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Addis Ababa University College of Business and Economics

Department of Management, Executive MBA

**FACTORS AFFECT COMPETITIVENESS OF ETHIOPIAN
LOCAL CONSTRUCTION COMPANIES,**

THE CASE OF SOME SELECTED LOCAL COMPANIES

**A Thesis submitted to Addis Ababa University College of Business
and Economics in partial fulfilment of the requirements for the
Degree of Executive Masters of Business Administration**

By

Getachew Dinberu, ID GSE/7746/14

Advisor:

Hailemariam G. (PhD)

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DECLARATION

I declare that the thesis entitled “*Factors Affect Competitiveness of Ethiopian Local Construction Companies, the case of some selected companies*” in Ethiopian construction sector is my original work and has not been presented for a degree in any other university. All sources of materials used for the thesis have been properly acknowledged. It is offered for the award of the degree of Executive Master of Business Administration (EMBA) from Addis Ababa.

Name: Getachew Dinberu

Place: Addis Ababa University: Collage of Business and Economics Department of management Date: 2024

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Abstract

Due to rapid population growth and fast urbanization, the demands of infrastructure and other types of construction increases in Ethiopian. As result of this, large number of local and international constructions companies involved in Ethiopian construction industry. But, local construction companies are poor competitive in local construction market. Thus, “the main objective of this study” was identifying the factors affect competitiveness of local construction companies in Ethiopia. Descriptive and explanatory research design and quantitative research approach were used in this study. Adopted 76 structured items used for collecting primary data. Convenience sampling techniques were used for infinite population of 384 respondents. The reliability of the dependent variables was 0.844. Ranked the items were using relative importance index (RII). Based on descriptive statistical analysis and weighted average mean out of these 72 items, 51 items or (70.83%) were extremely significant, 21items (29.17%) were strongly significant competitiveness of local construction companies. Foreign or international construction companies have an ample of experience in the sector. So, put a strategy how to use or change these experiences to national level and enhance competitiveness of local construction company.

Key words: *Construction industry, determinants factors, capacity, Competitiveness, Local Construction companies, International construction companies.*

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ACRONYMS AND ABBREVIATION

BC----Building Contractors

ECA—Ethiopian Construction Authority

CAGR-- The compound annual growth rate

GC---General Contractors

GDP---Growth Domestic Product

GTP I---Growth and Transformation Plan I

GTP II--- Growth and Transformation Plan II

ICB---International Competitive Bidding

MoUDC---Ministry of Urban Development and Construction

OECD---Organization for Economic Co-operation and Development

RC—Road Contractors

CHAPTER ONE

INTRODUCTION

This chapter discussed about the background of the study, statement of the problems, general objectives of the research, specific objectives of the research, research question, scope of the study, background of the study areas, significance of the study, organization of the study, and definition of terms accordingly.

1.1. Background of the Study

According to (L. Sui Pheng and L. Shing Hou, 2019); (Desalegn Girma Mengistu and Gangadhar Mahesh, 2020) construction industry has both forward and backward linkages. Because, it connects and encompasses different sectors such as: clients, designer, supervisor, material providers or manufacturer of construction materials, distributor, and the end user of the construction products. This indicates that the construction sector plays a big role in creating jobs for citizens. So, it is crucial element for development of a county, because of it is an essential multiplier and contributor of a county's growth domestic product (GDP). It transforms different man-made and natural resources to solid assembled structures, economy, and human infrastructures. Many countries give due emphasis to the sector and sustaining its contributions. "Ethiopia is like any other developing country investing 58--60% of capital budget in the construction industry" in the last a few decades. (Gashahun, 2020).

The contribution of construction industry for growth of domestic product (GDP) is also increases since the last fifteen years in Ethiopian (Zinabu Tebeje Zewdu and Getachew Teka Aregaw, 2015). In line with this, the grant of the construction industry to the gross domestic product (GDP) of Ethiopia has improved remarkably from 9% in 2015/2016 to 18% in 2017/2018. According to (Gashahun, 2020) quoted MRE, 2020) explanations, the allocation of construction sector is about 19.5% of the GDP for Ethiopian economy growth. According to World Bank estimation, the Ethiopia economic was 6.4% growth in FY 2021/2022. (ResearchAndMarketing, 2023), estimated that the yearly average growth rate of Ethiopia construction market will be reached more than 8% by 2026. Equally, African Union reported that Ethiopia will be

Africa's leading county with a 12.7 CAGR over the period of 2019-2024. (auti.africa , 2024).

According to (Florian Schaefer and Carlos Oya, 2019) discussion Ethiopian's construction industry is currently a hub for international construction companies, *“Ethiopia has been an important destination (International investors and contractors from different parts of the world have contributed to these processes as they tap into growing opportunities for business growth in Africa) for such investment flows, as well as for the increasing number of international construction “contractors, especially from China, who have been building much needed economic infrastructure since the early” 2000s.”*. As per Ethiopian Federal Audit 2023 report more than 261 foreign construction companies have been currently working in Ethiopian construction industry. Today in Ethiopia formal construction market is under taken by a few high-level local and international construction companies. Whereas as, informal construction markets are covered by medium and small local construction companies, *“(ResearchAndMarketing, 2023) “*

Undeveloped local construction industry has unable to fill the gap of construction interests or demands of the country, that enforces the local government to seek international or foreign construction company” (Martina Kirchberger, 2020)”. Therefore, it is not uncommon to see foreign construction company in local construction industry in Ethiopian especially Chines contractors, (Florian Schaefer and Carlos Oya, 2019). These international construction companies have ample of experiences in construction industry and they use advanced technologies, good performance, and have a good financial capacity which influences the local clients to prefer foreign construction company to local construction company.” (Armstrong Amoah; Jasmina Berbegal-Mirabent; Frederic Marimon, 2021) “. But, (Hanna Moges Dereje and Wubishet Jekale Mengesha, 2023) suggested that competitiveness and competitiveness strategy is essential for building competitive of local construction industry.

Therefore, this study is mainly focus in identifying determinant factors that influences competitiveness of local construction companies and investigating contribution of competitiveness in the capacity building of local construction industry in Ethiopian.

1.2. Statement of the Problem

However, many factors affecting competitiveness of construction companies, it can help a company to achieve a success and also helps to finding out the advantage of competitiveness in national and international level, (Alicia LOZANO-TORRÓ , 2020) and it also helps to evaluate their capability how to compete in national and international market now and so forth, (Nur Izzati Ab. Rani, Syuhaida Ismail, Zainai Mohamed, Afifuddin Husairi, 2018). Due to globalization and liberalization of world trade, however Malaysia has not ratified it yet, more foreign construction company involved in Malaysian construction industry and helps the Malaysian local construction companies to identifying their gaps in construction competitions and also helps how to building and how to improve their low competitiveness capacity (Nur Izzati Ab. Rani, Syuhaida Ismail, Zainai Mohamed, Afifuddin Husairi, 2018). Identifying factors that hinder's competitiveness capacity of Malaysia construction industry helps them to sustain competitiveness advantages in Malaysia construction industry. (Norudin Mansor, Zalinawati Abdullah, Muna Aimuni Zainal Abidin, 2014). The positive impact of competition of the local construction company with foreign companies brought a big change in United Arab Emirates (UAE) construction industry, which was previously poor competitive capacity (Mohammed Sultan Mohammed Al-Ali and Haslinda Musa, 2020).

Accordingly, competitiveness in Nigerian construction industry has brought both opportunity and challenges (Nur Izzati Ab. Rani, Syuhaida Ismail, Zainai Mohamed, Afifuddin Husairi, 2018). In South Africa construction industry, competitiveness helps local construction company to evaluate their competitiveness strategies, in improving their performance, in strengthening their capacity and in minimizing weakens.” (Luqman Oyekunle Oyewobi, Abimbola Olukemi Windapo and Keith Stone Cattell, 2014).”

In the same manner, (Fredrick Abonda & Vincent N. Machuki, 2018) in Kisumu County, Kenya identified that what construction company have to do to increases their competitiveness power. They implemented mixed construction competitiveness strategy to enhance their performance. Based on “the United Nations Economic Commission for Africa (UNECA 2015)” report cited by “ (Worku Asratie Wubet, Michael Burrow and Gurmel Ghataora, 2023)” most African countries domestic or local construction companies have faced challenge of competing large and

experienced international construction companies in winning local construction markets. In association with the advantageous of competitiveness, “The African Competitiveness Report” said that “competitiveness is essential for better African Cities and for improving the standard of living.” (The Africa Competitiveness Report 2017).

The Ethiopian construction industry has a long history but poorly competitive construction industry (Tadesse AYALEW, 2016). Most projects in Ethiopia has been executing by foreign construction companies especially by Chinese, Indian, and Turkey, (ResearchAndMarketing, 2023). For instances, according to (Worku Asratie Wubet, Michael Burrow and Gurmel Ghataora, 2023) out of 83 different construction project which was implemented by allocation of international donor organizations such as “World Bank, African Development Bank, European Union, China Exim Bank,” etc. with a total budget of ETB 63.65bl in Ethiopia construction, the local construction companies were succeed in only 1% one per cent of the total project. Whereas, 99% of the projects handled by foreign construction companies. Likewise, the thesis of FANGO (FANGO, 2019) identified that, the local construction company meagrely competitive in road construction sector, out of 76 international competitive road bidding projects; local construction company had accessed to won 17% only. Whereas, the remaining 83% of the projects again handled by foreign construction firms. The road sector was not the only cases but also in other construction sectors too.

The Ethiopian Road Authority Report (ERA, 2016) quoted by (Worku Asratie Wubet, Michael Burrow and Gurmel Ghataora, 2023) from 599 road projects which was implemented from 1997 to 2015 with a total budget of ETB 180.5 billion (> \$20 B) again, out of these projects, 476 projects or (79%) were awarded to Ethiopian local construction companies with budget of ETB 82.7bl (45% of the budget), whereas the remaining 123 projects with budget of ETB 102.8bl (55% of the allocated budget) were awarded to foreign or international contractors.

Despite the significant efforts have been taking by the side of Ethiopian Government, the local construction companies have not yet been competitive in national and international level “(Worku Asratie Wubet, Michael Burrow and Gurmel Ghataora,

2023)” Some of major competitiveness capacity building activities or strategies that Ethiopia government has been implementing since the last fifteen years are:

The Ethiopian Government’s 10-years Perspective Development Plan, which would be implementing from 2020 to and to 2029/30, put directions and gave due attention in enhancing the competitiveness capacity of local construction companies. The vision of the plan was increasing the competitiveness capacity of local construction industries by 75% at local or in domestic construction market level and 25% at regional and sub-regional level by the end of year 2029/30. (USAID, n.d.); Ethiopians ten years Development Plan, 2020.

To wind up the statement of the problem, most of local Construction Companies in Ethiopia have weak or poor competitiveness and their competitiveness declines from time to time.

Therefore, it is imperative to find out answer for the question of: “What are factor affect Ethiopian local construction companies not become competitive in national and international construction market?”

1.3. Objectives

1.3.1. General Objectives

The main objective of this study is identifying factors affect competitiveness of local construction companies in Ethiopia.

1.3.2. Specific Objectives

- ✓ To identify local construction company’s performances factors that affects their competitiveness.
- ✓ To investigate local construction company’s external factors that affects their competitiveness.
- ✓ To investigate local construction company’s organizational internal factors that affects their competitiveness.

1.4. Research Questions

- ❖ What is performances factor that affects competitiveness of local construction company?

- ❖ How do external factors affect competitiveness of local construction company?
- ❖ How internal factors do affects competitiveness of local construction company?

1.5. Scope of the Study

This study is mainly focussing on investigating the determinant factors that influences local construction company's competitiveness. Therefore, the selected firms/companies those who have full information about the topic and better understanding of about the determinant factors of the Ethiopian construction industry and would answer the research questionnaire in due considerations. The study covers from grade one or class A or highest-class to grade four or class D construction contracting companies.

1.6. Significance of the Study

The main significance of this study will be:

- It provides valuable insights into determinant factors which influences local company's competitiveness capacity in local and international construction market competitions.
- The findings and recommendations from the study can inform the user of documents aimed to promoting participation of local companies' participations in national and international construction market competitions.
- The study contributes to the existing literature in the construction industry competitiveness in Ethiopia and can serve as a basis for future study in this area.
- The study can also benefit to locally contracting companies by providing them with information on the determinant factors that affect their success in the national and international construction market and potential solutions to overcome those determinate factors.

1.7. Organization of the Study (Research Paper)

The thesis was organized in to five chapters.

- **Chapter One:** Presents the “Introduction” that the background the study, explains statement of the problem, objective of the study, significance of the study, scope of the study, limitations of the study, organization of the study and procedures of the investigation in general and gives direction.
- **Chapter Two:** Deals the “Literature review”. Here, the concepts and related theories were discussed thoroughly and the major topic areas are introduction, competitiveness, research gaps, and conceptual frame works.
- **Chapter Three** Presents the “Research Methodology” and it discusses the methods and techniques was employed for the investigation. Under this chapter, research design, data collection techniques, sampling & sample size determination methods, data quality assurance techniques, data analysis & interpretation method are explained.
- **Chapter Four** Provides the data analysis and discussion portion. In this portion, all the collected raw data was presented, analysed and interpreted in the detailed manner.
- **Chapter Five:** Presents “Conclusions and Recommendations”. This summarizes the data sequentially with which the research questions were properly answered in association with the actual data and makes concluding remarks. In the final section of this last chapter the researcher forwards some of his recommendations.

1.8. Definition of Terms

Building/ Construction: is the Development of Physical Infrastructures (Buildings (Housing, Social, Commercial and Industrial), Transport (Highway, Railway, Waterway, and Airway), Water Works (Supply and Sewerage, Irrigation, and Hydro Power) and Other Civil Works (Wubishet Jekale, 2017).

Construction Industry/Sector: defined as a system which includes, contractors and others engaged in assembly, engineers and design professionals, manufacturers of components, materials and equipment, developers, and those who regulate the

industry, as well as the people or the corporations that own or use the final product (Boyd et al, 1975).

Local/Indigenous Construction company/industry: in this study the meaning of local construction or indigenous construction industry means the construction company those perform the construction work in their own county and less international experiences and not yet full competitive capacity.

Foreign Construction Firms/companies: in this study foreign construction firms represent the construction companies those performs construction works outside their home country or land who have better skills, experiences, use advanced construction technology and better performance than local contracting companies.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introduction

Literature review is generally very important to determining the research methodology, to selecting appropriate surveying instruments for data collection, to conducting analysis, interpreting findings, and drawing conclusions based on research results (Weng Marc Lim, Satish Kumar & Faizan Ali, 2022). Under theoretical background, detailed review of literature which had been written about construction competitiveness and the impact of globalization in construction market. Under empirical section describes existing facts.

In this chapter reviewed published books, journals, dissertations and thesis, and articles to provide an overview of the characteristics of globalization and competitiveness, definition and characteristics of competitiveness, characteristics of the construction industry, advantageous of competitiveness and construction industry, characteristics of Ethiopian construction industry, the factors that influences the competitiveness of Ethiopian construction industry, and capacity building strategies for competitiveness in the construction industry in general and particularly in Ethiopian construction industry were discussed.

2.1. Theoretical Background

2.2. Characteristics of Construction Industry

The construction industry can be broadly clarification based on its activities such as “residential construction, non-residential construction, civil engineering works (infrastructures), maintains, and demolishing.” The “residential building” includes dwelling houses, real estates, and “non-residential building” includes social services buildings (school buildings, commercial building, hospitals, and others). On the other hand, the infrastructure activities or civil engineering works includes road construction, hydro-electric dam, power supply, air-port, water supply, and others.” (Omopariola, Emmanuel DELE, Jacob Olusegun ILORI, & Abimbola WINDAPO, 2019); (Makarfi, 2017)”

Although the construction industry is the catalyst for development of a country’s economy, the industry is exposed or venerable to risk, corruption and claim. This

because of different stakeholders participated in construction sector. The construction environment is not only well-known by its risks, complexity, and uniqueness but also characterised by a high level of competition due to globalization and liberalization of world trade. To succeed the competition the role player of the industry (client, contractor, and consultant) should understanding complex operation of high-risk conditions of the industry” (Mahmood Mokhtariani, Mohammad Hassan Sebt, & Hamid Davoudpour, 2017).”

(Ahmad Farid Amiri and Dennis C. Bausman, 2018) Described globalization as one of enabler of the construction industry to take advantage of cross-border markets and benefit from the opportunities that the globalized economy has provided. Advances in transportation, data sharing and communication have given construction professionals and the labour force unprecedented access to markets that were previously insulated. The emerging technology smooth’s the path of knowledge transformations through by the movement of skilled, semi-skilled, and unskilled work force across domestic borders. Because of these, however there is some demerit of globalization, it is leading to civilizations and economic development “ (Ahmad Farid Amiri and Dennis C. Bausman, 2018).” For example, the past Romans civilization, the Chinese civilization, the Ethiopian civilization, and the Egyptians civilization not only significantly transformed the way of how buildings, walls, pyramids, obelisks’ and rock-hewn churches were constructed, but also played a crucial role in passing the construction knowledge, skills, and experience from generation to next generation and from one country to another by involving people from different regions of the world in Roman, Chinese, Ethiopians, and Egyptians construction activities.

2.3. Characteristics of Ethiopian Construction Industry

According to (Mengesha, 2004 (Adapted by Tadesse A. et.al, 2016)) the Ethiopian construction industry can be viewed in six distinct periods for his evolution. The following table summarizes these distinct periods and their feature.

Table 1: Summary of Ethiopian Construction Industry in Six Distinct Period

Period	Designation	The Feature of Each Periods
“Pre1968”	“Foreign Company Domination”	“This was a period where almost all construction activities in the country were

		undertaken by international construction companies.”
“1968-1982”	“Emergence of small-scale domestic construction companies.”	“A period that encourages private sector development, which results in establishment of small-scale domestic construction companies in the country.”
“1982-1987”	“Parastatal Companies domination”	“This period was known as parastatal company domination period since the government has taken the private construction company that was established earlier and those state-owned construction firms undertook almost all construction activities.”
“1987-1991 Fragmentation of Phases”	“Fragmentation of Phases”	“During this period design services and construction phases was introduced as a separate phase to Ethiopian construction industry.”
“1991-2001”	“Era for Re-emergency of privatization”	“The year 1989 brings another change in government with completely different policies that re-emerge private sector development. As a result of this a number of private construction companies were established in the country and started taking parts in many construction activities.”
“Since 2001”	“Emergency of Integration and capacity building”	“Realizing the performance and capacity limitation of domestic firms, which begins to be involved in some projects, the government has introduced the concept of integration and capacity building in 2001.”

(Source; (Mengesha, 2004 (Adapted by Tadesse A. et.al, 2016))

As any other developing countries economy, the Ethiopia economy is also growing very fast and gross domestic product (GDP) is increasing from time to time. The construction sector is one of the contributors or an engine of gross domestic product

(Gashahun, 2020) Rapid urbanization, fast growing, and globalization increasing the demand for “building and infrastructure” more than ever which in turn enforces the government to allocate more budget to the sector (Gashahun, 2020). Since 2001, the construction industry grows vigorously all in all. Some of the major areas of construction since this time in the country have:

Table 2: Summery Major Areas of Construction Sector since 2001 in the country

Sector	Programs/ Project	Descriptions/ Examples
Buildings	Residential	Addis Ababa City Housing Development Program different topology condominiums (by government, MoUDC, 2013)
		Private houses building corporations
		Real Estate buildings (by Private and corporations)
	Non- Residential	Offices buildings
		Academic or Educational buildings, Research Centre buildings
		Health centres buildings
		Mixed buildings
		Skyscraper hotel buildings
		Business or commercial buildings (Banks and Insurance buildings)
		Public Library’s Buildings
Civil Engineering or Infrastructures Constructions	Road Construction	Express Ways (High Ways), asphalt roads, gravel roads, earthen roads, cobble stones, Bridges
	Aviation Constructions	Air ports
	Energy/ power supply	Hydroelectric dams, Geo Thermals, Wind energy, solar energy
	Telecommunications	Telecommunication buildings
	Manufacturing buildings	Industry parks, Sugar Factors, Textile Factors, Cement factors, other

		manufacturing constructions
	Rail Ways	Heavy and Light rail ways
	Water Supply Related works	Surface and underground water supply constructions, irrigations, and others.
	Recreation centres	City beautifications and green area constructions or land scape works, other recreation constructions.
Maintains and Restorations	Roads and Buildings	Routine road maintains, building maintains and Restoration of historic buildings

(Sources: government and non-government reports and news)

2.4. Competitiveness in Construction Industry

2.4.1. Definition of Competitiveness

Competitiveness defined by the Global Competitiveness Report: *"Competitiveness is the set of institutions, policies, and factors that determine the level of productivity of a country"*. The implication of this broad definition is that the level of competitiveness is not measured in one dimension rather it would be holistic approach to determine its level. Because, its complexity to measure competitiveness. The global index is conceived competitiveness as microeconomic competitiveness and macroeconomic competitiveness (Ketels, 2011); (Ural, 2014)

In accordance with (TRADE AND DEVELOPMENT, 2015), *"Competitiveness has become a term that can be associated with almost everything; leadership, growth, development, success, prosperity or productivity"*. UNCTAD clearly defines competitiveness that it touches and includes everything. Without competitiveness success in business, in living and in development is unexpected.

Competitiveness can be described as the capability or the capacity of a company or a nation to adopt and adapt with structural changes that enhancing their capacity at national and international position, nevertheless, there not yet a clear definition of competitiveness stated or it still remains a concept which is not well defined" (Ahmed Badawy, Abobakr Al-Sakkaf, Ghasan Alfalah, Eslam Mohammed Abdelkader, and Tarek Zayed, 2022)."

In conformity with “ (The Africa Competitiveness Report 2017)” competitiveness constitutes factors, institutions, and policies that determine a country’s level of productivity. Productivity, in turn, sets the sustainable level and path of prosperity that a country can achieve.

(Porter, 2001) Define competitiveness as: *"Competition is at the core of the success or failure of firms."* According to Porter competitiveness is crucial for company those want to compete. In other words, without competition success or failure is not measured.

From all above definitions’ competitiveness is unavoidable it is a natural phenomenon. All the literature tries to explain one thing in common: to improve business or to improve the way of living competition is the core issue.

Literatures similarly addressing that the increasing of globalisation and liberalization of trade and capital movements paves the road for competitiveness. Companies and countries are more than ever exposed to global competition - a firm does not any more compete only with others within the national boundaries, but it is confronted with companies from virtually in any other country. In such environment, it seems to be fundamental and mandatory for both companies and nations to be able to compete national and international level. Competitiveness is, therefore, regarded as a crucial prerequisite of success, and expected to bring about economic growth, sustained development and increase in the standard of living of populations.

It is important to note from the above definition of competitiveness is divided more generally into three categories, such as nation, industry or firms, and individuals “ (Hany Abd Elshakour Mohamed and Ahmed Ibrahim Eltohamy, 2022)” and the link between competitiveness and sustained prosperity of a nation, industry or firm, and individuals is a well-established argument and the basis for policy making and strategic setting. Therefore, in order to become competitive in businesses, industry or firms, and at an individual level is setting strategy, building capacity, and clearly defining the challenges are the corner stones. (Ericson, 2005).

2.4.2. Characteristics Competitiveness

Many authors and scholar long time debate on characteristics or meaning of competitiveness. This makes it exposed for different interpretations’ and in relation

with this there so far again no clear-cut characteristics of competitiveness, but they agreed that competitiveness is a basis for success in the business market. According to (Ericson, 2005) define some characteristics of competitiveness as follows:

- **Multi defined:** There is no general, generic definition of competitiveness and hence the term is subject to misinterpretation and consequent confusion
- **Multi measured:** There is no single, generic measurement of competitiveness. Instead measurements vary with the definitions
- **Multi layered:** Competitiveness may be applied at national, industrial and firm levels
- **Dependent:** The meaning of competitiveness depends on the values of the stakeholders of the entity under investigation
- **Relative:** Every measurement of competitiveness needs to be looked at in a relative sense, either against some maximum, ideal level or against its peers
- **Dynamic:** The factors that influence competitiveness change with time and context, e.g. as the national economy moves from a less to a more developed stage
- **Process:** Competitiveness involves assets, processes and performance, where processes turn assets into performance

As claimed by (TRADE AND DEVELOPMENT, 2015); (Alicia LOZANO-TORRÓ, Tatiana GARCÍA-SEGURA, Laura MONTALBÁN-DOMINGO, and Eugenio PELLICER, 2020) competitiveness could make the local companies to see the advantages of competitiveness and its international characteristics. They could define and perceived national competitiveness level as follows:

- Nations compete in creating the conditions that attract and encourage domestic and foreign investors to invest within the national borders.
- Nations can try to encourage domestic companies to invest abroad, under the condition that such investments will contribute to enhancing international presence and market proximity.
- Nations compete in providing an optimal policy, structural and institutional framework, which is fundamental to facilitate constant upgrading at a company or industry level, to promote the spread of technology and to open up

trade opportunities. Many of the factors underlying the competitiveness of individual enterprises are determined at the level of the national economy.

- Nations compete through developing and implementing adequate programmes and incentive systems that enable companies to develop and increase their competitive advantages and to enhance their participation in both international and domestic markets.

Major international levels of Competitiveness are as follow:

- International competitiveness can be defined as a process in which higher levels of competitiveness are achieved at different levels, that is, at firm, regional and national levels. As such, competitiveness becomes international when it pertains to two or more countries. Such process is captured by definitions of competitiveness which move from a general perspective to more specific understandings at the firm and country levels. There are several definitions of competitiveness that must be considered before one can build a particular understanding of international competitiveness. (imd.org, 2023)
- The concept of international competitiveness is often used in analysing countries' macroeconomic performance. It compares, for a country and its trading partners, a number of salient economic features that can help explain international trade trends. The indicators of competitiveness calculated by the OECD are defined by a particular characterization of the links between foreign trade variables (export and import volumes) and the measures of price competition influencing them. (OECD, 2005)

2.4.3. Advantageous of Competitiveness in Construction Industry

The contribution of construction industry in developed country economy (GDP) was almost 10%, whereas in developing country more than 4% (Erol, Isil and Unal,Umut, 2015).

- According to (Hany Abd Elshakour Mohamed and Ahmed Ibrahim Eltohamy, 2022), the competitiveness of the construction industry can be defined as ‘the degree of construction productivity by utilizing human resources, capital, and natural resources of a nation’.
- One of the industries where competitive analysis and business assessment tools are now particularly necessary and useful is construction” (Hany Abd

Elshakour Mohamed and Ahmed Ibrahim Eltohamy, 2022).” The study further investigated that to maintaining the survival of their company, the contracting companies must have understood and aware about the advantageous of competition. However, there would be a problem rising during competition, the competition sharpening the company to produce more competitive products and win the competition in national and international level. This is the biggest advantageous of global competitiveness.

- Competitiveness enforces construction companies to think proactively how to cope up with new construction market and faces the challenges and hassles of international competition. (Alicia LOZANO-TORRÓ, Tatiana GARCÍA-SEGURA, Laura MONTALBÁN-DOMINGO, and Eugenio PELLICER, 2020). For example, a lot of foreign construction firms in Nigerian construction industry is an advantage for Nigerian indigenous construction companies. In the article *“The contributions of Foreign Construction Companies towards capacity building of Indigenous Construction Companies in the Nigerian Construction Industry”* (Makarfi, 2017) explains this how to use foreign construction companies and enforce them to increase the capacity of local construction companies, thereby increase their competitiveness.
- Competitiveness is not only increase international competition market power but also domestic competition advantages too. Companies who have good experience in local construction market take the advantages of local competitions to international market.” (Alicia LOZANO-TORRÓ, Tatiana GARCÍA-SEGURA, Laura MONTALBÁN-DOMINGO, and Eugenio PELLICER, 2020).” In Ethiopian context there are high competition in “informal construction market”, which creates an advantage to those compete in international market. (auti.africa , 2024).

Competitiveness is a complex multidimensional concept. It reflects the favourable position of the national economy, mainly in the field of international trade and, at the same time, its ability to strengthen the position. In other words, the competitiveness of the national economy is a concentrated expression of economic, scientific, technological, organizational, managerial, marketing and other capabilities that are implemented in goods and services, successfully ensuring their competing or opposite

foreign goods and services at the domestic and foreign markets.” (Ganna Kharlamova, Olga Vertelieva, 2013).”

In the opinion of “ (Saheed Olanrewaju Yusuf, Ayooluwa Femi Aribisala, Abdulhaqq Onoruoyiza Muhammed, Jonathan Oluwapelumi Mobayo, Usman Belgore, 2022)” competition of local construction organization among themselves increases their competitiveness power to compete with foreign or international construction firms. Pressure in competitive construction organizations from national and international level enforce the local construction firms constantly improve their productivity and performance to either survive or be more competitive.

Competitiveness can be defined by” (Professor Klaus Schwab,Espen Barth Eide, Philipp Rösler, and Jennifer Blanke, 2014)” ability of an organization to compete for business in various markets. In other words, competitiveness determines the company’s ability to advance in new markets, to outplay or out shine the other actors in the market, at the same time attract investment and growth, emphasizes on governments who have produce policies and standards understand the importance of competition and how to make their country more competitive in relative to others, and how their competitive position evolves overtime. According to” (G J Johari,E Walujodjati,S Mulyana and S Permana, 2019)” however, it not practicable, the nation or the companies that do not have competitive capacity or ignore competitiveness indicates that the company will be willingly out of the world or international market. In other words, If the arena or the nation or the company not having competitive, means that they don’t want to produce an excellent product, and not want to taking the upper hand or the advantageous of what the globalization offering. Which means, a company would not survive or maintain in the competitive market for the long term” (G J Johari,E Walujodjati,S Mulyana and S Permana, 2019).” In addition to that they define competitiveness as the ability of companies to compete with competing companies.

It is obvious that the construction sector is a comparatively significant sector in both developed and developing economies. In compliance with this “ (Ahmed Ibrahim Eltohamy and Hany Abd Elshakour Mohamed, 2022)” the construction sector is an engine or the vehicle that makes the construction industry move in fast lane, which motivates the growth of a country’s economy, especially when the country suffers or

challenges from stagnation like COVID 19 (Gashahun, 2020) and other man-made or natural pandemics.

As specified by “ (G J Johari,E Walujodjati,S Mulyana and S Permana, 2019)” four dimensions for success of a company in the competitiveness: “the cost (cost), quality (quality), delivery time (delivery), and flexibility dimension.” These four dimensions are interrelated or interconnected with each other.

The cost is a dimension is everything for contractors, for operating competitiveness which affects the whole thing. The Quality dimension is what the global market expecting in the competitiveness. The delivery time that affects the cost or the budget of the company. Flexibility is the final dimension in the competitive market. It helps the organization to adjust them with the global market. Although competitiveness is an advantage for growth and success, as stated by “ (Reda Cherif, Sandesh Dhungana, Xiangming Fang, Jesus Gonzalez-Garcia,, 2020)” most of the markets are well known by its uncompetitive especially developing countries like most Sub-Shoran African countries. According to the paper the competition in Sub Shoran counties is low.

Table 3:Factors of Competitiveness.

Category	Influencing Factors / Variables	Sources
“Experience of the company/ Experience in construction business (number of years in construction business)”	“National reputation”	(Alicia LOZANO-TORRÓ, Tatiana GARCÍA-SEGURA, Laura MONTALBÁN-DOMINGO,and Eugenio PELLICER, 2020) (Kamalendra Kumar Tripathi and Kumar Neeraj Jha, 2018)
	“International reputation”	
	“International experience”	
	“Experience in a type of contract”	
	“Hold a quality certification”	
	“Age of the company”	
	“Availability of client portfolio”	
	“Management at different levels”	
	“Knowledge management”	
	“Number of projects completed per	

“Project management capacity”	year”	(Kamalendra Kumar Tripathi and Kumar Neeraj Jha, 2018)
	“Number of professionals in organization”	
	“Average values of projects per year”	
	“Annual construction demand or market share (yearly order received)”	
“Financial capacity”	“Own financial capacity”	(Alicia LOZANO-TORRÓ, Tatiana GARCÍA-SEGURA, Laura MONTALBÁN-DOMINGO, and Eugenio PELLICER, 2020)
	“External financing”	
“Ability to adapt to the destination country”	“Cultural intelligence”	
	“Local knowledge of the host country”	
	“Ability to adapt to the environment”	
	“Previous knowledge of the client”	

2.5. Factors Affecting Competitiveness of Local Construction Companies

2.5.1. Performance Capacity of the Local Construction Companies

The construction sector, according to (FEDR, Ministry of Construction, 2018), is one of the four major sole suppliers to the Ethiopian economy and is considered one of its fastest-growing sectors in the country. Due to its complexity, size and uniqueness the industry is exposed to different level of risk or challenges or poor performance, and it might impossible to totally eliminate or prevent risks or challenges from happening during the construction process. “ (Ahmed Badawy, Abobakr Al-Sakkaf, Ghasan Alfalah, Eslam Mohammed Abdelkader, and Tarek Zayed, 2022)”; (Desalegn Girma Mengistu and Gangadhar Mahesh, 2020)”

The Ethiopian construction sector has different problems or challenges in all sections of construction: building, infrastructures, maintains and restoration. According to

(FDRE, Ministry of Construction, 2018) the industry is nearly uncompetitive. The major problem of the indigenous construction industry had been investigated or identified by different Ethiopian scholar. Both identified, infrastructure construction and building construction have highly faced challenges of cost overrun, time overrun, and quality or performance. “ (Zinabu Tebeje Zewdu,& Getachew Teka Aregaw, 2015); (Solomon Esaiyas and Girmay Kahssay, 2020) “As indicated by (Dakito Alemu Kesto and Betelhem Tsega, 2022) foreign construction companies have better performance than local construction companies in federal road construction. In line with this (Tadesse AYALEW, 2016) in his article explains that African countries have poor construction management practices when compared to developed countries like north America and Europe.

As indicated by all above articles, the Ethiopian construction management practices is very bad which was only better to Mozambique from seven countries in which the report includes. Weak or poor construction management has an impact in the performance of the construction. In turn, weak or poor performance resulted to claim or dispute, because of poor performance has a quality issue. In other words, the contracting company has not executed and delivered construction projects in intended time and budget. That influences the competitiveness power of the company. As increase of construction demand in Ethiopia like: infrastructure and buildings, stakeholders give due accountability to delivers high quality construction products with minimum cost to maintain in the industry. “(A.Q. Adeleke, A.Y. Bahaudin, and A. M. Kamaruddeen, 2015).”

The performance of construction industry” can be measured in terms of delivering the project or completion of project with allocated cost or budget, completed the project in pre-defined time or in schedule, completed with expected quality, assures sustainable growth. Finally, the performance of construction project can be measured with the satisfaction of client “ (OROZCO. F.,SERPELL. A., & MOLENAAR. K., 2011).” The performance of Construction Company, on other hand could be affected by technology and finance.” (Luqman Oyekunle Oyewobi, Abimbola Olukemi Windapo and Keith Stone Cattell, 2014)” Company’s performance is the bases for success or competitiveness of the organization. So, an organization of construction companies improving and advancing their performances not only necessary but also it is also fundamental in the dynamic world of construction market” (Luqman Oyekunle

Oyewobi, Abimbola Olukemi Windapo and Keith Stone Cattell, 2014).” To survive, to maintain, to increase the market share, and to increase the profitability in the construction market company have to meet or fulfil the need and interest of the client.” (Ervina Alfian, Ph.D and Zarina Zakaria, Ph.D., 2013).”

Table 4:List of Performance Factors

SI	Factors	Sources
1	“Size of the organization (measured in terms of turnover, market share, number of employees, etc.)”	(Kamalendra Kumar Tripathi and Kumar Neeraj Jha, 2018)
2	“Productivity of employees (value added per employee)”	(Kamalendra Kumar Tripathi and Kumar Neeraj Jha, 2018)
3	“Good track record of timely completion of the projects (number of projects completed in time)”	(Kamalendra Kumar Tripathi and Kumar Neeraj Jha, 2018)
4	“Health and safety consciousness (number of accidents/100,000/ year and worker’s fatality/100,000 workers)”	(Kamalendra Kumar Tripathi and Kumar Neeraj Jha, 2018)
5	“Customer satisfaction in terms of product and services (measured as rating provided by the customers after project completion)”	(Kamalendra Kumar Tripathi and Kumar Neeraj Jha, 2018)
6	“Cost performance of projects (number of projects completed within the tender cost)”	(Kamalendra Kumar Tripathi and Kumar Neeraj Jha, 2018)
7	“Impact on society (measured in terms of low noise pollution, less disturbance to the occupants in nearby area due to vehicle movement, etc.)”	(Kamalendra Kumar Tripathi and Kumar Neeraj Jha, 2018)
8	“Impact on environment (measured in terms of use of low natural resources, low production of waste, preservation of plants and trees, etc.)”	(Kamalendra Kumar Tripathi and Kumar Neeraj Jha, 2018)
9	“Optimum liquidity ratio (measured in terms of current ratio = current asset/current liability)”	(Kamalendra Kumar Tripathi and Kumar Neeraj Jha, 2018)

		Jha, 2018)
10	“Higher profitability ratio (measured in terms of gross profit margin, return on assets, return on equity, return on invested capital)”	(Kamalendra Kumar Tripathi and Kumar Neeraj Jha, 2018)
11	“Higher annual growth rate of the organization (measured in terms of sales growth percentage, earning per share growth percentage, P/E ratio)”	(Kamalendra Kumar Tripathi and Kumar Neeraj Jha, 2018)
12	“Predictability of cost in design and construction (percentage on target)”	(Kamalendra Kumar Tripathi and Kumar Neeraj Jha, 2018)
13	“Rework/defect rectification (number of man hours and material used for repairing work as a percentage of total man hours for the entire project and total contract amount)”	(Kamalendra Kumar Tripathi and Kumar Neeraj Jha, 2018)
14	“Higher wages of the employees”	(Kamalendra Kumar Tripathi and Kumar Neeraj Jha, 2018)
15	“Good relationship with client (in terms of repeat business, low dispute, and litigation, timely payment, etc.)”	(Kamalendra Kumar Tripathi and Kumar Neeraj Jha, 2018)
16	“Accuracy/ Precision/ Meticulous/detail in work”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)
17	“Company’s reputation/track record in completing the project on time with good quality and fair pricing”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017) (Kamalendra Kumar Tripathi and Kumar Neeraj Jha, 2018)
18	“Emphasis on quality”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)

2.5.2. Organizations External Factors

The external or coercive factors are out of company’s control. Positively or negatively creates an impact on success or competitiveness of an organization. The external factors put pressure or a challenge on competitiveness of construction organization.” (Hassan Fehan and Osaro Aigbogun, 2022).” The effect of globalization, free world trade, and financial challenging factors of the construction industry are some of organizations external factors “ (Nurisra, Nurul Malahayati, and Mahmuddin, 2018).” Other challenges in construction industry are: policy environment, market environment, social environment, and Technological Environments. Number of competitors in the market/industry and institutional pressures are also other types of external factors (Tefera, 2013); “(Hassan Fehan and Osaro Aigbogun, 2022). “Unfavourable external environmental factors are common in any business market, but owing to its uniqueness’, size, and complexity increases its prevalence in construction market” (ResearchAndMarketing, <https://www.researchandmarkets.com>, 2024).”

Table 5:External Factors

Category	Influencing Factors / Variables	Sources
“Market in the home country or in the host/out-side home country”	“Local competition”	(Alicia LOZANO-TORRÓ, Tatiana GARCÍA-SEGURA, Laura MONTALBÁN-DOMINGO, and Eugenio PELLICER, 2020)
	“Foreign competition”	
	“Market size”	
	“Market growth”	
	“Level of agglomeration”	
“Links between origin/home country and host country”	“Commercial links”	
	“Geographical distance”	
	“Air connection”	
“Political environment”	“Political risk”	
	“Corruption”	
	“Citizen insecurity”	
	“Local protectionism”	
	“Economic stability	(Alicia LOZANO-

“Economic environment”	/Country’s economic conditions”	TORRÓ, Tatiana GARCÍA-SEGURA, Laura MONTALBÁN- DOMINGO, and Eugenio PELLICER, 2020) (Kamalendra Kumar Tripathi and Kumar Neeraj Jha, 2018)
	“Financial risk”	
	“Currency fluctuations”	
	“Payment delays”	
	“Capital requirement”	
“Socio-cultural environment”	“Cultural differences”	
	“Language differences”	
	“Social risk”	
	“Religious beliefs”	
	“Interest in the project”	
“Legal environment”	“Institutional differences”	
	“Legal risk”	
“Availability of resources”	“Lack of availability of resources”	
	“Local labour conditions”	
	“Existence of infrastructures”	

2.5.3. Organizations Internal Factors.

A construction sector is as one of a business that involved in business environment and its growth and success or competitiveness in the market can be strongly influenced by internal organizational factors” (Nurisra, Nurul Malahayati, and Mahmuddin, 2018).” According to” (A.Q. Adeleke, A.Y. Bahaudin, and A. M. Kamaruddeen, 2015)” perceived organizational culture as the elementary assumptions, values, beliefs and models of behaviour, practices, rituals, heroes, symbols, technology and artefacts. According to “ (Manal Suliman Omer, Nawi, M.N.M., A.Q. Adeleke, Sitansu Panda, Harun, A.N., and Anas A. Salameh, 2021) “organizational culture as the elementary assumptions of values and beliefs that increases the competitive capacity of the organization by applying effective control of the risks. According to “ (Ahmed Badawy, Abobakr Al-Sakkaf, Ghasan Alfalah, Eslam Mohammed Abdelkader, and Tarek Zayed, 2022)” investigating construction companies’ competitiveness can be executed and which mainly focused on three pillars, such as an “An organizational internal factor, external influences and financial factors.”

An organizational internal factor is very crucial for innovation and critical thinking in organization which is bases for sustainability of construction industry competitiveness in national and in international or global level.” (Ville Matinaro and Yang Liu, 2016)”

An organizational internal factor not only encompass the elementary believes and an attitude of organization but also communication, strong leadership, and risk management and others which is the bases for construction success “ (Manal Suliman Omer, Nawi, M.N.M., A.Q. Adeleke, Sitansu Panda, Harun, A.N., and Anas A. Salameh, 2021).”

An organizational internal factor is very decisive for increasing productivity of an organization which in turn plays an important role for market competitiveness and success. Organizations internal culture also pivotal for achievement of organizations predefined goals. Developed and matured organizations internal culture enforce rules of the organization, and tries to meeting and satisfied the need or the interest of the clients, and value propositions by construction firms. “(Peter A., Yola, Mohammed L.,2014; (Manal Suliman Omer, Nawi, M.N.M., A.Q. Adeleke, Sitansu Panda, Harun, A.N., and Anas A. Salameh, 2021)” The construction sector is more than any others business sector, as result of its unpredictable nature, it is over-whelmed by challenges and risk. Good organizational internal culture is the bases for minimising the challenges and makes the organization competitive in the market.

According to “(Deal & Kennedy (1982)” cited by “ (Manal Suliman Omer, Nawi, M.N.M., A.Q. Adeleke, Sitansu Panda, Harun, A.N., and Anas A. Salameh, 2021)” the achievement or shortcoming of any project are handled by an organization, is determined by strengthens or weakness of its organization cultural. And improving and strengthening organizations internal cultural values are more associated to the organization strategy. Organizations effectiveness in their culture has an ability of a strong proactive leadership skill, innovativeness, sharing experience and skills and strong communication with client and other stakeholders. An organizational internal culture is the bases for market competitiveness, especially in construction industry. A contracting company understand the advantageous of market competitiveness and compete in the market. Organizations successes in national or international competition assure the existence and survival of the company “ (Nurisra, Nurul Malahayati, and Mahmuddin, 2018) “

Strong organizational internal factors and good strategy for management of construction challenges in competitiveness is very crucial for facing the external influences and for enhancing poor competitiveness, “ (Nurisra, Nurul Malahayati, and Mahmuddin, 2018)” The current global activate and rapid change in construction sector not only creates an opportunity for construction companies but also challenges too, specifically for low capacity of local construction industry like Ethiopian construction industry “ (Placeholder1).” The local construction companies before evaluating their accomplishment or misfortunes, gives primarily evaluation of their internal culture which gives an advantage to see the current and future hassles of the industry and how to face the challenges.” (Alicia LOZANO-TORRÓ , 2020).” An organizations internal working culture paves or blocks the way for success which was more related with competitiveness or success “ (Alicia LOZANO-TORRÓ , 2020).”

An organizations internal factors plays not insignificant role in success and in competitiveness of organization. (Nasser Alnasser, Allan Osborne and Glenn Steel, 2013). In conformity with this, “ (Luong Hai Nguyen and Tsunemi Watanabe, 2017)” in their research paper or article titled, “*Cultural influence has recently received significant attention from academics due to its vital role in the success or failure of a project. In the construction industry, several empirical investigations have examined the influence of culture on project management.*” the analysis disclosed that organizational internal culture has everything for organizational futurity. Closely or attentively examining the organizational culture is very important to predict the accomplishment or lack of success of organization in competitive global world. In other words, organizations that fails or poor in internal culture has not met the interest of the global market and would not to compete with internal and external construction market. In line with this “ (Luqman Oyekunle Oyewobi, Abimbola Olukemi Windapo, and James O. B. Rotimi, 2016)” said that, an organizational characteristic affects organizational performance rather than competitiveness strategies in South Africa Construction industry.

An organizational internal factor has an impact in innovation of organization, an impact in effectiveness of organizations leadership, an impact in fairly decision making, an impact in enhancing entrepreneurial direction, and an impact in for casting of the organization’s future direction and destinations. “ (Malte Brettel, Christoph Chomik, and Tessa Christina Flatten, 2015).”

To advance the competitiveness of the construction industry through scaling up of organizational internal culture, using and implementing knowledge's which gained from their own present and past success or failure experiences and best practices from others local or international similar companies who have better in the area of constructions. All in all, enhancing organizational innovation culture clears the way for competitiveness or success achievement of company. In other words, the effect of low and poor risk handling culture, lack of using knowledge of others or lack of creativity is very devastating issue in competitive world “ (Moazzam Azeem, Fahim Ullah, Muhammad J. Thaheem and Siddra Qayyum, 2020).” Major factors of “organizational internal factor” which determines competitiveness capacity of companies are:

Table 6:List of “organizational internal Factors”

Influencing Factors	Sources
“Highly organized”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)
“Having a clear guiding philosophy”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)
“Hierarchical”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)
“Rule oriented”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)
“Management respect for subordinate”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)
“Competitive strategy used by the organization”	(Kamalendra Kumar Tripathi and Kumar Neeraj Jha, 2018)
“Adopting learning and growth culture in the organization (measured in terms of amount spent for learning and growth as a percentage of total turnover of the company)”	(Kamalendra Kumar Tripathi and Kumar Neeraj Jha, 2018)
“Opportunity for professional growth”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)
“Achievement / Action oriented. “	(Bernard Tuffour Atuahene &

	Bernard Kofi Baiden, 2017)
“Effective risk management capability in the organization”	(Kamalendra Kumar Tripathi and Kumar Neeraj Jha, 2018)
“Being competitive”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)
“Utilize available opportunity”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)
“Coordination”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)
“Innovative/Research and Development “	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)
“Fairness”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)
“Low staff turnover (percentage of employees leaving the organization)”	(Kamalendra Kumar Tripathi and Kumar Neeraj Jha, 2018)
“Collaboration”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)
“People oriented”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)
“Being reflective”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)
“Being distinctive”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)
“Teamwork/Team spirit / Aggressive for task / Enthusiasm for the job”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)
“Clear lines of responsibility and authority”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)
“Being socially responsible”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)
“Mutual responsibility”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)
“Taking individual responsibility”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)

“Sharing information freely”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)
“Job security”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)
“Stable in operation”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)
“Low conflict”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)
“Enabling working environment”	(Bernard Tuffour Atuahene & Bernard Kofi Baiden, 2017)

2.6. Research Gap

From above theoretical and empirical literatures review the researcher understood that the advantage of national or local and international competitiveness and empirical literatures review evidence has shown identifying determinants of competitiveness is crucial for company’s growth and advancement. Some of local empirical evidence showed that international construction firms are better performance than local construction firms, because they have better experiences, use advance technologies, and better financial capacity. The involvement of international construction firms in Ethiopian construction has a long history. But, recently their involvement has increasing at alarming rate and nearly invaded in all levels of local construction market. This is because of poor or low competitiveness capacity of the local construction companies. The analysis result of “(Dakito Alemu Kesto and Betelhem Tsega, 2022)” had supported this issue.

2.7. Conceptual Framework

The conceptual framework gives a description of how the variable relates to each other. It consists of independent and dependent variables underpinning theories. Independent variables determine the other variable in the relationship. From many factors that affect competitiveness of local construction companies, for this study three independent variables are selected: Performance of the Local Construction Industry, Organizational External Factors, and organizational internal factors, Whereas, the dependent variable is: competitiveness of local construction industry.

Therefore, the research framework of this study measures the relationship of Performance Capacity of Local Construction Industry, Organizational Internal Culture, Organizational External Factors, and Competitiveness Capacity of Local Construction Industry. As shown in Figure 1 below.

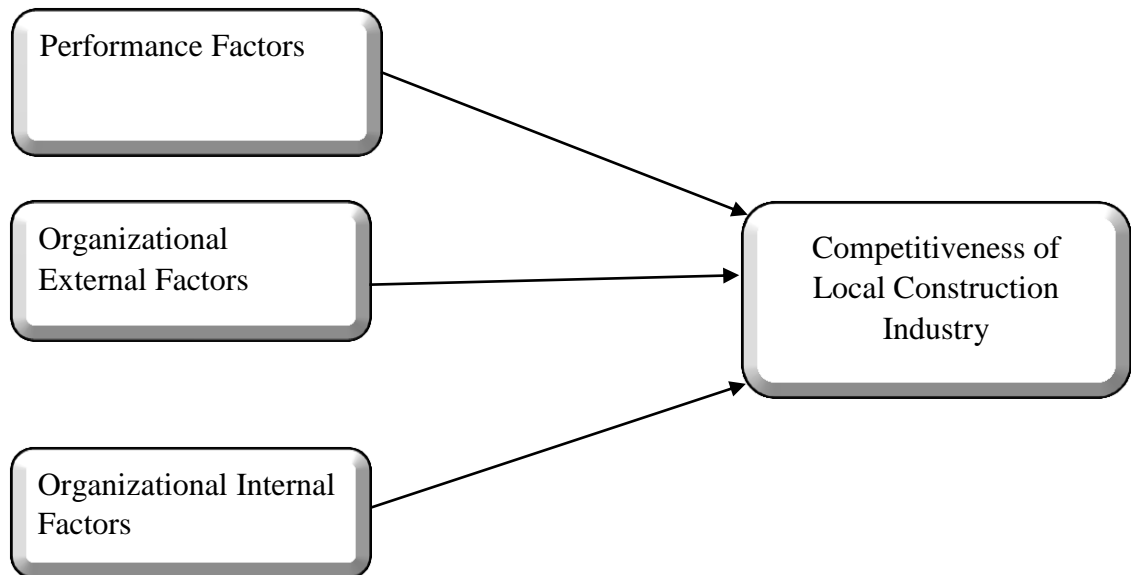


Figure 1: Conceptual Framework

(Source: Compiled form Literature Reviews)

CHAPTER THREE

RESEARCH METHODOLOGY

Introduction

This section of the thesis was dealt with the research methodology, the research design, the research strategy, methods of data collection or Data Collection Instruments, methods of Data Quality Measurement (the Reliability of the Data and the Validity of the Data), Sampling Procedures (about Target Population, Sample size, Data Processing and Analysis Techniques, and finally about the Ethical Issues or considerations.

3.1. Research Methodology

As specified by” (Dr. Prabhat Pandey and Dr. Meenu Mishra Pandey, 2015)”, a research is a combination of two words such as: ‘Research’= “Re+Search.” It means to do something again which was done by someone else before. So, research means a systematic investigation or findings to gain new knowledge from others previous works or ideas or understandings. They further defined the research as: “Research is an intellectual or a professional activity. It is responsibility for showing the same way to disclose new beliefs. It is also accountable for correcting the past mistakes, clearing existing misconceptions and adding new learning or believes in the existing fund of knowledge. Researches are considered as a combination of those activities which are removed from day to day life and are pursued by those persons who are gifted in intellect and sincere in pursuit of knowledge As stated by “ (Boru, 2018)” a research is defined as procedures for collecting, analysing, explaining and addressing data in research studies. In other words, a research is an activity of collecting, analysing and interpreting information to provide solutions to questions. According to (Girma Tadesse, 2014) a research can be classified as descriptive, correlational, explanatory, and exploratory. Based on above definition, this research used facts of information already available to analyse and made critical evaluation and atonement of the data/information.

3.2. Research Design and Approach

The research design is an instrument that directs comprehensibility of the strategy or structural plan of the research. In other words, the main function of a research design is to clarify the work plan in a coherent and logical way and guiding the direction how to collect data, measure data, analysis data, and interpreted the result. It is a blueprint or the master plan of the research. It designs the way how to go, where to, when to go.” (Thakur, 2021).”; “ (Dr. Prabhat Pandey and Dr. Meenu Mishra Pandey, 2015)” The research design is methodology and methods generally; it is a strategy or plan how to answer and to attain the research gap in coherently and systematic way. The conformation obtained enables the researcher how effectively to address a research problem logically without personal bias or ambiguity. Therefore, selecting appropriate research design methodology and system is vital for a research.

Regarding to this thesis, the researcher was applied a descriptive and explanatory research design. (Girma Tadesse, 2014). Because, it was found to be efficient the way for solving research questions through investigating factors that affect competitiveness of local construction companies. It was descriptive, because to describe the output of analysis and explanatory, because it helps to describes and defines systematically a situation or the impact of competitiveness. (Girma Tadesse, 2014). To come up to the objective of the study, a quantitative research strategy or approach was applied. (BRYMAN, 2012)

3.3. Method of Data Collection

The researcher implemented primary and data collection techniques for this study. For collecting primary data adopted 76 well-structured questionnaires from similar works of previous scholars. The questionnaires were distributed for 384 respondents through direct self-contact administration to grade one, grade two, grade three, and grade four construction contractors of Ethiopia. The data was collected at a single-point-in-time via a structured closed and open-ended questionnaire by a 5-point Likert's scale to evaluate the response to the survey.” (U.Sekaran,and R.Bougle, 2010)” Secondary data was collected from published and unpublished local sources, plans, and reports.

3.4. Sampling Methods (Technique)

The qualitative methodology technique was implemented using a structured questionnaire which was administered for infinite sample size of 384 respondents. Per Ethiopian Construction Authority Company Registration Lead Executive Process information, construction contracting companies registered so far at federal level were about 27 thousand. These includes from grade 1 or highest level to grade 7 or lowest level. Thus, the total population size for this study was 27 thousand. To delineate the sample size from infinite population the researcher applied Non-Probability, Conveniences sampling Technique. (Girma Tadesse, 2014)

3.4.1. Company selection Criteria

For this study the companies selected based on their classes. According to this from grade one companies: GC-1=29, BC-1=151, RC-1= 80. From grade two to grade four companies 124.

3.5. Quality of Data Measurement

Before conducting collection of data, assuring the quality of data collection instrument was done. One of the data measuring instruments was done by checking “reliability and validity” of the questionnaire. Testing the reliability of the questionnaire or items was very important to get reliable results. As indicated by (Norušis, 2006); (Cochran, 1977) can be used to test the reliability of the survey based on the five-point Likert scale. The reliability of the questionnaires is measuring the internal consistency among the items. This was done by using the SPSS 27, (Kirkpatrick, 2015) the Cronbach’s alpha. Similarly, Santos and Reynaldo (Santos, A.; Reynaldo, J. Cronbach’s Alpha, 2013) said that, a Cronbach’s Alpha value greater than 0.7 implies that, for five-point Likert scale measurement, it was reliable. Besides that, the results were tested by the Kaiser–Meyer–Olkin (KMO) and Bartlett tests. The results of the KMO and Bartlett tests assured that the initial variables are strongly correlated (Kaiser-Meyer-Olkin (KMO) Test for Sampling Adequacy, 2018) The KMO index was 0.918, which was higher than the minimum value of 0.8, shows that the correlation between variables was satisfactory. The Bartlett test ($\chi^2 = 14396.806$, sig. = 0.00) suggested that the data were appropriate for the result.

Table 7: Statistics of Reliability

Factors	Cronbach's Alpha value	Number of Items
Competitiveness Factors	.844	4
Performance Factors	.830	18
External Factors	.887	27
Organizational Internal Factors	.869	27

Table 8: The KMO and Bartlett tests Values

Interpretation:	
“KMO > 0,5 variables are considered suitable for factor analysis”	Kaiser and Meyer, 1974
“KMO > 0,6 acceptable factor analysis,”	
“KMO > 0,7 good factor analysis,”	
“KMO > 0,8 very good factor analysis,”	
“KMO > 0,9 excellent factor analysis.”	
“Bartlett's test < 0,05 variables can be used in factor analysis”	Bartlett, 1954

Source: ((datum), n.d.)

3.6. Method of Data Analysis

Descriptive, weighted average mean, severity factor analysis, and correlational analysis approaches were used analyses the data.

3.6.1. Descriptive Statistical Analysis

For analysing the data gathered from the close ended questionnaire, the researcher used quantitative analysis approach. Quantitative research is selected, because to find out facts about a concept, question or an attribute and also to collect factual evidence and study the relationship between facts to test theory. For analysis of the data gathered from open ended questionnaire, the researcher applied qualitative approaches. (Boru, 2018); (Girma Tadesse, 2014)

Since the study was trying to identify the determinant of local construction company's competitiveness and showed how the building competitiveness capacity of local construction companies. So, the researcher was employed descriptive analysis methods using Statistics Package for Social Science version 27 (SPSS 27) and Microsoft Excel Version 19 were used in the analysis and presented the findings of the research.

3.6.2. Severity Factor Analysis

A relative importance index (RII) can be used for ranking purpose. Ref. (Holt, 1997) explained that many researchers in construction and related works prefer the RII because of the relative index helps to analyse and compare the relationship between each item that influence the variables. Besides that, a relative importance index (RII) is the best alternative to converge five-point Likert scale measurements to more understandable single point. The relative important index value is between 0 and 1. The highest value of RII means the highest influencing factor of the item. An ordinal scale was the best option for this kind of studies and used during data encoding in SPSS level of measurement. The formula of RII was indicated below.

$$R_{II} = \sum_{i=1}^5 \frac{w_i X_i}{A * n}$$

Equation 1: Relative Importance Index

Where: W_i is the weight of the i^{th} item or Likert scale points ($i = 1, 2, 3, 4, 5$), X_i is the frequency of the i^{th} response, A is the highest weight (5 in this study), and n is the total number of respondents which was 384.

Therefore, a mean value and a relative importance index (RII) were used to rank the out-put. The independent variables items were ranked using relative importance index (RII) and the dependent variable items were ranked using the mean of the items.

3.7. Limitations of the Study

There were some limitations in this study. First of all, sampling selection were covered from grade one to grade four contractors those who renewed their licences from January first to first week of February 2024. It was not covered contractors those renewed their license in other months and years. Secondly, in this study, the researcher tried to identify limited variables that affect competitiveness of local construction companies. Thirdly, the research was not including construction consultants and professional those involved in the construction. Finally, the researcher came to conclusion only through descriptive statistic and relative importance index analysis. Because, the model that the researcher developed was not fits to this study.

3.8. Ethical Considerations

Since this research was tried to find out the determinant of local construction companies' competitiveness, thereby sustaining and maintaining the contribution of the construction industry to growth of domestic production, GDP. The information collected from respondents was very crucial and confidential and applied only for the development and strengthens of this research. Therefore, the researcher ensured that all information given from the respondents were very confidential. In addition to that, the researcher gave proper acknowledgements each source he used in his study.

CHAPTER FOUR

ANALYSIS AND DISCUSSION OF RESULTS

4.1. Introduction

This fourth chapter of the thesis was dealt with the presentation of the data which was collected by means of questionnaires. The study was aimed to investigate and find out the determinants of competitiveness of local construction companies. At this stage, the collected data were examined, analysed, and interpreted in terms of the objectives of the study. Frequency, Means, and relative important index (RII), ranks and tables were used to organize the analysed data, which gave meaning to the response rates and facilitate insight.

To simplify analysis process of a data, a questionnaire survey has been conducted to gather the required information from grade one, grade two, grade three, and grade four contractors who are involved in Ethiopian construction industry. Because, they have some information about the competition of construction sector in national and international level and have enough understanding to answering the research questionnaires. Therefore, questionnaire was divided into the following four major parts.

Part one: This part consists of four inquiries on general background information of the respondent and the organization. It was the dependent variables.

Part two: This part consists of a list of 18 performance indicators items, identified processes that are selected to overview the status and differences of construction project performance of local construction companies. It was the independent variables.

Part Three: This part consists of a list of 27 items about “organizational internal culture” that tried to identify general structure of organization which influences the competitiveness of the organization. It was again, the independent variables.

Part Four: This part consists of a list of 27 items about external factors that influences organizational competitiveness. It was also, the independent variables.

Except part one, the rest of the item were categorized in five Likert scale divisions. Such as scale 1 stands for “Not Significant”, scale 2 stands for “Less Significant”,

scale 3 stands for “Moderately Significant”, scale 4 stands for “Strongly Significant”, and scales 5 stands for “Extremely Significant.”

These four parts were administrated self-contact and distributed for 384 respondents. All the questionnaires were properly answered by the respondents which helped to analyse, to discussed, and to conclude on factors that affect local construction company’s competitiveness. The surveying instrument of structured questionnaires were attached in **APPENDIX I**.

4.2. Descriptive Statistical Analysis

Before analysing the data, the researcher followed the following steps to get accurate and reliable results. For this specific study the researcher thoroughly reviewed of literatures and adopted pre-tested seventy-six (76) items. Out of these 76 data, 72 were used to collect primary data by using 5 points Likert scales for three independent variables, the remaining four data or items used for dependent variable which selected to measure the respondents background and then properly encoded the data in SPSS data view sheet and checked the reliability or internal consistency of the items. The reliability result of items selected to measure the dependent and independent variable were greater than 0.7, which was excellent and accepted according to Cronbach Alpha. Therefore, there was no any problem in the application of descriptive statistical analysis.

Noted: Relative Importance Index (RII) was by using Microsoft Excel-19

4.2.1. Competitiveness

The four items that tried to analyse the background information of the organization were “annual project demand or market share of construction, number of projects completed in the last five years, number of employments in the organization, and the average value of projects.”

Table 9:Result of Factors

Factors			Frequency	Pre-cent (%)	Mean	Rank
“Annual Project Demand”	4-6 pro.		206	53.6	2.52	2
	7-10 pro		158	41.1		

	>10 Pro	20	5.2		
“Number of construction projects worked over the last five years”	1-3 pro	5	1.3	2.51	3
	4-6 pro	187	48.7		
	7-10 pro	182	47.4		
	>10 pro	10	2.6		
“Number of Employments”	1-50 employees	51	13.3	1.97	4
	50-200 employees	295	76.8		
	200-500 employees	38	9.9		
“The average contract value of projects implemented per year”	100-500 METB	4	1.0	2.72	1
	500-1BETB	168	43.8		
	1-5 BETB	155	40.4		
	5-10 BETB	47	12.2		
	>10 BETB	10	2.6		

Source: Owen Data and an Output of SPSS (27), 2024

The above table 9 showed that the “average contract value of the projects implemented per year” has scored the highest mean (2.72) from the rest of three factors. When we come to frequency and the percentage of the variables, from the given items from 500-1 Billion ETB scores the highest frequency which was 168(43.8%). 155 respondent or (43.4%) of the respondent replied that the “average project value implemented per year” was from 1-5 Billion ETB. When “the average annual value of the project” increases the number of contractors decreases. For examples, when the average contract value greater than 10 BETB out of 384 respondents only 10 respondents or 2.6% of the respondents achieved to that value. It was ranked in the first position.

Similarly, regarding to annual project demand/ market share, from 384 respondents 206 (53.6%) respondents “annual project demand or market share” were between 4-6 projects. Out of 384 respondents 158(41.1%) of the respondents’ “annual project demand” were from 7-10 projects. The remaining 20 respondents’ “annual project demands” were more than 10 projects. From the analysis result we understand that the data scores the second highest mean (2.52) of the rest of the variables. It was ranked in second position.

Next to the above two items or factors, “the number of construction projects worked or completed over the last five years” were also pays a vital role for competitiveness of local construction company. The above analysis table 9 has shown from 384 respondents 187(48.7%) of the respondents completed or worked out 4-7 projects within five years. Again, out of the total respondents 182(47.4%) replied that they completed or worked out 7-10 projects within the last five years. From the aggregate of the respondents only 10(2.6%) completed or worked out above ten projects. The mean of the variables 2.51 and set in third places.

Indeed, the previous three variables were very crucial for companies’ competitions, from the above analysis table 9 we understood that,” the number of employments” in the organization is also essential for building the capacity of local construction industry that is the bases for competitiveness. The result of the analysis had shown that out of 384 respondents 295(76.8%) of them have between 50 to 200 hundred employees. 38(9.9%) of the respondents have employed 200 to 500 hundred employees whereas 51(13.3%) contractors employed one to fifty employees.

4.2.2. Performance

Table 10:List of Performance Factors

Items	Frequency and Percentage (%)			Mean	RII (Rank)	Decisions
	MS	SS	ES			
“Size of the organization (measured in terms of turnover, market share, number of employees, etc.)”	70 (18.2)	182 (47.4)	132 (47.4)	4.16	0.832 (16)	Strongly Significant

“Productivity of employees (value added per employee)”	12 (3.1)	161 (41.9)	211 (54.9)	4.52	0.904 (13)	Extremely Significant
“Good track record of timely completion of the projects (number of projects completed in time)”	93 (24.2)	168 (43.8)	123 (32.0)	4.08	0.816 (18)	Strongly Significant
“Health and safety consciousness (number of accidents/100,000/year and worker’s fatality/100,000 workers)”	63 (11.4)	143 (37.2)	178 (54.4)	4.30	0.860 (15)	Strongly Significant
“Customer satisfaction in terms of product and services (measured as rating provided by the customers after project completion)”		176 (45.8)	208 (54.2)	4.54	0.908 (10)	Extremely Significant
“Cost performance of projects (number of projects completed within the tender cost)”	12 (3.1)	152 (39.6)	220 (57.3)	4.54	0.908 (10)	Extremely Significant
“Impact on society (measured in terms of low noise pollution, less disturbance to the occupants in nearby area due to vehicle movement, etc.)”	85 (22.1)	161 (41.9)	138 (35.9)	4.14	0.828 (17)	Strongly Significant
“Impact on environment (measured in terms of	7 (1.8)	117 (30.5)	260 (67.7)	4.66	0.932 (2)	Extremely Significant

use of low natural resources, low production of waste, preservation of plants and trees, etc.)”						
“Optimum liquidity ratio (measured in terms of current ratio = current asset/current liability)”		133 (34.6)	251 (65.4)	4.65	0.931 (3)	Extremely Significant
“Higher profitability ratio (measured in terms of gross profit margin, return on assets, return on equity, return on invested capital)”		105 (27.3)	279 (72.7)	4.73	0.945 (1)	Extremely D Significant
“Higher annual growth rate of the organization (measured in terms of sales growth percentage, earning per share growth percentage, P/E ratio)”		132 (34.4)	252 (65.6)	4.66	0.931 (3)	Extremely Significant
“Predictability of cost in design and construction (percentage on target)”	8 (2.1)	143 (37.2)	233 (60.7)	4.59	0.917 (8)	Extremely Significant
“Rework/defect rectification (number of man hours and material used for repairing work as a percentage of total man hours for the entire project and total contract amount”	56 (14.6)	142 (37.0)	186 (48.4)	4.34	0.868 (14)	Strongly Significant
“Higher wages of the		149	235	4.61	0.922	Extremely

employees”		(38.8)	(61.2)		(6)	Significant
“Good relationship with client (in terms of repeat business, low dispute, and litigation, timely payment, etc.)”	2 (.5)	132 34.4)	250 (65.1)	4.65	0.930 (5)	Extremely Significant
“Accuracy/ Precision/ Meticulous/detail in work”	19 (4.9)	131 (34.1)	234 (60.9)	4.56	0.912 (9)	Extremely Significant
“Company’s reputation/track record in completing the project on time with good quality and fair pricing”	35 (9.1)	111 (28.9)	238 (62.0)	4.53	0.906 (12)	Extremely Significant
“Emphasis on quality”		156 (40.6)	228 (59.4)	4.59	0.919 (7)	Extremely Significant

Source: own data and output of SPSS (27), 2024

Noted: **RII**=Relative Important Index, **MD**= Moderately Significant, **SD** = Strongly Significant, **ED**= Extremely Significant.

The above analysis table 10 was showed that “Higher profitability ratio (measured in terms of gross profit margin, return on assets, return on equity, and return on invested capital)” has scored the highest mean (4.73). From the respondents 279 replied that item is extremely determine and the remaining 105 of the replied the item is strongly significant. But, based on the relative important index ranked in third (1) position and its significance was extremely significant item.

This table (10) also showed that from eighteen items “Impact on environment (measured in terms of use of low natural resources, low production of waste, preservation of plants and trees, etc.)” and “Higher annual growth rate of the organization (measured in terms of sales growth percentage, earning per share growth percentage, P/E ratio)” were paced in second position (2) with the mean value of 4.66. From 384 respondents 260 were replied that the item was extremely significant, 117 of the respondents replied that the items was strongly significant, the remaining 7 respondents replied that the item was moderately significant. The respondent’s

reactions for the second item were from the total respondents 252 said that the item was extremely significant. According to their relative important index values the items were again placed it in second (2) and in third (3) places. Based on decision of the researcher the items were extremely significant.

The analysis result of the above table (10) put the items “Optimum liquidity ratio (measured in terms of current ratio = current asset/current liability)” and “Good relationship with client (in terms of repeat business, low dispute, and litigation, timely payment, etc.)” in fourth place and their mean value was 4.65. From the respondents 251 and 250 respondents replied the items were extremely significant, 133 and 132 of the respondents said that the item was strongly significant. The remaining 2 respondent said that the item was moderately significant. In general, the items were extremely significant item. Their relative important index values were placed them in third and fifth position respectively.

The other results the analysis table (10) disclosed was that the item “Higher wages of the employees”, was placed in sixth position based on its mean value 4.61. The reaction of the respondent to this item was as follow; from 384 respondents 235 said that the item was extremely significant and 149 said that the item was strongly significant. The relative importance index value was 0.922 and its rank was sixth position. In general, its significance value was extremely significant

The table (10) was also revealed that “Predictability of cost in design and construction (percentage on target)” and “Emphasis on quality” items were took the seventh (7) position from eighteen items of the variable. The mean value of the items was 4.59. The relative importance index of the items was 0.917 and 0.919 respectively which was eighth and seventh position. The weighted average mean value of the items was extremely determined.

The analysis table (10) had again shown that the item “Accuracy/ Precision/ Meticulous/detail in work” was based on its mean value placed in ninth position. Out of 384 respondents, 234 were replied that the item was extremely significant for performance of the construction companies. The remaining 131 and 19 the item was strongly determined and moderately significant respectively. Based on researcher’s decision the item was extremely significant.

From the above table (10) we understood that items like “Customer satisfaction in terms of product and services (measured as rating provided by the customers after project completion)” and “Cost performance of projects (number of projects completed within the tender cost)” were also scored the mean value of 4.54, which was placed them in tenth position. Their relative important index value 0.908. The decision of the researcher was extremely significant item.

From the table above (10) the mean value of “Good track record of timely completion of the projects (number of projects completed in time)” was 4.08 which placed it in last position from eighteen items. From the respondents 123 said that the item was extremely significant and 168 were said the item was strongly significant and the remaining 93 respondents said that the item was moderately significant. In general, the item was strongly significant the variable.

4.2.3. External Factors

Table 11: List of External Factors

Items	Frequency and Percentage (%)			Mean	RII (Rank)	Decision
	MS	SS	ES			
“Local competition”	80 (20.8)	162 (42.2)	142 (37)	4.16	0.832 (25)	Strongly Significant
“Foreign competition”	1 (.3)	179 (46.6)	204 (53.1)	4.53	0.906 (17)	Extremely Significant
“Market size”	96 (25.0)	150 (39.1)	138 (35.9)	4.11	0.821 (27)	Strongly Significant
“Market growth”	72 (18.8)	165 (43.0)	147 (38.3)	4.20	0.839 (24)	Strongly Significant
“Level of agglomeration”		153 (39.6)	231 (60.2)	4.60	0.920 (7)	Extremely Significant
“Commercial links”		174 (45.3)	210 (54.7)	4.55	0.909 (16)	Extremely Significant
“Geographical distance”	95 (24.7)	147 (38.3)	142 (37.0)	4.12	0.824 (26)	Strongly Significant

“Air connection”	8 (2.1)	140 (36.5)	236 (61.5)	4.59	0.919 (9)	Extremely Significant
“Political risk”		111 (28.9)	273 (71.1)	4.71	0.942 (1)	Extremely Significant
“Corruption”		127 (33.1)	257 (66.9)	4.67	0.934 (3)	Extremely Significant
“Citizen insecurity”		114 (29.7)	270 (70.3)	4.70	0.941 (2)	Extremely Significant
“Local protectionism”		140 (36.5)	244 (63.5)	4.64	0.927 (5)	Extremely Significant
“Economic stability /Country’s economic conditions”	64 (16.7)	144 (37.5)	176 (45.8)	4.29	0.858 (23)	Strongly Significant
“Financial risk”		152 (39.6)	232 (60.4)	4.60	0.920 (7)	Extremely Determine
“Currency fluctuations”		138 (35.7)	246 (64.1)	4.64	0.928 (4)	Extremely Determine
“Payment delays”	16 (4.2)	137 (35.7)	231 (60.2)	4.56	0.912 (14)	Extremely Determine
“Capital requirement”	40 (10.4)	113 (29.4)	231 (60.2)	4.50	0.899 (18)	Extremely Determine
“Cultural differences”		147 (38.3)	237 (61.7)	4.62	0.923 (6)	Extremely Significant
“Language differences”		159 (41.4)	225 (58.6)	4.59	0.917 (10)	Extremely Significant
“Social risk”		194 50.5)	190 (49.5)	4.49	0.899 (18)	Strongly Significant
“Religious beliefs”	5 (1.3)	158 (41.1)	221 (57.6)	4.56	0.912 (14)	Extremely Significant
“Interest in the project’	2 (0.5)	189 (49.2)	193 (50.3)	4.50	0.899 (18)	Extremely Significant
‘Institutional		163	221	4.58	0.915	Extremely

differences”		(42.4)	(57.6)		(12)	Significant
‘Legal risk”	4 (1.0)	196 (51.0)	184 (47.9)	4.47	0.893 (22)	Strongly Significant
“Lack of availability of resources”	3 (0.8)	155 (40.4)	226 (58.9)	4.58	0.916 (11)	Extremely Significant
“Local labour conditions”		197 (51.3)	187 (48.7)	4.49	0.897 (21)	Strongly Significant
“Existence of infrastructures”	3 (0.8)	159 (41.4)	222 (57.8)	4.57	0.914 (13)	Extremely Significant

Source: own data and output of SPSS (27), 2024

Noted: **RII**=Relative Important Index, **MD**= Moderately Significant, **SD** = Strongly Significant, **ED**= Extremely Significant.

The above data analysis table 11 disclosed the respondents’ replied on above items. Out of twenty-seven (27) significant factors of external variable “Political risk” has scored the highest mean (4.71) which was selected to measure the external factors that hinders competitiveness capacity of local construction companies. From 384 respondents 273 said that the item was extremely significant and the remaining 111 respondents said the item was strongly significant the variable. The relative importance index of the item was 0.942 and ranked in first place and the item was extremely significant.

Next to “Political risk,” “Citizen Insecurity” was taking the second position. Based on respondent’s replies, out of the respondents 270 said that the item was extremely significant and the remaining 114 respondents replied that the item was strongly significant item. The relative importance index (RII) value of the items was 0.941. Again, based on researches decisions the item was extremely significant.

Similarly, “Corruption” was taking the third position by the respondents and its relative importance index value was 0.934, ranked in third position. The above table 11 again discloses that the out of 384 respondents 252 said that the item was extremely significant and 127 were said the item was strongly significant the items. The researcher decision regarding to this item was extremely significant item.

From twenty-seven items that chosen to measure the influence of external factors “Local protectionism” and “Currency fluctuations” were taking the fourth place. From respondents 244 were said that the item was extremely significant and 140 were said that the “Local protectionism” was extremely significant and strongly significant respectively. Whereas, out of 384 respondents, 246 respondents were said that “Currency fluctuations” significant extremely significant and 138 respondents said that “Currency fluctuations” strongly significant competitiveness respectively. Their relative importance index values were 0.927 and 0.928 respectively and the items were extremely significant item.

Subsequently; the above analysis table 11 revealed the respondents’ attitude in “Cultural differences” was taking the next position based on the mean value of 4.62. From the respondent 237 were said the item was extremely determinant item and 147 respondents were said that the item was strongly determined. The relative importance index severity was 0.923 and the item was extremely determinant item.

Other factors adopted to measure the significant of external factors in competitiveness of local construction companies were “Level of agglomeration” and “Financial risk”. Their mean value was 4.60 and their severity value was 0.920. Generally, the items were extremely determinant item. Table 11 also, disclosed that “Local competition, Market growth, Geographical distance and Market size” were strongly d significant the items. Their mean value ranges from 4.11 to 4.20 and their relative importance index values were ranges from 0.821 to 0.832.

4.2.4. Organization Internal Factors

Table 12:Internal Factors

Items	Frequency and Percentage (%)			Mean	RII (Ranke)	Decisions
	MS	SS	ES			
“Highly organized”	27 (7.0)	149 (38.8)	208 (54.2)	4.47	0.894 (19)	Strongly Significant
“Having a clear guiding philosophy”	18 (4.7)	108 (28.1)	259 (67.2)	4.63	0.927 (11)	Extremely Significant
“Hierarchical”		137 (35.7)	247 (64.3)	4.64	0.929 (10)	Extremely Significant

“Rule oriented”		170 (44.3)	214 (55.7)	4.56	0.911 (16)	Extremely Significant
“Management respect for subordinate”	63 (16.4)	175 (45.6)	146 (38.0)	4.22	0.843 (25)	Strongly Significant
“Competitive strategy used by the organization”		145 (37.8)	239 (62.2)	4.62	0.924 (13)	Extremely Significant
“Adopting learning and growth culture in the organization (measured in terms of amount spent for learning and growth as a percentage of total turnover of the company)”	54 (14.1)	145 (37.8)	185 (48.2)	4.34	0.868 (21)	Strongly Significant
“Opportunity for professional growth”	54 (14.1)	145 (37.8)	185 (48.2)	4.34	0.868 (21)	Strongly Significant
“Achievement / Action oriented. Effective risk management capability in the organization”		156 (40.6)	228 (59.4)	4.59	0.919 (15)	Extremely Significant
“Utilize available opportunity”		108 (28.1)	276 (71.9)	4.72	0.944 (2)	Extremely Significant
“Innovative/Research and Development”		155 (40.4)	229 (59.1)	4.60	0.919 (14)	Extremely Significant
“Fairness”		108 (28.1)	276 (71.9)	4.72	0.944 (2)	Extremely Significant
“Low staff turnover (percentage of employees leaving the		110 (28.6)	274 (71.4)	4.71	0.943 (4)	Extremely Significant

organization)”)						
“Collaboration”		119 (31.0)	265 (68.8)	4.69	0.938 (5)	Extremely Significant
“People oriented”		120 (31.3)	264 (68.8)	4.69	0.938 (5)	Extremely Significant
“Being reflective”	27 (7.0)	125 (32.6)	232 (60.4)	4.53	0.907 (17)	Extremely Significant
“Being distinctive”	90 (23.4)	147 (38.3)	147 (38.3)	4.15	0.830 (27)	Strongly Significant
“Teamwork/Team spirit / Aggressive for task / Enthusiasm for the job”	81 (21.1)	137 (35.7)	166 (43.2)	4.22	0.844 (25)	Strongly Significant
“Clear lines of responsibility and authority”		141 (36.7)	243 (63.3)	4.63	0.927 (11)	Extremely Significant
“Being socially responsible”	64 (16.7)	125 (32.6)	195 (50.8)	4.34	0.868 (21)	Strongly Significant
“Mutual responsibility”	63 (16.4)	147 (38.3)	174 (45.3)	4.29	0.858 (24)	Strongly Significant
“Taking individual responsibility”		124 (32.3)	260 (67.7)	4.68	0.935 (7)	Extremely Significant
“Sharing information freely”	27 (7.0)	147 (38.3)	210 (54.7)	4.48	0.895 (18)	Strongly Significant
“Job security”		134 (34.9)	250 (65.1)	4.65	0.902 (9)	Extremely Significant
“Stable in operation”	9 (2.3)	110 (28.6)	265 (69.0)	4.67	0.933 (8)	Extremely Significant
“Low conflict”		101 (26.3)	283 (73.7)	4.74	0.947 (1)	Extremely Significant

“Enabling working environment”	27 (7.0)	158 (41.1)	199 (51.8)	4.45	0.889 (20)	Strongly Significant
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Source: own data and output of SPSS (27), 2024

Noted: **RII**=Relative Important Index, **MD**= Moderately Significant, **SD** = Strongly Significant, **ED**= Extremely Significant.

To illustrate the analysis result of the above table 12, tried to measure the organizational internal factors through twenty-seven (27) items. Out of these items, “Low conflict” scored the highest mean and the highest relative important index values organization internal factors. Its mean value and relative importance index value was 4.74 and 0.947 respectively. The researcher decision was extremely significant.

The other point of this variable was “Utilize available opportunity” and “Fairness” which were placed in second position. Their mean value of the item was 4.72 and the relative importance index value was 0.944. The decisions of the items were extremely significant.

The above analysis table 12 had shown that “Low staff turnover (percentage of employees leaving the organization)” one of extremely significant items that measures the organization internal factor. Its mean value was 4.71 and its relative importance index value was 0.943 respectively. The table also disclosed that “Collaboration” and “People oriented” were extremely significant item. Its mean value was 4.69 and its relative importance index value 0.938.

The other area of this analysis was “Taking individual responsibility” which was extremely significant, its mean value and relative importance index value was 4.68 and 0.935 respectively.

4.3. DISCUSSION OF RESULTS

Alicia L. et.al, (2020) in their work “competitiveness advantage and Barriers in International Construction” said that competitiveness in construction market has so many advantages in enhancing competitiveness power of construction companies. In other words, they said that competitiveness of construction companies are affected or influenced by so many factors or barriers. The analysis results of factors that selected to measure competitiveness of Ethiopian local construction companies are agreed with what the scholars mentioned.

The other point raised by Kamalendra K. T. and Kumar N.J, (2018) was “success factors in construction organizations.” One of the success factors or competitiveness factors construction organization is performance of organization. Some of the factors that selected to measure performance of organization for this study were “Higher profitability ratio (measured in terms of gross profit margin, return on assets, return on equity, return on invested capital)”, “Impact on environment (measured in terms of use of low natural resources, low production of waste, preservation of plants and trees, etc.)”, “Optimum liquidity ratio (measured in terms of current ratio = current asset/current liability)”, and “Higher annual growth rate of the organization (measured in terms of sales growth percentage, earning per share growth percentage, P/E ratio)”. According to the analysis results out of eighteen variables they score the maximum points and the remaining factors also strongly affects competitiveness of Ethiopian local construction companies. All in all, the analysis result reinforces the scholars’ work of success factor in construction.

The next discussion point was an organizational external factor that affects competitiveness of Ethiopian local construction. This variable was analysed by using twenty seven (27) factors. All the factors equally affect competitiveness of Ethiopian local construction companies. From these twenty seven factors the analysis result of “Political environment” such as “Political risk”, “Corruption”, “Citizen Insecurity”, and “Local protectionism” scores result totally agreed with the research question and what Kamalendra K. T. and Kumar N.J, (2018) mentioned in their study.

The other discussion point of this study was the analysis result of “organizational internal factors” of Ethiopian local construction companies. This variable was measured by twenty seven (27) factors. The result of the analysis showed that

organization internal factors were some of the factors competitiveness of local construction companies. These results were supported by (Kamalendra K. T. and Kumar N.J,(2018) “success factors in construction organizations” and Bernard T. A. and Bernard K. B. (2017) “Organizational culture of Ghanaian construction firms.”

Finally, according to this study from some of factors that affects competitiveness of Ethiopian local construction companies “performance of organization, external factors of organization, and organizational internal factors” were the major ones.

CHAPTER FIVE

5.1. SUMMARY, CONCLUSION, AND RECOMMENDATIONS

This chapter presented the summary of findings, conclusions, and recommendations obtained from the findings of the study.

5.1.1. Summary of Findings

After literature review and the research data analysed discussed in the previous chapters this fifth chapter of the thesis had summarized the main findings.

This study is titled as determinants of local construction companies' competitiveness in Ethiopian was analysed. Before the analysis was made the researcher had followed some procedures which facilitate the way to arrive more reliable analysis results. The first thing what researcher has done was preliminary literature review for assessing the research title. After clearly identified the research title and its urgency, prepared problem statement, research objectives, and research question. To come to research objectives vigorously reviewed literatures, documents, and reports according to the title. Then, followed research methodologies (research design, sampling, data collection techniques, data analysis procedures and research ethics). Finally, analysed the collected data from the respondents and reported the research.

As indicated previously, the research title "*Factors Affect Competitiveness of Ethiopian Local Construction Companies*" it was totally focused in construction industry. According to (Karen R. Polenske and Petros Sivitanides, 2014) Construction industry has both forward and backward linkages. In its backward linkages "relationship of inter industry purchases to total purchases." In the same manner, a backward linkage measures, "the impact of final demand changes on output." And forward linkage means "relationship of inter industry sales to total output." That means, forward linkages measure "the impact of value-added changes on price." Due to this, there are so many actors play in the industry. Majorly: client, contractor, and consultants are taking the first places in the sector. Construction material producer, suppliers, and distributors are also playing a great role in solving the construction material problems. Skilled, semi-skilled, unskilled professional are the backbone in the development of the industry.

The construction sector is one of the major contributors of gross domestic product (GDP) both in developing and developed countries. Taking these under consideration, countries allocate large amount of money for the development of the sector. The industry creates huge job opportunity and building the image of the country. According to Ethiopian Construction Authority (ECA) information lists more than 27 thousand different level of construction company from first grade or grade one or class A or the highest-level contractor to grade seven or class seven or lowest grade contractor, and from class A or grade one to class C or grade three consultant have been registered and issued the working license at federal level so far. In the same way, the registration process is continuous in regional and city administration level. This indicates that, more or less, how the industry creates job opportunity in Ethiopia.

Like any other developing countries country's construction industry development, the Ethiopian construction industry is also in advanced developing level, however, there are some gaps in the industry. As Ethiopia is the second highest populated country in Africa, next to Nigeria, the demand of high infrastructure and other construction are increasing. It is obvious that it could be impossible for a single country to meet the demand of infrastructures and other construction needs from citizens by itself.

It could be imperative for the countries like Ethiopia seeking more skilled and experienced companies in the area from other country. Because of, the sector of construction is unique, complex, and differs in size. For this reason, recently there are so many foreign construction companies have been working in Ethiopia construction industry. These foreign construction firms have their own positive and negative impact in the development of local or indigenous constructions industry.

Many literatures disclosed that competitiveness in the construction industry builds the capacity of the sector. But, the Ethiopian construction industry competitiveness gloomily decreases from time to time and nearly become uncompetitive. According to local scholars in the area, there are so many reasons for this, but this study tried to find out determinant/influencing factors of local construction company's competitiveness were the major one.

In connection with this, the researcher tried to adopt per-tested items or factor to indicate the determinant factor of local construction company's competitiveness in Ethiopia. Some of the determinant factors selected for this study were performance

capacity of local construction companies, “organizational internal” working culture of local construction companies, and external influencing factors of local construction companies that affects competitiveness capacity as an independent variable and considering competitiveness as dependent variable. Then analysed the collected data through the descriptive statistics, correlational and regression model analysis.

The model developed to analysis regression of independent variable on dependent variable was not fit for this study due to strong correlation of independent variables. Descriptive statistics and weighted average mean analysis were summarized as follow:

- ❖ Regarding to the dependent variable, competitiveness capacity of the local construction industry, nineteen (19) factors were identified from literature review and grouped in four category such as “Experience of the company/ Experience in construction business (number of years in construction business), Project management capacity, Ability to adapt to the destination country, and Ability to adapt to the destination country.” But, from these 19 items only four items were fit positive by Cronbach Alpha test. Then collected primary data from three hundred and eighty-four (384) respondents by using these four items such as “Annual Project Demand/ Market share, Number of construction projects worked over the last five years, Number of Employments, and the average contract value of projects implemented per year.”

From analysis only 5.2% of contractors got “annual project demand or market share” above 10 projects whereas the remaining 94.8% of contractors from the respondents were got less than 10 projects of market share annually. “Number of projects the local construction companies completed or worked during the last five years” in local or international level were only 2.6% of the respondents were completed more than 10 projects. The remaining 97.4% of contractors were able to completed less than 10 projects. When come to number of employments, from respondents 9.9% were able to employed between 200-500 employees. Whereas the remaining 91.1% were employed below 200 employees. “Average contracting values of company per year” was also one of the investigated factors. According to the result of the analysis, only a few companies were able to achieve more than 10 Billion Eth Birr per

year. Therefore, these four factors were highly influencing or determining the competitiveness of local construction company.

- ❖ Performance of local construction industry was one of the variables that determined or selected by the researcher to investigate the influencing factors of local construction companies by using eighteen items. From eighteen (18) items thirteen (13) items were extremely determinant for competitiveness of local construction company, whereas, the remaining five (5) items were strongly determinant items. In other words, 72.22% of the items were extremely determinant and the remaining 27.78% were strongly determine the variable. So, these eighteen (18) items were significantly determinant factor of local construction company's performance.
- ❖ In the same manner, organizational internal culture was one of the variables that determined competitiveness of local construction companies. Then the data was collected from respondents by twenty-seven (27) items which were appropriate to measure the variable. According to the respondents reply out of twenty-seven (27), seventeen (17) items were extremely determine and ten (10) items were strongly determine organization internal culture. That means, 62.96% of the item was extremely determinant factor of "organizations internal culture" and the remaining 37.04% of the item was strongly determine organization internal culture. Understanding from these results, these items were determined organizational internal culture.
- ❖ Similarly, the external factors that influences or determines competitiveness of local construction companies were measured again by twenty-seven (27) items. Out of these items, nineteen (19) items were extremely determine and eight (8) items were strongly determine. That means, 70.40% of the items selected to measure external factor was extremely determine and the remaining 29.60% of the item was strongly determine. Concluding from this, items selected to measure external factors were truly measured the variables. Therefore, these twenty-seven factors were determined competitiveness of local construction company externally.

5.2. CONCLUSION

As indicated in chapter one, this study tried to fill the gap of poor competitiveness capacity of local construction company through identifying factors that affect competitiveness of Ethiopian local construction companies.

As expressed by scholars in the area, construction industry is like any business, it is venerable to many risks and high competitions. Because of, there are many factors affecting competitions of the industry. Therefore, construction companies those who have access to properly handle the factors or barriers and minimize the risks succeed or become competitive in national and international construction market.

Competition in construction industry has multi-dimensional perspectives, because, the industry is uniqueness and complex. Thus, it needs special attention to succeed in the industry. Since, different stakeholders involved in the sector, shows its complexity. Stakeholders like clients, consultants, contractors, and communities have different interest and attitude affects competitiveness of the industry.

In addition to uniqueness of construction industry, Ethiopian local construction companies have a problem of performance; exposed to high level of external factors and weak internal working culture. For this reason, Ethiopian local construction companies are not competitive in national and international construction market.

5.3. RECOMMENDATIONS

5.3.1. Recommendation for the concerned bodies

Based on the above conclusion the researcher has forward the following recommendations:

- ✓ The research in the area revealed that performance of a company takes the first places to become competitiveness of construction industry. So, the local construction companies have to improve their performance in the area, because it helps to become competitive in national and intentional construction market.
- ✓ Organization internal working culture plays a role for succeeding in competition. Therefore, local construction companies should give due consideration for internal factors that affects their competitiveness.

- ✓ Foreign or international construction companies have an ample of experience in the sector. So, put a strategy how to use or change these experiences to national level and enhance competitiveness of local construction company.
- ✓ The annual market share or demand of local construction companies are not at satisfactory level in Ethiopian construction industry, thus increasing the local market share paves the way to develop competitiveness of the local construction companies.
- ✓ The average contract value of project implementation per year is one of major factors that affect competitiveness of Ethiopian local construction companies. Therefore, improving the average contract project value implementation per year creates an opportunity for building competitive local construction companies.

5.3.2. Recommendation for Further Study

This study with its limitation has investigated factors that affecting Ethiopian local construction companies, the case of some selected companies. Nevertheless, the following issues are identified and suggested for future studies:

- ✓ This study covers limited number of local construction companies. So, further inclusive study in the area will give full information about factors affecting competitiveness of local construction companies.
- ✓ Since, construction industry is unique and complex, factors affecting competitiveness of the industry are not easy and simple. Thus, further study in the area will fill the gaps accordingly. of local construction companies. Thus, further study in the area use additional variables not covered by this study shall give clear information about weak competitiveness of local construction companies.
- ✓ Construction consultants and senior construction professionals have also enough information about construction competitiveness. So, further study shall include these professionals and consultants and make the study full.
- ✓ Inferential analysis helps the researcher to reach more precise conclusions. Therefore, further study shall include this analysis method.

References

(datum), S. B. (n.d.).

https://www.StatistischeDatenAnalyse.de/images/Exploratory_Factor_Analysis-EFAHow_to_interpret_KMO_and_Bartletts_test.pdf. Retrieved 03 25, 2024, from Statistical agency: <https://statistical.agency>

A.Q. Adeleke, A.Y. Bahaudin, and A. M. Kamaruddeen. (2015). A Partial Least Square Structural Equation Modeling (PLS SEM) Preliminary Analysis on Organizational Internal and External Factors Influencing Effective Construction Risk Management among Nigerian Construction Industries. *Rev. Téc. Ing. Univ. Zulia*, 143 - 155.

Ahmad Farid Amiri and Dennis C. Bausman. (2018). The Internationalization of Construction Industry - A Global Perspective. *International Journal of Engineering Science Invention (IJESI)*, 59-68.

Ahmed Badawy, Abobakr Al-Sakkaf, Ghasan Alfalah, Eslam Mohammed Abdelkader, and Tarek Zayed. (2022, September 28). Scrutinizing Competitiveness of Construction Companies Based on an Integrated Multi-Criteria Decision Making Model. *Competitiveness of Construction Companies Based on an Integrated Multi-Criteria Decision Making Model*, pp. 850-872.

Ahmed Ibrahim Eltohamy and Hany Abd Elshakour Mohamed. (2022). Critical Success Factors for Competitiveness of Egyptian Construction Companies. *Sustainability*, 1-22. doi:10.3390/su14171060

Alicia LOZANO-TORRÓ . (2020). *COMPETITIVE ADVANTAGES AND BARRIERS IN INTERNATIONAL*, 475–489.

Alicia LOZANO-TORRÓ, Tatiana GARCÍA-SEGURA, Laura MONTALBÁN-DOMINGO, and Eugenio PELLICER. (2020). *COMPETITIVE ADVANTAGES AND BARRIERS IN INTERNATIONAL CONSTRUCTION: AN ORIGIN-HOST MARKET APPROACH*. *Journal of Civil Engineering and Management*, 475–489.

Armstrong Amoah; Jasmina Berbegal-Mirabent; Frederic Marimon. (2021). What makes the management of a project successful? The case of construction projects in developing countries. *Journal of Construction Engineering and Management.*, 1-36.

- ATAEI, H. (2019). GLOBALIZATION AND CONSTRUCTION ENGINEERING MANAGEMENT EDUCATION. *Interdependence between Structural Engineering and Construction Management*, EPE-03-1-6.
- auti.africa . (2024, 03 07). Retrieved from Costruction and Infrastructure-Africa Union : <https://auti.africa › industries>
- Beliz Ozorhon , Cansu Kus , Semih Caglayan. (2020). Assessing competitiveness of international contracting firms from the. *Journal of Construction Engineering, Management & Innovation*, 52-66.
- Bernard Tuffour Atuahene & Bernard Kofi Baiden. (2017). Organizational culture of Ghanaian construction firms. *International Journal of Construction Management*, 1-12.
- Boru, T. (2018, December). *ResearrchGate*. doi:10.13140/RG.2.2.21467.62242
- BRYMAN, A. (2012). *Social research methods 4th Edition*. London: OXFORD.
- Cochran, W. G. (1977). *Sampling techniques 3rd Editions*. New York, NY: John Wiley & Sons.
- Dakito Alemu Kesto and Betelhem Tsega. (2022). A COMPARATIVE ANALYSIS OF PERFORMANCE OF DOMESTIC AND FOREIGN CONTRACTORS: THE CASE OF ETHIOPIAN FEDERAL ROAD CONSTRUCTION PROJECTS. *International Journal of Project Management and Productivity Assessment*, 1-11.
doi:10.4018/IJPPMA.301599
- Desalegn Girma Mengistu and Gangadhar Mahesh. (2020). Dimensions for improvement of construction management practice in Ethiopian construction industry. *Journal of Engineering, Design and Technology*, 1, 21-39. doi: 10.1108/JEDT-10-2018-0175
- Dr. Prabhat Pandey and Dr. Meenu Mishra Pandey. (2015). *RESEARCH METHODOLOGY: TOOLS AND TECHNIQUES*. Romania,, European Union: Bridge Center.
- Ericson, K. (2005). The Influence of Experience and Deliberate Practices on The Development of Superior Expert Pefformance . In K. Ericson, *The Cambridge HandBook of Expertise and Performance* (pp. 683-703).
- Erol, Isil and Unal,Umut. (2015, Dec 08). Role of Construction Sector in Economic Growth: New Evidence from Turkey. *Role of Construction Sector in Economic Growth: New Evidence from Turkey*. Munich Personal RePEc Archive, MPRA. Retrieved from <https://mpra.ub.uni-muenchen.de/68263/>

- Ervina Alfian, Ph.D and Zarina Zakaria, Ph.D. (2013). Review of Financial Performance and Distress: A Case of Malaysian Construction Companies. *British Journal of Arts and Social Sciences, Vol.12 No.II (2013)* (2046-9578), 143-157. Retrieved 03 07, 2024, from <https://www.bjournal.co.uk/BJASS.aspx>
- Evgenij Smirnov and Igor Fedoseev . (2013). Improving Competitiveness of a Construction Company. *World Applied Sciences Journal*, 1555-1559.
- FANGO, E. F. (2019). CHALLENGES OF LOCAL CONTRACTORS IN WINNING TENDER. *Thesis*. Addis Ababa, ADDIS ABABA SCIENCE AND TECHNOLOGY UNIVERSITY, Ethiopia.
- Florian Schaefer and Carlos Oya. (2019). *Employment patterns and conditions in construction and manufacturing in Ethiopia. A comparative analysis of the road building and light manufacturing sectors*. London: Economic and Social Research.
- Fredrick Abonda & Vincent N. Machuki. (2018). Competitive Strategies and Performance of Construction Companies in. *Journal of Management and Strategy*, 47-61.
- G J Johari,E Walujodjati,S Mulyana and S Permana. (2019). Factors affecting competitiveness small contractors in construction industry. *Journal of Physics: Conference Series*, 1-6.
- Ganna Kharlamova, Olga Vertelieva. (2013, October). THE INTERNATIONAL COMPETITIVENESS OF COUNTRIES: ECONOMIC-MATHEMATICAL APPROACH. *Economics & Sociology*, 6(2071-789X), 39-52. doi:10.14254/2071-
- Gashahun, A. D. (2020, July 29). Assessment on Impact of Covid-19 on Ethiopian Construction Industry. *Research Article IJESC*, pp. 26889 -26894.
- Girma Tadesse, P. (2014). *Methodology and Writing Up Research. A HandBook For Students & Supervisors*. ADDIS ABABA: Mega Publishing & Distribution PLC.
- Hanna Moges Dereje and Wubishet Jekale Mengesha. (2023). Contractors' Competitiveness Measurement in International Competitive Bid of Ethiopian Road Projects. *International Journal of Management and Humanities (IJMH)*, 19-29.
- Hany Abd Elshakour Mohamed and Ahmed Ibrahim Eltohamy. (2022, August 23). Critical Success Factors for Competitiveness of Egyptian Construction Companies. *Sustainability MDPI*, pp. 1-22.
- Hassan Fehan and Osaro Aigbogun. (2022, May 01). Impact of External Environmental Factors on Construction Firms' Performance, Mediated By Institutional Pressures.

Civil Engineering Journal, 8(2476-3055;;2676-6957), 967-984.

doi:<http://dx.doi.org/10.28991/CEJ-2022-08-05-09>

Holt, G. N. (1997). Construction research questionnaires and attitude measurement: Relative index or mean? *Journal of Construction research Procure.*, 88-96.

<http://data.worldbank.org/data-catalog/world-development-indicators>. (2023, July 1).

Retrieved from World Development Indicators database, World Bank:

<https://databankfile.worldbank.org>

imd.org. (2023, June 20). Retrieved 03 08, 2024, from World Competitiveness Ranking 2023 - IMD Business School: <https://www.imd.org>

Kaiser-Meyer-Olkin (KMO) Test for Sampling Adequacy. (2018). Political Risks in Central Asian Countries: Factors and Strategies. *Journal of Management and Engineering* , 34.

Kamalendra Kumar Tripathi and Kumar Neeraj Jha. (2018). Determining Success Factors for a Construction Organization: A Structural Equation Modeling Approach. *J. Manage. Eng*, 04017050-1-04017050-15.

Karen R. Polenske and Petros Sivitanides. (2014). Linkages in the Construction. *The Annals of Regional Science*, 147-161.

Ketels, C. H. (2011). 10 Clusters and competitiveness: Porter's contribution. In M. Porter, *Competiton, competitiveness Advantages and Cluster* (pp. 173–192).

doi:<https://doi.org/10.1093/acprof:oso/9780199578030.003.0010>

Kirkpatrick, L. (2015). *A Simple Guide to IBM SPSS Statistics-Version 23.0*. San Francisco, CA, USA: Cengage Learning.

L. Sui Pheng and L. Shing Hou. (2019, 03 07). Chapter 2 The Economy and the Construction Industry. *Construction Quality and the Economy, Management in the Built Environment*. Singapore: Springer Nature Singapore Pte Ltd. Retrieved from https://doi.org/10.1007/979-981-13-5847-0_2

Luong Hai Nguyen and Tsunemi Watanabe. (2017, March 9). The Impact of Project Organizational Culture on the Performance of Construction Projects. *Sustainability, MDPI*, pp. 1-21.

- Luqman Oyekunle Oyewobi, Abimbola Olukemi Windapo and Keith Stone Cattell. (2014). Competitiveness of construction organisations in South Africa. *Construction Research Congress 2014 ©ASCE 2014*, 2063-2073.
- Luqman Oyekunle Oyewobi, Abimbola Olukemi Windapo, and James O. B. Rotimi. (2016). Environment, competitive strategy, and organizational characteristics: A path analytic model of construction organizations' performance in South Africa. *Canadian Journal of Administrative Sciences*, 213–226 .
- Mahmood Mokhtariani, Mohammad Hassan Sebt, & Hamid Davoudpour. (2017). Characteristics of the Construction Industry from the Marketing Viewpoint: Challenges and Solutions . *Civil Engineering Journal*, 701-714.
- Makarfi, A. S. (2017). The contributions of Foreign Construction Companies towards capacity building of Indigenous Construction Companies in the Nigerian Construction Industry. *MSc Thesis, Project Management*. Johannesburg : <https://wiredspace.wite.ac.za>.
- Malte Brettel, Christoph Chomik, and Tessa Christina Flatten. (2015). How Organizational Culture Influences Innovativeness, Proactiveness, and Risk-Taking: Fostering Entrepreneurial Orientation in SMEs. *Journal of Small Business Management*, 868–885.
- Manal Suliman Omer, Nawi, M.N.M., A.Q. Adeleke, Sitansu Panda, Harun, A.N., and Anas A. Salameh. (2021). Analysis of Organizational Internal Factors Influencing Construction Risk Management among Construction Industries. *Productivity management*, pp. 106-128.
- Martina Kirchberger. (2020). The Construction Sector in Developing Countries. *The Construction Sector in Developing Countries : Some Key Issues In: Mining for Change: Natural Resources and Industry in Africa*. (J. P. Tarp, Ed.) United Nations University World Institute for Development Economics Research (UNU-WIDER).
- Mengesha, W. J. (2004 (Adapted by Tadesse A. et.al, 2016)). Performances for public construction projects in developing countries: federal road & educational building projects in Ethiopia. Performances for public construction projects in developing countries: federal road & educational building projects in Ethiopia. Trondheim: Norwegian University of Science and Technology, Faculty of Social Sciences and

Technology Management, Department of Industrial Economics and Technology Management.

Merriam Wester. (2024, 04 05). Retrieved from www.merriam-webster.com:
<http://www.merriam-webster.com>

Moazzam Azeem, Fahim Ullah, Muhammad J. Thaheem and Siddra Qayyum. (2020).
Competitiveness in the construction industry: A contractor's perspective on barriers to improving the construction industry performance. *Journal of Construction Engineering, Management & Innovation*, 193-219.

Moffat Tembo, Dr. Erastus Misheng'u Mwanauo, Dr. Charles Kahanji. (2023, February 14).
Impact of Globalization on Sustainable Implementation in the Construction Industry: Dynamics of Construction Tender-Price Volatility. *International Journal of Developing and Emerging Economies*, 11(2055-6098(Online)), 19-53.
doi:<https://doi.org/10.37745/ijdee.13/vol11n11953>

Mohammed Sultan Mohammed Al-Ali and Haslinda Musa. (2020). Competitive advantage toward construction project development in the United. *Religación. Revista de Ciencias Sociales y Humanidades*, 171-176.

Nasser Alnasser, Allan Osborne and Glenn Steel. (2013). ORGANIZATIONAL CULTURE, LEADERSHIP STYLE AND EFFECTIVENESS: A CASE STUDY OF MIDDLE EASTERN CONSTRUCTION CLIENTS. *Smith, S.D and AhiagaDagbui, D.D (Eds) Procs 29th Annual ARCOM Conference, 2-4 September 2013* (pp. 393-403.). UK: Association of Researchers in Construction Management.

Norudin Mansor, Zalinawati Abdullah, Muna Aimuni Zainal Abidin. (2014). Sustaining Competitive Advantages of Malaysian Construction Industry. *Journal of Applied Environmenta and Biological Sciences*, 61-71.

Norušis, M. (2006). *SPSS 14.0 Guide to Data Analysis*. NJ, USA: Prentice Hall Upper: Saddle River.

Nur Izzati Ab. Rani, Syuhaida Ismail, Zainai Mohamed, Afifuddin Husairi. (2018). Local Contractors' Awareness on Competitiveness towards. *Journal of Construction in Developing Countries*, 21-42.

Nurisra, Nurul Malahayati, and Mahmuddin. (2018). The main factor affecting the competitiveness of Contractor Company. *The 7th AIC-ICMR on Sciences and*

Engineering 2017 (pp. 1-6). Indonesia: IOP Publishing. doi:10.1088/1757-899X/352/1/012034

OECD, G. F. (2005). *REGULATING FOR COMPETITION AND GROWTH*. Paris: Organisation for Economic Co-operation and Development,.

Omopariola, Emmanuel DELE, Jacob Olusegun ILORI, & Abimbola WINDAPO. (2019). CHALLENGES FACING CONTRACTORS IN THE EXECUTION OF PUBLIC BUILDING PROJECTS AND THEIR IMPACT ON PERFORMANCE. *Journal of Construction Project Management and Innovation*, 105-120.

OROZCO. F., SERPELL. A., & MOLENAAR. K. (2011). Competitiveness factors and indexes for construction companies: findings of Chile. *Revista de la Construcción*, 91 - 107.

Oxford Economics. (2023, March 16). Retrieved from www.oxfordeconomics.com:
<https://www.oxfordeconomics.com>

Patrick Schober, MD, PhD, MMedStat, Christa Boer, PhD, MSc, and Lothar A. Schwarte, MD, PhD, MBA. (2018, August 29). Correlation Coefficients: Appropriate Use and Interpretation. *ANESTHESIA & ANALGESIA, Volume 126*, 1763-1768. doi: 10.1213/ANE.0000000000002864

Porter, P. M. (2001). *The Competitive Advantage of Nations*. Washington, D.C.: Harvard Business School.

Professor Klaus Schwab, Espen Barth Eide, Philipp Rösler, and Jennifer Blanke. (2014). *The Europe 2020 Competitiveness Report, Building a More Competitive Europe 2014 Edition*. Geneva: the World Economic Forum.

Reda Cherif, Sandesh Dhungana, Xiangming Fang, Jesus Gonzalez-Garcia,. (2020). IMF Working Paper, Competition, Competitiveness and Growth. *IMF Working Paper*. 2020 International Monetary Fund.

ResearchAndMarketing. (2023). Retrieved from <https://www.researchandmarkets.com>

ResearchAndMarketing. (2024). <https://www.researchandmarkets.com>. Retrieved from ResearchAndMarketing.com

Saheed Olanrewaju Yusuf, Ayooluwa Femi Aribisala, Abdulhaqq Onoruoyiza Muhammed, Jonathan Oluwapelumi Mobayo, Usman Belgore. (2022). Saheed Olanrewaju Yusuf*,

- Ayooluwa Femi Aribisala, Abdulhaqq Onoruoyiza Muhammed, Jonathan Oluwapelumi Mobayo, Usman Belgore. *International Journal of Real Estate S*, 11-22.
- Santos, A.; Reynaldo, J. Cronbach's Alpha. (2013). A Tool for Assessing the Reliability of Scales. *Journal of Extension*, 37,6-9.
- Solomon Esaiyas and Girmay Kahssay. (2020). Challenges Facing Local Contractors Working with Chinese Contractors in Addis Ababa Building Projects . *American Journal of Civil Engineering*, 87-96.
- Tadesse AYALEW. (2016). Assessment on Performance and Challenges of Ethiopian. *Journal of Architecture and Civil Engineering*, 01-11.
- Tefera, H. (2013). Management Control of Projects in Construction Industry Ethiopian Context. *Thesis*.
- TESFAYE, E. (2019). A COMPARATIVE STUDY OF CONSTRUCTION PROJECT MANAGEMENT SYSTEMS BY LOCAL AND FOREIGN CONTRACTORS. *THESIS, MASTER OF BUSINESS ADMINISTRATION ADDIS ABABA SCIENCE AND TECHNOLOGY UNIVERSITY*. Addis Ababa: <https://www.semanticscholar.org>.
- Thakur, H. K. (2021). CONDUCT OF RESEARCH (Major Steps and Precautions). In H. K. Thakur, *Research methodology in Social Sciences* (pp. 61-98). New Delh: Corvette Press.
- (n.d.). *The Africa Competitiveness Report 2017*.
- U.Sekaran, and R.Bougle. (2010). *Research Methods for Business: A Skill Building Approach. Fifth Edition*. UK: John Wiley and Sons Limited.
- UNCTAD. (2015). Retrieved 03 08, 2024, from UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT: <https://unctad.org>
- Ural, O. (2014). Uncovering Porter's Five Forces Framework's status in today's disruptive business context. *3rd IBM Bachelor Thesis Conference* (pp. 1-11). The Netherlands: University of Twente, Faculty of Management and Governance.
- USAID. (n.d.). Retrieved from . <https://urban-links.org/insight/ethiopias-rapid-urbanization-requires-innovative-municipal-finance/> . <https://urban-links.org/insight/ethiopias-rapid-urbanization-requires-innovative-municipal-finance/>

- Ville Matinaro and Yang Liu. (2016). Towards increased innovativeness and sustainability through organizational culture: A case study of a Finnish construction business. *Journal of Cleaner Production*, 1-23. doi:doi: 10.1016/j.jclepro.2016.10.151.
- Weng Marc Lim, Satish Kumar & Faizan Ali. (2022). Advancing knowledge through literature reviews: 'what', 'why', and 'how to contribute'. *The Service Industries Journal*, 1-35. doi:10.1080/02642069.2022.2047941
- Wikipedia*. (n.d.). Retrieved 03 09, 24, from <https://en.wikipedia.org>
- Worku Asratie Wubet, Michael Burrow and Gurmel Ghataora. (2023). Risks affecting the performance of Ethiopian domestic road construction contractors. *INTERNATIONAL JOURNAL OF CONSTRUCTION MANAGEMENT*, 639–647.
- Youjin Jang, Nahyun Kwon, Yonghan Ahn, Hyun-Soo Lee, A.M. ASCE, and Moonseo Park, A.M. ASCE. (2019). International Diversification and Performance of Construction Companies: Moderating Effect of Regional, Product, and Industry Diversifications. *Journal of Management in Engineering* 35(5). doi:10.1061/(ASCE)ME.1943-5479.0000713
- Zinabu Tebeje Zewdu, & Getachew Teka Aregaw. (2015). Causes of Contractor Cost Overrun in Construction Projects: The Case of Ethiopian Construction Sector. *International Journal of Business and Economics Research*, 180-191.

APPENDIX I

QUESTIONNAIRES FOR CONTRACTORS AND CONSULTANTS

Dear Respondents!

I am currently working a research in *Factors Affecting Competitiveness of Ethiopian Local construction Companies*, as a partial fulfilment for my EMBA (Executive Masters of Business Administration) studying at Addis Ababa University in Business and Economics Faculty.

The purpose of this questionnaire is to gather information from key actors in Ethiopian construction industry in competitiveness practices of the sector. The information you provided will be kept confidential and used to research on the existing construction challenges that hinder the competitiveness of local/indigenes construction company, thereby analysing the role of the impact of competitiveness in local construction sector and to recommend the appropriate scientific solutions for the accelerated development of competitions in global market of construction. However, all responses to this survey are completely confidential. Please, be assured that the information you provide in this study will have no effect in your business or in your private life.

Thank you very much for your time and cooperation, and looking forward to receiving your response.

Yours faithfully, Getachew Dinberu Tel: +251912013325 or +251966214308

E-mail: getu40minch@gmail.com

PART I: BACKGROUND INFORMATION OF RESPONDENTS.

1. “Annual construction demand (yearly order received).”

1--3 4-6 7-10 > 10

2. “Number of construction projects your organization worked/completed over the last five years.”

1--3 4-6 7-10 > 10

3. “Number of employees currently working at your company/organization.”

1-50

50-200

200-500

500 and more

4. “The average contract value of projects implemented per year”

ETB 100 - 500 million ETB 500 million - ETB 1 billion ETB 1 - 5

billion ETB 5 – 10 billion More than 10 billion

PART II FACTORS AFFECTING LONCAL CONSTRUCTION INDUSTRY

Kindly rank the level of factors that affect local/indigenous construction companies' competitiveness in Ethiopia. Please, Tick in the box to indicate the level of determines.

Level or Rank of Significance.

1=Not Significance (NS).

4= Strongly Significance (SS)

2= Less Significance (LS).

5=Extremely Significance (ES)

3=Moderately Significance (MS)

Table 13:Table of Questionnaires

Cods	FACTORS	RANKS/Levels				
		1 NS	2 LS	3 MS	4 SS	5 ES
SECTION A						
Performance of Organization						
A1	“Size of the organization (measured in terms of turnover, market share, number of employees, etc.)”					
A2	“Productivity of employees (value added per employee)”					
A3	“Good track record of timely completion of the projects (number of projects completed in time)”					
A4	“Health and safety consciousness (number of accidents/100,000/ year and worker’s fatality/100,000 workers)”					
A5	“Customer satisfaction in					

	terms of product and services (measured as rating provided by the customers after project completion)”					
A6	“Cost performance of projects (number of projects completed within the tender cost)”					
A7	“Impact on society (measured in terms of low noise pollution, less disturbance to the occupants in nearby area due to vehicle movement, etc.)”					
A8	“Impact on environment (measured in terms of use of low natural resources, low production of waste, preservation of plants and trees, etc.)”					
A9	“Optimum liquidity ratio (measured in terms of current ratio = current asset/current liability)”					
A10	“Higher profitability ratio (measured in terms of gross profit margin, return on assets, return on equity, return on invested capital)”					
A11	“Higher annual growth rate of the organization (measured in terms of sales growth percentage, earning					

	per share growth percentage, P/E ratio)”					
A12	“Predictability of cost in design and construction (percentage on target)”					
A13	“Rework/defect rectification (number of man hours and material used for repairing work as a percentage of total man hours for the entire project and total contract amount”					
A14	“Higher wages of the employees”					
A15	“Good relationship with client (in terms of repeat business, low dispute, and litigation, timely payment, etc.)”					
A16	“Accuracy/ Precision/ Meticulous/detail in work”					
A17	“Company’s reputation/track record in completing the project on time with good quality and fair pricing”					
A18	“Emphasis on quality”					
If others please specify.....						
SECTION B						
ORGANIZATIONS EXTERNAL FACTORS						
Market in the home country or in the host/out-side home country						
B1	“Local competition”					
B2	“Foreign competition”					

B3	“Market size”					
B4	“Market growth”					
B5	“Level of agglomeration”					
Links between origin/home country and host country						
B6	“Commercial links”					
B7	“Geographical distance”					
B8	“Air connection”					
Political environment						
B9	“Political risk”					
B10	“Corruption”					
B11	“Citizen insecurity”					
B12	“Local protectionism”					
Economic environment						
B13	“Economic stability /Country’s economic conditions”					
B14	“Financial risk”					
B15	“Currency fluctuations”					
B16	“Payment delays”					
B17	“Capital requirement”					
Socio-cultural environment						
B18	“Cultural differences”					
B19	“Language differences”					
B20	“Social risk”					
B21	“Religious beliefs”					
B22	“Interest in the project”					
Legal environment						
B23	“Institutional differences”					
B24	“Legal risk”					
Availability of resources						
B25	“Lack of availability of resources”					

B26	“Local labour conditions”					
B27	“Existence of infrastructures”					
If others, please specify.....						
SECTION C						
Organizational Internal Culture						
C1	“Highly organized”					
C2	“Having a clear guiding philosophy”					
C3	“Hierarchical”					
C4	“Rule oriented”					
C5	“Management respect for subordinate”					
C6	“Competitive strategy used by the organization”					
C7	“Adopting learning and growth culture in the organization (measured in terms of amount spent for learning and growth as a percentage of total turnover of the company)”					
C8	“Opportunity for professional growth”					
C9	“Achievement / Action oriented. Effective risk management capability in the organization”					
C10	“Utilize available opportunity”					
C11	“Innovative/Research and Development”					

C12	“Fairness”					
C13	“Low staff turnover (percentage of employees leaving the organization)”					
C14	“Collaboration”					
C15	“People oriented”					
C16	“Being reflective”					
C17	“Being distinctive”					
C18	“Teamwork/Team spirit / Aggressive for task / Enthusiasm for the job”					
C19	“Clear lines of responsibility and authority”					
C20	“Being socially responsible”					
C21	“Mutual responsibility”					
C22	“Taking individual responsibility”					
C23	“Sharing information freely”					
C24	“Job security”					
C25	“Stable in operation”					
C26	“Low conflict”					
C27	“Enabling working environment”					

Appendix II

Secondary Data Sources

1. Growth and Transformation Plan I (GTP I) and (GTP II)

The plan was implemented from 2010 to 2019 which a ten years plan. The GTP I and was applied from 2010 to 2014 and GTP II was acted from 2015 to 2019.

2. The years “The Development Plan” (2020-2029/30).

The plan had given due attention to construction industry like as the previous plans. The objective the plan was to make the local construction industry competitive in national and international level. In other words, assure competitiveness of local construction industry 75% locally and 25% regional and continental level. Some of the major steps taken after the plan were:

- Researches on ICB (International Competitive Bidding). The research was done by Addis Ababa University, Ethiopian Institute of Architectural, Building Construction and City Development (EiABC) The client was Ethiopian Construction Works Regulatory Authority (ECWA), now Ethiopian Construction Authority (ECA). The major objectives of the research were how the local construction company increase their competitiveness power, Capture Best Practices & Experiences, Analyse Legal Gaps & Impacts, and Develop a legal framework and implementation guideline.