as a location parameter to determine how far the hotel located from the central part of Addis Ababa.

Hypothesis 4: Location has negative and significant effect on return on asset of star one and two hotels.

Firm age

Firm age is the length of time during which a company existed. In this study, the number of years since the hotel incorporated in the industry used as a measure of firm age.

Hypothesis 5: Firm age has positive and significant effect on return on asset of star one and two hotels.

Star rating

Star rating is a system used by independent organizations to rate a hotel. One star is the lowest rating, and five stars are the highest score. In this study, the star level which is given by MOCT in accordance with regulation number 172/2002 is used.

Hypothesis 6: Star level has positive and significant effect on return on asset of star one and two hotels.

Table 3.1: Definitions, notation and expected effect of the explanatory variables

	Variable	Measure	Notation	Exp.sign
	Return on asset	The ratio of net-profit to total assets of hotel	ROA	N/A
Independent Variable	Firm size	Natural logarithm of Total sales of the hotel	FS	+
	Current ratio	The ratio of current asset to current liability	LI	+
	Number of rooms available	The number of rooms available for guests	NR	+
	Location	Distance of the hotel from the central part of the city	LO	-
	Firm age	Number of years since incorporation	FA	+
	Star level	The level of star given by MOCT	SL	+

CHAPTER FOUR

4. Results and Discussion

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., heteroskedasticity test, multicollinearity & normality test, and 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 econometric software

4.1. Descriptive Statistics of Variables

In this section descriptive statistics of the dependent variable; Return on Asset (ROA) and explanatory variables: firm size (FZ) which Is expressed in terms of logarithm of annual total sales, liquidity(LI)), number of rooms available (NR), location (LO), firm age (AG) ,star level (SL) that are involved in the regression model are presented. The analysis starts with the broad statistical description of both dependent and explanatory variables of the study and it provides descriptive about statistical mean, maximum value, minimum value and standard deviation of each variables in Table 4.1. These figures give overall description about the data used in the regression models.

Table 4.1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev	Min	Max
ROA	155	0.0835355	0.069581	-0.0354	0.321
FS	155	6.762725	0.3658929	5.941525	7.554458
LI(CR)	155	0.8130761	0.5724915	0.312	3.451
NR	155	25.12258	8.50312	17	48
LO	155	5.172903	2.411426	1	10.5
FA	155	8	3.939477	5	19
SL	155	1.483871	0.5013597	1	2

Source: Researcher Computation Using STATA, 2021

Table 4.1 shows descriptive statistics for all variables that were employed for the regression. Accordingly, Return on Asset, the dependent variable, has a positive mean value of 0.083, which implies star 1 and 2 hotels was gaining average positive return of 8.3 cents in every one birr investment they made on total asset during the study period. Similarly, the descriptive statistics in the above table indicates a positive mean value of independent variables, 6.76, 0.81, 25.12, 5.17,8 and 1.48 for firm size, current ratio, number of rooms available, location, age and star level respectively.

As clearly shown in the above table, table 4.1, from the total of 155 observations, the highest return on asset is 0.321 and the lowest return on asset is -0.0354. That means, the most profitable hotel from the sample earned 32.1 cents of net income from a single birr investment and the maximum loss incurred by one of the sample hotel is a loss of 3.5 cent on each birr of investment. Regarding firm size which is expressed in annual total sales, the most profitable hotel earns 35.8 million and the minimum sales by one of the sample hotel is 874026. Regarding liquidity management, on average ,the sample hotels kept 0.813 current ratio. In terms of number of rooms available, the maximum number of rooms from the sample hotels is 48 whereas the minimum number of rooms is 17, and on average the sample hotels have 25 rooms available. In terms of how far the hotel from the central location, the farthest hotel is 10.5 km from the central location and the nearest hotel is 1 km, on average the sample hotel has a distance of 5.17 km from the central location. Regarding age, the sample hotels had a mean of 8 years and the maximum and minimum number of years since the hotels opened is 19 and 5 years respectively.

4.2. Correlation Analysis between Explanatory Variables

In this section the correlation between the hotel industry indicator (return on asset) and the six explanatory variables namely: firm size (log sales), liquidity (current ratio), number of rooms available; location; firm age and star level are presented and analyzed. A correlation matrix is used to ensure the correlation between explanatory variables. There is no agreement regarding the level of correlation coefficient. Cooper & Schindler (2008) suggest that a correlation coefficient above 0.8 between explanatory variables should be corrected because it is a sign for multicollinearity problem. Moreover, Mashotra (2007) argue that the correlation coefficient can be 0.75. In addition, Hair et al. (2006) also argued that correlation coefficient below 0.9 may not

cause serious multicollinearity problem. Accordingly, all variables in the study meet the above standard and as a result there is no sign of multicollinearity problem on the model of the study. The detailed correlation analyses of the model are presented as follows.

Table 4.2: Correlation Coefficients

Variable	ROA	FS	LI (CR)	NR	LO	FA	SL
ROA	1.0000						
FS	0.6993	1.0000					
LI(CR)	0.6478	0.7105	1.0000				
NR	0.6133	0.8725	0.7286	1.0000			
LO	-0.5446	-0.6472	-0.4265	-0.5782	1.0000		
FA	0.6916	0.7989	0.6892	0.8200	-0.5762	1.0000	
SL	0.1250	0.2473	0.0054	0.1292	-0.2872	0.1315	1.0000

Source: Researcher Computation Using STATA, 2021

Table 4.2 provides the correlation coefficient between all variables. Correlations measure the strength and direction of the linear relationship between the two variables. As indicated in the above correlation matrix, it is seen that the correlation coefficient among the explanatory variables is less than 0.9 which indicates that there is no serious multicollinearity problem in the model.

As per the table above, Return on asset has positive correlation coefficient with firm size, current ratio, number of room available, firm age and star level, whereas it has negative correlation coefficient with location. This finding is consistent with findings such as Mesut. (2014), Ajanthan (2013), Urtasun and Gutierrez (2006), Ofuan et al.(2016), and Ingram and Roberts (2000).The negative correlation coefficient finding is also consistent with findings of Shoval et al. (2011)

Generally, since the highest correlation coefficient is 0.87 between firm size and number of rooms available, it is possible to conclude that there is no serious multicollinearity problem as supported by Hair et al. (2006) which stated that the concern of multicollinearity problem arises when the correlation coefficient exceeds the absolute value of 0.90.

During the last 5 years the size of hotels (total sales) shows improvement. Increase in the size of hotels shows a higher positive correlation with current ratio(0.71),number of rooms available(0.87) firm age(0.79) and a higher negative correlation with location(-0.64).The correlation result of 0.71 implies that when the hotel is more liquid (effective working capital management) ,the firm's ability to increase sales is increased. Correlation of 0.87 between firm size and number of rooms available depicts that when number of room's available increase, then total sales of the hotel generated from room sales also increases. The correlation result of 0.79 between firm age and sales implies that when the number of years of a hotel in operation increased, the hotel sales also increased. A correlation of -0.64 implies that the size of hotels and location goes in different directions.

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 ($E(u) = 0$). 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 Test

One of the assumption of CLRM states that the variance of the errors is constant, σ^2 this is known as the assumption of homoskedasticity (Brook 2008). If the errors do not have constant variance, they are said to be heteroskedastic. In other words, if the residuals of the regression have systematically changing variability over the sample, that is a sign of heteroskedasticity (Chris Brooks 2008)

Breusch Pagan Test is used to test for heteroskedasticity in a linear regression model and assumes that the error terms are normally distributed. It tests whether the variance of the errors from a regression is dependent on the values of the independent variables.

Table 4.3: Heteroskedasticity Test Result

Null hypothesis (Ho) = there is no heteroskedasticity; Alternative hypothesis (Ha) = there is heteroskedasticity	
F(6,141)	13.33
Prob>F	0.0001
Prob chi squared	0.0747

Source: Researcher Computation Using STATA, 2021

The above table depicts that, F-test versions of the heteroskedasticity test fail to reject the null hypothesis even at 5% of significant level as their corresponding probability value exceeds 0.05. This indicates the variance of the errors is constant (i.e. there is no problem of heteroskedasticity in both models).

Multicollinearity test

The other assumption of CLRM states that no independent variable is a perfect linear function of other explanatory variables. Perfect correlation occurs when two variables have a Pearson's correlation coefficient of +1 or -1 which implies that when one of the variables change, the other variable also changes by a completely fixed proportion. Perfect correlation suggests that two variables are different forms of the same variable.

Variance inflation factor (VIF) is a measure of the amount of multicollinearity in a set of multiple regression variables. Mathematically, the VIF for a regression model variable is equal to the ratio of the overall model variance to the variance of a model that includes only that single independent variable. This ratio is calculated for each independent variable. A rule of thumb commonly used in practice is if a VIF is > 10 , there is a high multicollinearity.

Table 4.4 Variance Inflation Factor Test

Variable	VIF	1/VIF
FS	5.58	0.179190
LI(CR)	2.43	0.411927
NR	5.40	0.185146
LO	1.81	0.551623
FA	3.54	0.282871
SL	1.19	0.837659
Mean VIF	<u>3.33</u>	

Source: Researcher Computation Using STATA, 2021

The above table depicts that, VIF is less than 10. This indicates that there is no multicollinearity among the Independent variables, but the predictors may be moderately correlated in the models.

Normality Test: Jarque- Bera (JB)

The other assumption of classical linear regression model that was done for this research work was normality test. It requires checking whether the disturbances are normally distributed or not (Brooks 2008). In order to do this, one of the most commonly applied tests for normality, i.e., Jarque- Bera (JB) test was implemented.

If the residuals are normally distributed, the histogram should be bell-shaped and the Jarque- Bera (JB) statistic would not be significant. This means that, the p-value should not be bigger than 0.05 to not reject the null of normality at the 5% significance level, (Brooks 2008). Accordingly, the Jarque- Bera (JB) statistic test result of the model of this study is presented in the table 4.5 below.

Table 4.5: Jarque- Bera (JB) Statistical Test Results

Ho :residuals are normally distributed	
H1:Residuals are not normally distributed	
	P value
JB test	0.000000

Source: Researcher Computation Using STATA, 2021

As can be seen in the above table, the residuals are not normally distributed in the models. Hence the null hypothesis for residual normality is rejected as the p-value for the JB test is less than 0.05 for models employed in the research. This implies that the inferences made about the coefficient estimates could be wrong. However, the sample is probably just about large enough that the study needs to be less concerned than it would be with a small sample. In addition to that, due to central limit theorem, since the sample size is almost half of the total population, the normality assumption is not needed at all as the Central Limit Theorem ensures that the distribution of disturbance term will approximate normality and the study assured the existence of normality in the model doesn't affect the significance of the model.

4.4. Regression Result Between Explained Variables and Explanatory Variables

In order to examine the relationship between the dependent variable and independent variables, two regression models were run on this study. The two model was adopted basically due to high multicollinearity (0.87) problem existed between Firm size and number of rooms available, which prevented the research not to use one model. Since the study was interested to see the impact of both FS and NR, it employed two models for each by including the remaining explanatory variables to investigate their level of determination on the profitability of hotels. The two regression models were undertaken to investigate the relationship between ROA and independent variables. The regression model is presented as follows:

ROA-Model One: First Regression with firm size

$$ROA_{i,t} = \beta_0 + \beta_1(FS)_{i,t} + \beta_2(LI)_{i,t} + \beta_3(LO)_{i,t} + \beta_4(FA)_{i,t} + \beta_5(SL)_{i,t} + \varepsilon$$

Where: $ROA_{i,t}$ is the dependent variable as a proxy for hotels profitability, for hotel i at time t .

B_0 -constant

B_{1-5} —coefficients of the regression model

ε –Error term

In the following table 4.6, coefficients of variables, standard errors, t- statistic, and p-values for explanatory variables, and R-squared, Adjusted R-squared, Standard Error of regression, F-statistic, Prob. (F-statistic) for the first regression, i.e., ROA-Model with FS, and number of observations included in the study are presented.

Table 4.6 Regression Result between ROA & Explanatory Variables with Firm Size

Variables	Coefficient	Std.Error	t-Statistic	Prob.
Constant	-0.240	0.130	-1.84	0.067
FS	0.042	0.020	2.09	0.038**
LI	0.030	0.009	3.05	0.003***
LO	-0.004	0.002	-2.05	0.042**
FA	0.005	0.001	2.75	0.007***
SL	-0.001	0.008	-0.13	0.894
Mean dependent var	0.084	SD dependent var		0.070
R-squared	0.575	Number of obs		155.000
F-test	40.297	Prob > F		0.000
Akaike crit. (AIC)	-507.946	Bayesian crit. (BIC)		-489.686

***, ** denotes significance level at 1% and 5% levels respectively.

Source: Researcher Computation Using STATA, 2021

The regression output with the first model look:

$$ROA=0.042*FS+0.030*LI-0.004*LO+0.004*FA-0.001*SL$$

ROA-Model Two: Second Regression with number of rooms available

$$ROA_{i,t} = \beta_0 + \beta_1(LI)_{i,t} + \beta_2(NR)_{i,t} - \beta_3(LO)_{i,t} + \beta_4(FA)_{i,t} + \beta_5(SL)_{i,t} + \varepsilon$$

Table 4.7 Regression Analysis between ROA & Explanatory Variables with Number of Room's Available

Variables	Coefficient	Std.Error	t-Statistic	Prob.
Constant	0.039	0.026	1.52	0.131
LI	0.042	0.009	4.27	0.000***
NR	-0.001	0.001	-0.98	0.327
LO	-0.006	0.002	-3.03	0.003***
FA	0.007	0.002	4.12	0.000***
SL	0.002	0.007	0.38	0.707
Mean dependent var	0.084	SD dependent var		0.070
R-squared	0.565	Number of obs		155.000
F-test	38.745	Prob > F		0.000
Akaike crit. (AIC)	-504.477	Bayesian crit. (BIC)		-486.217

*** denote significance level at 1%

Source: Researcher Computation Using STATA, 2021

The regression output with the model look

$$ROA = 0.042 * LI - 0.001 * NR - 0.006 * LO + 0.007 * FA + 0.002 * SL$$

In the above table coefficients of variables, standard errors, t- statistic, and p-values for explanatory variables, and R-squared, Adjusted R-squared, Standard Error of regression, F- statistic, Prob. (F-statistic) for the second regression, i.e., ROA-Model with NR, and number of observations included in the study are presented. Moreover, the result of other explanatory variables, current ratio, location, age, star level are explained by comparing and contrasting with the results of the first model.

As it can be seen from table 4.6, there is statistically positive relationship between firm size, current ratio, age with return on asset of star 1 and 2 hotels. On the other hand, there is statistically negative relationship among location and star level on return on asset. On contrary,

table 4.7 shows that there is statistically positive relationship between current ratio, firm age, star level with return on asset of star 1 and 2 hotels where as number of rooms available and location are statistically positively related with return on asset of star 1 and 2 hotels. In both model location is statistically negatively related with return on asset.

Table 4. 8 : Regression Result of All Determining Variables

Variables	Coefficient	Std.Error	t- Statistic	Prob.
Constant	-0.413	0.144	-2.87	0.005
FS	0.076	0.024	3.19	0.002***
LI	0.035	0.001	3.56	0.000***
NR	-0.003	0.001	-2.59	0.011**
LO	-0.004	0.002	-2.15	0.033**
FA	0.006	0.001	3.53	0.001***
SL	-0.003	0.007	-0.41	0.682
Mean dependent var	0.084	SD dependent var		0.070
R-squared	0.593	Number of obs		155
F-test	35.979	Prob > F		0.000
Akaike crit. (AIC)	-512.801	Bayesian crit. (BIC)		-491.497

***, ** denote significance level at 1% and 5% respectively

Source: Researcher Computation Using STATA, 2021

The F-test shows overall significance of linear regression model and to what extent all explanatory variables jointly explain dependent variable. It provides a better fit to the data than a model that contains no independent variables. According to Brooks (2008), F-test is mandatory for multiple regression to assess overall significance of the model even at 1 percent of significance level.

The coefficient variables show that there is positive and negative causal relationship between return on asset and independent variables. This implies that an increase or decrease on these variables will result in an increase or decrease on performance of hotels return on asset. Firm size, current ratio and age are positively related with return on asset, i.e. an increase in these explanatory variables will result in an increase in profitability indicator, return on asset.

Whereas number of rooms available, location and star level are negatively related with return on assets i.e. as the star level of the hotel, rooms available and distance of hotels from central location increases will result in a decrease in return on asset.

The R-squared also known as the coefficient determination of statistic quantifies the predictive accuracy of a statistical model. It shows the proportion of variance in the dependent variable that is explained by the independent variables. According to Brooks (2008), R-squared answers how well does the model containing the explanatory variables that was proposed actually explain variations in the dependent variable.

As clearly seen in Table 4.8 above, R-squared value for the ROA regression models is 0.59. This indicates that the explanatory variables in this study jointly explain about 59 percent of the variation in the profitability measures, return on asset. The remaining 41 percent of the variation in the profitability of star 1 and 2 hotels is explained by other variables which are not included in the models.

The Adjusted R-Square which is the modified version of R-squared, increases only if the new term improves the model more than would be expected by chance. It also decrease when a predictor improves the model by less than expected by chance. In the above model the Adjusted R-Square is 0.57 for the model. This also signifies to what extent the variation in explained variable is expressed by the model and goodness of the model.

The above explanatory variables together are good explanatory variables of the profitability of star 1 and 2 hotels in Ethiopia. Beside this, F-statistics which was used to measure the overall test of significance of the model was presented, and null hypothesis can be clearly rejected in the regression models. Since the p-value is 0.000000, which is sufficiently lower, the model is well fitted at 1 percent level of significance.

4.5. Result Discussion

Firm size and return on asset

Hypothesis testing: Firm size and return on asset of hotels

Hypotheses 1: Firm size has positive and significant effect on return on asset of star one and two hotels.

Conclusion: Do not reject the hypothesis since the regression result shows there is a positively significant causal effect between firm size which is expressed in total sales and return on asset of star 1 and 2 hotels. The p-value on the regression output i.e., 0.002 in the above table 4.6 shows, the variable is statistically significant at 1 percent of significant level. This indicates that firm size has a positive contribution to improve profitability. In addition, the coefficient, 0.075 indicates that there is positive relationship between firm size and return on asset. This implies that if firm size (sales) is increased by one percent, annual return on asset to increase by 0.00075 units (0.075 percent) other things remains constant.

Consistent with this finding, Stierwald (2009) have found significant positive relationship between performance of service companies and return on asset. This finding show that larger firms are much more profitable gain scalable economies and benefit from field of economies as compared to smaller firms. This finding is also consistent with Doğan.2013. According to Doğan (2013) big firms have the opportunity to have more profit since they have a bigger market share. So based on these situations, the big size firms work in more profitable with little competition is expected.

Liquidity Management and return on asset

Hypothesis testing: Liquidity Management (current ratio) and return on asset of hotels

Hypotheses 2: Current ratio has positive and significant effect on return on assets of star one and two hotels

Conclusion: Do not reject the hypothesis since the regression result shows there is a positively significant causal effect between liquidity management (current ratio) and return on asset of star 1 and 2 hotels. The p-value on the regression output i.e., 0.000 in the above table 4.6 shows, the variable is statistically significant at 1 percent of significant level. This indicates that effective liquidity management expressed in current ratio has a positive contribution to improve profitability. In addition, the coefficient, 0.035 indicates that there is positive relationship between current ratio and return on asset. This implies that a one percent increase on current ratio will result in an increase on profitability of hotels, return on asset by 3.5 percent other things remain constant.

Consistent with this finding, Nunes and Serrasqueiro (2014) have found a positive correlation between profitability and liquidity. This finding shows that liquidity provides financial freedom in the form of buying power and immediate access for a large or small purchases that are supposed to improve the performance of firms.

Number of rooms available and return on asset

Hypothesis testing: Number of rooms available and return on asset of hotels

Hypotheses 3: Number of rooms available has positive and significant effect on return on asset of star one and two hotels

Conclusion: Reject the hypothesis since the regression result shows there is a negatively significant causal effect between number of rooms available and return on asset of star 1 and 2 hotels. The p-value on the regression output i.e., 0.011 in the above table 4.6 shows, the variable is statistically significant at 5 percent of significant level. This indicates that having large number of rooms doesn't contribute to improve profitability. Rather having large number of rooms decrease return on asset. In addition, the coefficient, -0.0025 indicates that there is negative relationship between number of rooms available and return on asset. This implies that a one percent increase on number of rooms available will result in a decrease on profitability of hotels, return on asset by 0.25 percent other things remain constant.

This finding is not consistent with the finding of Thrane, C. (2007). According to Thrane (2007) hotel characteristics which is expressed in terms of number of rooms available, location and competition lead to greater profitability. The result points out that management of the hotel should focus on the balance between these variables to significantly increase return on asset.

Location and return on asset

Hypothesis testing: Location and return on asset of hotels

Hypotheses 4: Location has negative and significant effect on return on asset of star one and two hotels.

Conclusion: Do not reject the hypothesis since the regression result shows there is a significant negative causal effect between distance to central part of the city, piassa and return on asset of star 1 and 2 hotels. The p-value on the regression output, 0.033 in the above table 4.6 shows, the

variable is statistically significant at 5 percent of significant level. This indicates that a hotel being nearest to the central location, piassa has a positive contribution to improve profitability. In addition, the coefficient, -0.0043 indicates that there is negative relationship between hotels distance from central part of the city and return on asset. This implies that if distance of hotels from the central location increased by one kilometer, annual return on asset will decrease by 0.43 percent other things remains constant.

This finding is consistent with the finding of Adam and Amuquandoh(2014) that show that empirical testing of performance determinants cannot neglect the spatial location of the hotel because important differences among locations were found.

Firm age and return on asset

Hypothesis testing: Firm age and return on asset of hotels

Hypotheses 5: Firm age has positive and significant effect on return on asset of star one and two hotels.

Conclusion: Do not reject the hypothesis since the regression result shows there is a positive significant causal effect between firm age and return on asset of star 1 and 2 hotels. The p-value on the regression output i.e., 0.001 in the above table 4.6 shows, the variable is statistically significant at 1 percent of significant level. This indicates that firms established years before has the ability to improve profitability. In addition, the coefficient, 0.00614 indicates that there is positive relationship between firm age and return on asset. This implies that if firm's age increase by one year, annual return on asset will increase by 0.61 percent other things remains constant.

consistent with the finding, Ofuan et al .(2016) finds that old firms has a strong effect on the business network since older firms can obtain resources easily over time and have better access the business networks. In another saying, older firm's profitability performs better than younger firm's profitability.

Star level and return on asset

Hypothesis testing: Star level and return on asset of hotels

Hypotheses 6: Star level has positive and significant effect on return on asset of star one and two hotels.

Conclusion: Reject the hypothesis since the regression result shows there is an insignificant negative causal effect between star level and return on asset of star 1 and 2 hotels. The p-value on the regression output is 0.68 which is considerably higher indicating that star level is statistically insignificant to explain return on asset in Ethiopian star 1 and 2 hotels.

This indicates that star level has little contribution to improve profitability. In addition, the coefficient, -0.0032 indicates that there is negative relationship between star level and return on asset. This implies that if star level changes from level one to level two, annual return on asset will decrease by 0.32 percent other things remains constant.

This finding is not consistent with the finding of Ingram and Roberts (2000). This mean, Star ratings cannot impact purchase decisions and return on asset instantly. So, star level doesn't communicate something about the hotels' brand's quality, luxury, and customer service.

CHAPTER FIVE

5. Conclusion and Recommendation

Introduction

It is generally agreed the hotel industry is one of the most important industries for the financial development. In order to ensure financial sustainability, companies in the hotel industry need to increase their profitability and ensure their continuity. In order to survive and maintain a good financial stability, it is important to identify the determinants that influence the overall performance of hotel. The study investigate the internal determinants of profitability of star one and two hotels in Addis Ababa over the period of 2015 to 2019. The study also used an appropriate econometric methodology for the estimation of variables coefficient under multiple regression model. The following sections discussed about the final concluding remarks of the study and possible recommendations.

5.1 Conclusion

- R-squared value for the regression models is 0.59. This indicates that the explanatory variables in this study jointly explain about 59 percent of the variation in the profitability measures, return on asset respectively. The remaining 41 percent of the variation in the profitability of star one and star two hotels in Addis Ababa is explained by other variables which are not included in the models.
- The F-statistic is less than one percent of significance level which implies that all explanatory variables jointly affect performance of star one and star two hotels in Addis Ababa.
- Firm size is statistically significant at 1 percent of significant level and the variable have a great contribution to improve return on asset of star one and star two hotels in Addis Ababa. There is positive causal relationship between firm size and return on asset. As a result, an increase of firm size expressed in total sales will increase return on asset of star one and star two hotels in Addis Ababa. This implies that, marketing activities makes larger hotels“ more profitable in comparison to smaller hotels.
- Current ratio is statistically significant at one percent of significance level and has great contribution in the improvement of return on asset of star one and star two hotels in

Addis Ababa. Effective liquidity management practice positively affects hotels performance. This implies that Proper cash flow, money or assets that can easily be converted to cash in short run are always important for firms to react faster and get competitive advantage.

- Number of rooms available is statistically significant at five percent of significance level implying that having an optimal level of number of rooms available improve the performance of star one and star two hotels in Addis Ababa .Number of rooms available negatively affects hotel performance. In other words, having large number of rooms beyond a certain level would limit the performance of star one and star two hotels in Addis Ababa.
- Location is statistically significant at five percent of significant level and has negative causal relationship with return on asset of star one and two hotels. As a result, as distance of the hotel from the central location increases, performance of star one and star two hotels in Addis Ababa will be reduced.
- Star level is statistically insignificant at one and five percent of significance level for the model and it has low level of determination for performance of star one and star two hotels in Addis Ababa. Star level negatively affects hotel performance. This implies that having large star level decreases performance of star one and star two hotels in Addis Ababa.
- Firm age is statistically significant at one percent and has great contribution in the improvement of return on asset of star one and star two hotels in Addis Ababa. Firm age positively affects hotels performance. In other words, initially new hotels return on asset is lower and later on become profitable at an old age

Based on these findings, it can be concluded that performance of star one and star two hotels in Addis Ababa, is highly affected by the firm size, liquidity management, location and firm age. Whereas number of rooms available and star level has low level of determination for performance of star one and star two hotels in Addis Ababa.

5.2 Recommendations

In order to exist and maintain hotel in the industry, it is vital to identify the determinants that mostly influence the overall performance of star one and star two hotels in Addis Ababa. Therefore, based on the findings of the study the following possible recommendations were forwarded:

- Firm size, liquidity management, number of room's available; location and firma age are significant determinants of performance of star one and star two hotels in Addis Ababa. Therefore, the managements of hotels, prospective investors, creditors and government need to give great attention for these explanatory variables.
- It is positive to have high hotel sizes. Because the size of the hotel is an important factor as it influences its competitive power. Small companies have less power than large ones; hence hotel owners and managers should enhance firm size through promotion, keeping customer benefit upfront, lowering the price of the services, be aware of the competition, and provide a broader range of service like swimming.
- Hotel owners and managers ought to maintain Proper cash flow. They also need to hold assets that can easily be converted to cash in short run so as to react faster.
- Prospective investors should determine the optimal number of rooms that the hotel building to hold.
- Hotel owners and managers whether for expansion of the existing hotel or incorporation of a new hotel should emphasis on location, since the shortest distance of hotels from the central part of Addis Ababa are more profitable.
- Hotel owners who are interested to expand their business should focus on horizontal integration with older hotels.

Finally, the study sought to investigate the factors that influence profitability of star one and star two hotels in Addis Ababa. However, the variables used in the statistical analysis did not include all factors like indebtedness, leverage, occupancy rate and seasonality that can affect Addis Ababa's hotel profitability. Furthermore future research could incorporate all hotels ranging from star one to five.

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Appendix: Dependent and Independent variables value

Hotels	Year	ROA	Firm size	Current ratio	Number of rooms available	Location (In km)	Age	Star
Spa Service Hotel	2015	0.209	29,254,121.00	2	44	2.4	19	1
Spa Service Hotel	2016	0.22	30,125,125.00	2.2	44	2.4	19	1
Spa Service Hotel	2017	0.206	32,522,155.00	3.235	44	2.4	19	1
Spa Service Hotel	2018	0.212	34,652,121.00	3.345	44	2.4	19	1
Spa Service Hotel	2019	0.241	35,654,125.00	3.451	44	2.4	19	1
Ras Amba Hotel	2015	0.0604	17,583,426.16	0.615	39	3.2	16	2
Ras Amba Hotel	2016	0.0507	20,446,117.12	0.525	39	3.2	16	2
Ras Amba Hotel	2017	0.0432	21,990,023.00	0.425	39	3.2	16	2
Ras Amba Hotel	2018	0.07	21,940,144.00	0.512	39	3.2	16	2
Ras Amba Hotel	2019	0.088	23,393,414.96	0.572	39	3.2	16	2
Semien Hotel	2015	0.321	18,492,330.30	1.2	38	1.8	17	1
Semien Hotel	2016	0.3056	20,015,567.43	1.4	38	1.8	17	1
Semien Hotel	2017	0.206	21,775,869.69	1.921	38	1.8	17	1
Semien Hotel	2018	0.207	22,223,803.58	1.95	38	1.8	17	1
Semien Hotel	2019	0.253	21,665,592.94	1.92	38	1.8	17	1
Ghion Hotel	2015	0.2514	25,652,145.00	1.95	48	3.3	18	2
Ghion Hotel	2016	0.2607	27,854,121.00	1.91	48	3.3	18	2

Ghion Hotel	2017	0.2311	31,524,122.00	1.92	48	3.3	18	2
Ghion Hotel	2018	0.1298	31,254,124.00	1.94	48	3.3	18	2
Ghion Hotel	2019	0.2384	35,847,394.00	1.97	48	3.3	18	2
Hera Hotel	2015	-0.0312	874,026.32	0.412	18	7.5	5	2
Hera Hotel	2016	-0.0321	946,212.0	0.412	18	7.5	5	2
Hera Hotel	2017	-0.0334	912,542.00	0.314	18	7.5	5	2
Hera Hotel	2018	-0.0354	2,803,297.00	0.454	18	7.5	5	2
Hera Hotel	2019	0.0364	4,406,714.00	0.332	18	7.5	5	2
Ag Pal Hotel	2015	0.1562	2,783,984.32	0.312	17	6	6	1
Ag Pal Hotel	2016	0.1575	2,702,158.00	0.325	17	6	6	1
Ag Pal Hotel	2017	0.1589	2,855,647.00	0.339	17	6	6	1
Ag Pal Hotel	2018	0.1608	2,766,497.00	0.358	17	6	6	1
Ag Pal Hotel	2019	0.1611	2,955,626.00	0.361	17	6	6	1
Damu Hotel	2015	0.04152	3,760,535.80	0.412	22	6.6	7	1
Damu Hotel	2016	0.0452	3,760,535.80	0.451	22	6.6	7	1
Damu Hotel	2017	0.0458	4,208,721.29	0.457	22	6.6	7	1
Damu Hotel	2018	0.0459	4,078,129.94	0.459	22	6.6	7	1
Damu Hotel	2019	0.0469	4,229,939.14	0.461	22	6.6	7	1
Lion Den Hotel	2015	-0.03185	1,935,324.62	0.318	18	5	5	1
Lion Den Hotel	2016	-0.03251	2,061,746.79	0.325	18	5	5	1
Lion Den Hotel	2017	0.0327	2,098,478.16	0.327	18	5	5	1

Lion Den Hotel	2018	0.0334	2,302,404.74	0.334	18	5	5	1
Lion Den Hotel	2019	0.0337	2,649,562.00	0.337	18	5	5	1
D Afrique Hotel	2015	0.0632	8,482,981.00	0.61	32	4.5	8	1
D Afrique Hotel	2016	0.0641	8,482,981.00	0.631	32	4.5	8	1
D Afrique Hotel	2017	0.0664	6,144,165.00	0.641	32	4.5	8	1
D Afrique Hotel	2018	0.0674	8,068,330.00	0.651	32	4.5	8	1
D Afrique Hotel	2019	0.0687	9,658,388.00	0.66	32	4.5	8	1
Embilta Hotel	2015	0.142	19,846,079.57	1.51	41	3.4	7	2
Embilta Hotel	2016	0.1524	23,893,592.71	1.652	41	3.4	7	2
Embilta Hotel	2017	0.1528	24,401,455.87	1.721	41	3.4	7	2
Embilta Hotel	2018	0.165	28,791,135.49	1.754	41	3.4	7	2
Embilta Hotel	2019	0.1852	34,274,423.54	1.841	41	3.4	7	2
Celeste Eth Hotel	2015	0.1962	2,221,781.94	0.315	19	6.5	5	2
Celeste Eth Hotel	2016	0.095	2,395,281.94	0.317	19	6.5	5	2
Celeste Eth Hotel	2017	0.214	2,661,381.94	0.319	19	6.5	5	2
Celeste Eth Hotel	2018	0.184	3,998,836.00	0.467	19	6.5	5	2
Celeste Eth Hotel	2019	0.0058	4,522,255.00	0.47	19	6.5	5	2
Dessa Hotel	2015	0.0612	3,900,480.90	0.61	22	6.2	7	2
Dessa Hotel	2016	0.0614	4,300,146.00	0.621	22	6.2	7	2
Dessa Hotel	2017	0.0621	4,050,147.00	0.631	22	6.2	7	2
Dessa Hotel	2018	0.0635	4,200,347.98	0.6341	22	6.2	7	2

Dessa Hotel	2019	0.0648	3,671,962.00	0.614	22	6.2	7	2
Defrance Hotel	2015	0.0312	2,998,260.00	0.321	18	7.6	5	1
Defrance Hotel	2016	0.04851	3,170,620.00	0.624	18	7.6	5	1
Defrance Hotel	2017	0.0301	2,751,340.00	0.325	18	7.6	5	1
Defrance Hotel	2018	0.0325	2,291,380.00	0.327	18	7.6	5	1
Defrance Hotel	2019	0.03523	2,144,960.00	0.327	18	7.6	5	1
Afropolitan Hotel	2015	0.0325	2,751,340.00	0.325	19	4.2	6	2
Afropolitan Hotel	2016	0.0312	2,291,380.00	0.324	19	4.2	6	2
Afropolitan Hotel	2017	0.03895	3,322,951.00	0.631	19	4.2	6	2
Afropolitan Hotel	2018	0.04652	5,708,845.00	0.471	19	4.2	6	2
Afropolitan Hotel	2019	0.05425	6,510,036.00	0.531	19	4.2	6	2
3day Hotel	2015	0.0542	4,641,395.88	0.912	24	5.2	7	1
3day Hotel	2016	0.05621	5,896,047.31	0.912	24	5.2	7	1
3day Hotel	2017	0.05321	5,857,707.24	0.932	24	5.2	7	1
3day Hotel	2018	0.06521	7,387,478.89	0.914	24	5.2	7	1
3day Hotel	2019	0.066524	7,308,792.16	0.942	24	5.2	7	1
Mr Hotel	2015	0.06521	7,592,495.45	0.661	27	1.7	8	2
Mr Hotel	2016	0.07596	9,492,028.53	0.721	27	1.7	8	2
Mr Hotel	2017	0.1112	11,098,474.15	1.01	27	1.7	8	2
Mr Hotel	2018	0.1251	10,938,968.00	1.21	27	1.7	8	2
Mr Hotel	2019	0.1265	12,533,281.11	1.34	27	1.7	8	2

Tikur Anb Hotel	2015	0.0451	5,845,224.00	0.451	25	6.1	5	1
Tikur Anb Hotel	2016	0.0461	6,742,392.52	0.512	25	6.1	5	1
Tikur Anb Hotel	2017	0.0562	7,711,516.47	0.524	25	6.1	5	1
Tikur Anb Hotel	2018	0.05421	4,699,701.45	0.514	25	6.1	5	1
Tikur Anb Hotel	2019	0.1251	12,130,177.42	1.61	25	6.1	5	1
C-Fun Hotel	2015	0.0212	2,002,404.74	1.331	19	7.5	5	1
C-Fun Hotel	2016	0.0225	2,349,462.00	1.341	19	7.5	5	1
C-Fun Hotel	2017	0.02352	2,554,251.00	1.351	19	7.5	5	1
C-Fun Hotel	2018	0.02452	2,845,265.00	1.341	19	7.5	5	1
C-Fun Hotel	2019	0.02491	2,925,142.00	1.348	19	7.5	5	1
Dimetri Hotel	2015	0.02185	1,452,652.00	0.595	18	7.8	5	1
Dimetri Hotel	2016	0.0231	1,745,214.00	0.501	18	10.5	5	1
Dimetri Hotel	2017	0.024	1,985,642.21	0.515	18	10.5	5	1
Dimetri Hotel	2018	0.03142	2,254,124.52	0.525	18	10.5	5	1
Dimetri Hotel	2019	0.03251	2,658,451.00	0.532	18	10.5	5	1
Edena Add Hotel	2015	0.02851	1,650,453.00	0.774	20	6.4	5	2
Edena Add Hotel	2016	0.0312	2,694,816.90	0.712	20	6.4	5	2
Edena Add Hotel	2017	0.0213	3,470,795.50	0.717	20	6.4	5	2
Edena Add Hotel	2018	0.046	4,254,323.60	0.721	20	6.4	5	2
Edena Add Hotel	2019	0.05751	4,395,664.52	0.731	20	6.4	5	2
Emmad Apartement H	2015	0.135	6,154,512.00	0.874	20	2	9	2

Emmad Apartement Hotel	2016	0.1364	7,152,451.00	0.879	20	2	9	2
Emmad Apartement Hotel	2017	0.1384	8,452,641.00	0.981	20	2	9	2
Emmad Apartement Hotel	2018	0.1425	9,025,145.00	0.993	20	2	9	2
Emmad Apartement Hotel	2019	0.1425	11,254,151.00	1.02	20	2	9	2
Haiken Hotel	2015	0.0635	6,125,491.00	0.734	20	4.6	7	2
Haiken Hotel	2016	0.0652	7,025,421.00	0.741	33	4.6	7	2
Haiken Hotel	2017	0.0675	8,021,542.00	0.771	33	4.6	7	2
Haiken Hotel	2018	0.0685	8,562,412.00	0.789	33	4.6	7	2
Haiken Hotel	2019	0.102	9,102,522.00	1.2	33	4.6	7	2
Harambe Hotel	2015	0.0561	4,864,627.00	0.541	25	3	6	1
Harambe Hotel	2016	0.0564	5,353,923.00	0.521	25	3	6	1
Harambe Hotel	2017	0.0574	5,892,079.00	0.534	25	3	6	1
Harambe Hotel	2018	0.0589	6,349,594.00	0.554	25	3	6	1
Harambe Hotel	2019	0.0632	8,786,183.00	0.6	25	3	6	1
Giovanni Hotel	2015	0.0564	2,589,545.00	0.641	23	4.8	7	1
Giovanni Hotel	2016	0.0562	2,895,645.24	0.641	23	4.8	7	1
Giovanni Hotel	2017	0.0541	3,012,512.52	0.512	23	4.8	7	1
Giovanni Hotel	2018	0.0554	3,251,252.55	0.513	23	4.8	7	1
Giovanni Hotel	2019	0.0561	3,425,125.20	0.512	23	4.8	7	1
Manrashiwa Hotel	2015	0.0567	4,251,212.00	0.574	23	8.9	7	1
Manrashiwa Hotel	2016	0.0589	4,352,652.54	0.581	23	8.9	7	1

Manrashiwa Hotel	2017	0.0599	4,525,255.24	0.589	23	8.9	7	1
Manrashiwa Hotel	2018	0.0561	4,789,562.27	0.591	23	8.9	7	1
Manrashiwa Hotel	2019	0.0562	4,985,784.28	0.594	23	8.9	7	1
Pacific Hotel	2015	0.0562	5,254,152.00	0.542	17	9.8	7	2
Pacific Hotel	2016	0.0564	6,389,561.21	0.554	17	9.8	7	2
Pacific Hotel	2017	0.0563	6,785,963.24	0.5741	17	9.8	7	2
Pacific Hotel	2018	0.0621	7,125,415.67	0.612	17	9.8	7	2
Pacific Hotel	2019	0.063	7,562,532.24	0.687	17	9.8	7	2
Sheger Royal Hotel	2015	0.132	4,584,222.00	0.785	21	2.5	10	2
Sheger Royal Hotel	2016	0.142	6,512,421.00	0.791	21	2.5	10	2
Sheger Royal Hotel	2017	0.142	7,412,542.00	0.781	21	2.5	10	2
Sheger Royal Hotel	2018	0.152	8,451,242.00	0.789	21	2.5	10	2
Sheger Royal Hotel	2019	0.1652	10,252,152.00	0.812	21	2.5	10	2
Soramba Hotel	2015	0.0632	8,791,305.04	0.652	32	1	9	2
Soramba Hotel	2016	0.018	8,125,215.00	0.742	32	1	9	2
Soramba Hotel	2017	0.1352	10,132,000.96	0.758	26	1	9	2
Soramba Hotel	2018	0.1486	11,738,601.00	0.765	26	1	9	2
Soramba Hotel	2019	0.1303	13,375,531.05	0.793	26	1	9	2
Louvre Hotel	2015	0.0632	4,560,426.23	0.647	24	4.6	9	2
Louvre Hotel	2016	0.0642	5,865,262.25	0.622	24	4.6	9	2
Louvre Hotel	2017	0.0649	6,158,784.65	0.561	24	4.6	9	2

Louvre Hotel	2018	0.0672	6,356,284.25	0.472	24	4.6	9	2
Louvre Hotel	2019	0.0681	7,545,215.00	0.679	24	4.6	9	2
Adam Hotel	2015	0.0259	2,145,256.52	0.451	20	5.5	6	1
Adam Hotel	2016	0.035	2,356,245.25	0.612	20	5.5	6	1
Adam Hotel	2017	0.0365	2,654,154.25	0.625	20	5.5	6	1
Adam Hotel	2018	0.0345	2,985,447.25	0.631	20	5.5	6	1
Adam Hotel	2019	0.0364	3,254,541.54	0.641	20	5.5	6	1
Chuchu Hotel	2015	0.0325	2,920,640.00	0.601	19	8.6	5	1
Chuchu Hotel	2016	0.0335	3,103,510.00	0.32	19	8.6	5	1
Chuchu Hotel	2017	0.0339	3,051,634.00	0.434	19	8.6	5	1
Chuchu Hotel	2018	0.0345	3,307,233.00	0.5415	19	8.6	5	1
Chuchu Hotel	2019	0.0356	3,432,770.00	0.5361	19	8.6	5	1