

T.C

ISTANBUL COMMERCE UNIVERSITY

GRADUATE SCHOOL OF FOREIGN TRADE

MASTER OF INTERNATIONAL TRADE

**EVALUATION OF THE COMPETITIVENESS OF SUB-SAHARAN COUNTRIES
WITH PORTER'S DIAMOND MODEL AND INVESTIGATION OF THE IMPACT
OF CHINESE INVESTMENTS ON GLOBAL COMPETITIVENESS**

MA Thesis

Imam Hissein Alio

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ABSTRACT

The main objective of this dissertation is to evaluate the competitiveness of Sub-Saharan African countries, specifically Chad, Ethiopia, and Ghana by applying Porter's Diamond Model (1990) and to investigate the impact of Chinese investments on global competitiveness. Using Porter's model (1990) as a framework, the thesis employs a qualitative technique based on both in-depth semi-structured interviews as primary data, and uses secondary sources including books, and articles. Thus, this study is the first attempt to address this issue.

The survey results and later in-depth interviews in this study show that Ghana has the most competitive advantage in all Diamond model components, from firm strategy, structure, and rivalry to government factors. Ethiopia, the second most competitive country, has competitive potential in all model components except demand conditions and government factors. Chad, however, is the least competitive country, lacking a competitive advantage in every element of the model, from firm strategy, structure, and rivalry to government factors. China, on the other hand, as a strong competitor, uses various strategies to beat local rivals in Chad, Ethiopia, and Ghana. In this regard, it offers a wide range of products of average quality at affordable prices to customers in Chad and Ethiopia, while benefiting from large-scale production, economies of scale, and tax breaks in Ghana. With this, local investors are unable to compete with China, which negatively impact the local markets to flourish, especially in the long run.

Key Words: *China, Sub-Saharan Africa, Investment, Competitiveness, Global Competitiveness, Porter's Diamond model.*

ÖZET

Bu tezin temel amacı, Porter'ın Elmas Modelini (1990) uygulayarak Sahra Altı Afrika ülkelerinin, özellikle Çad, Etiyopya ve Gana'nın rekabet edebilirliğini değerlendirmek ve Çin yatırımlarının küresel rekabet gücü üzerindeki etkisini araştırmaktır. Elmas Modelini (1990) bir çerçeve olarak kullanan tez, birincil veri olarak derinlemesine yarı yapılandırılmış görüşmelere dayalı nitel bir teknik kullanmasının yanında kitaplar, makaleler ve akademik dergiler gibi ikincil kaynaklardan da yararlanmaktadır. Bu açıdan, bu çalışma, Sahra Altı Afrika'daki, özellikle Çad, Etiyopya ve Gana'daki Çin yatırımları bağlamında modelin geçerliliğini test etmeye yönelik ilk girişimdir.

Bu çalışmadaki anket ve yarı yapılandırılmış görüşme sonuçlarına göre Gana, firma stratejisi, yapısı ve rekabetten devlet faktörüne kadar Elmas modelinin bileşenlerinde en fazla rekabet avantajına sahip ülkedir. En rekabetçi ikinci ülke olan Etiyopya, talep koşulları ve devlet faktörleri dışındaki tüm model bileşenlerinde rekabet potansiyeline sahiptir. Çad ise en az rekabetçi ülke olarak, modelin firma stratejisi, yapısı ve rekabetinden hükümet faktörüne kadar her unsurunda rekabet avantajından yoksundur. Öte yandan yerel pazarlarda güçlü bir rakip olarak Çin, Çad, Etiyopya ve Gana'daki yerel rakiplerini yenmek için çeşitli stratejiler kullanmaktadır. Bu bağlamda Çad ve Etiyopya'daki müşterilerine makul fiyatlarla geniş ve ortalama kalitede ürün yelpazesi sunarken, Gana'da büyük ölçekli üretim, ölçek ekonomileri ve vergi muafiyetlerinden yararlanmaktadır. Sonuç olarak, yerel yatırımcılar, Çin ile rekabet edememekte ve bu da yerel pazarların uzun vadeli büyüme kapasitesini olumsuz etkilemektedir.

Anahtar Kelimeler: *Çin, Sahra Altı Afrika, Yatırım, Rekabetçilik, Küresel Rekabetçilik, Porter'ın Elmas modeli.*

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LIST OF ABBREVIATIONS

BIT.....	Bilateral Investment Treaties
CAD.....	China-Africa Development Fund
CEMAC.....	Central African Economic and Monetary Union
CFA.....	Financial Cooperation in Central Africa
DRC.....	Democratic Republic of the Congo
EIB.....	European Investment Bank
FDI.....	Foreign Direct investment
FOCAC.....	Forum on China-Africa Cooperation
GCI.....	Global Competitiveness Index
GCI.....	Global Competitiveness Index
GDP.....	Gross domestic product
GVA.....	Gross Value Added
HATC.....	Hôpital de l'Amitié Tchad-Chine
ICT.....	Information and Communications Technology
IFR.....	Infrastructure-for-Resources
IMF.....	International Monetary Fund
MOFCOM.....	Ministry of Commerce of the People's Republic of China
NRI.....	Network Readiness Index
OECD.....	Organisation for Economic Co-operation and Development
PEST.....	Political, Economic, Social, and Technological
PRC.....	People's Republic of China
R& D.....	Research and Development
RFI.....	Resources-for-infrastructure
SCP.....	Structure-Conduct-Performance
SME.....	Small and Medium-sized Enterprises
SOE.....	State-owned firms
SSA.....	Sub-Saharan Africa
SSC.....	South-South cooperation
UNCTAD.....	United Nations Conference on Trade and Development
UNICEF.....	United Nations International Children's Emergency Fund
WB.....	World Bank
WEF.....	World Economic Forum
WTO.....	World Trade Organization

CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

The relationship between investment and competitiveness has received increased attention across a number of disciplines in recent years. In this context, factors such as Foreign Direct investment (FDI), trade and labour productivity have been cited as major determinants of competitiveness in both efficiency-driven and innovation-driven countries (Rusu & Roman, 2018). Yet the quick expansion of globalisation and liberalisation; and the rapid advances in technology have created more complexity in identifying determinants of competitiveness (UNCTAD, 2009; p. 4). As a result, identifying factors that affect competitiveness has become a critical strategy for companies, sectors, and countries to not only survive but also expand.

With globalisation and liberalisation, the world has also become more interdependent and so international markets have been made accessible for both developing and developed countries (UNCTAD, 2009; p. 1). Recent reports from the World Bank show that there has been steady and broadly constant increase in the international exchange of goods and services since the last few decades. For instance, the percentage of trade in the world GDP was equal to 27%; this figure reached 59% by 2018 (World Bank, 2020). In an attempt to boost international trade through global economic integration, and so gain more from global trade (by improving the living standards of the countries), many trade barriers were removed and free trade agreements were introduced. However, this globalisation trend is criticised by some for causing more internal inequality in some Western economies and even decreasing living standards of low-income households' countries in some cases. As such, many political backlashes calling against globalisation came out, this stance; however, gained ground after the global financial crisis of 2008, where tangible effects of such anti-globalization policies on international trade were witnessed in many parts of the world. In this context, many populist leaders who emphasise on Economic nationalism and deny the benefits of global trade have elected in several countries. As a result, policies such as tariffs have been increased, and a global trade recession has emerged, which all affected the global GDP (Brown, 2018). As noted, the rise of Economic nationalism is one the trends witnessed for some time and was reinforced following the financial crisis of 2008. Economic nationalism, also called Economic populism and Economic patriotism is an ideology, which has a negative view on global economic integration, including international trade and investments. In this regard, it advocates for State interventionism over other market systems as if to protect the national economy, even if this requires imposing tariffs and other restrictive business practises such as quotas and so on (Al-Ubaydli, 2020).

As a developing country, China has engaged with Africa in the last six decades. It especially cooperated with resource-rich African countries such as Angola, Nigeria, Gabon, the Democratic Republic of the Congo, and Kenya. This collaboration has enabled China to not only meet its demand for natural resources such as gas, oil, minerals, and forests, but also to expand into new markets, while Africa appears to benefit from Chinese infrastructure development projects, FDI, and trade (Bbaala, 2015). When viewed from this aspect, the partnership not only meets China's demand for natural resources, but it also opens up new markets for its goods and services. In addition, availability of resources, well-structured institutions, and market potential of the host country are among the main factors affecting China's FDI to Africa (Abdullahi, 2020).¹

1.2. Problem of the Study

There are a large number of published studies (e.g., Dube, 2009; Lipsey, 2006; Niu, 2019) which emphasises on the positive spill-over effects of Foreign direct investment on the economic growth of the host countries, particularly developing countries. These studies' findings suggest that Foreign direct investment (FDI) does not only provide capital for domestic investment, but also creates employment opportunities for developing countries, including Sub-Saharan Africa. FDI also paves the way for the transfer of both managerial skills and technology. It also accelerates infrastructure development process and brings wealth to the recipient countries. With the aim of attracting inward Foreign direct investment (FDI), many Sub-Sahara African countries have been using various forms of subsidies including but not restricted to tax exemption, legal arrangement, ideologically and politically motivated privatisations and even providing direct financial support to multinational companies which use FDI as a tool to expand internationally (Makuei, 2019).

Studies over the past two decades have provided important information on the Sino-African relation. It is now well established from a variety of studies that the bilateral cooperation between China and Africa is on the rise (Ewelukwa Ofodile, 2008). As the Chinese Ministry of Commerce reported, China's last FDI in Africa has increased by 46 percent every year within the last decade. Similarly, the amount of Chinese foreign investment rose from \$56 million in 1996 to \$4.46 billion by 2007. In similar fashion, in 2009, the percentage of foreign investment provided by China has increased to 81%, compared to \$56 million in 1996. Yet, works such as that conducted by Ying (2018) have shown that China had provided loans totalling more than US\$10 billion to Africa in less than a year since Xi Jinping was elected as a President, accounting for roughly half of the entire loan of \$20 billion

¹ Abdullahi, H. (2020). *The Assessment of Chinese Commercial Diplomacy and Investment in Africa: Nigeria Case Study*. (Unpublished master's thesis). Istanbul Commerce University. Istanbul. Türkiye.

promised by China to Africa between 2013 and 2015 (Ying, 2018, p. 35).² Chinese FDI in Africa has clearly increased over the preceding decade, with investment directed specifically at Africa following the 2015 FOCAC high point, when China contributed \$60 billion to the continent. Geographically, those investments have been accumulated in oil-rich nations such as Nigeria and Angola, as well as in energy and transportation sectors. In light of all that has been said thus far, one can say that the bilateral cooperation between China and Africa has shown an increasing trend over the recent years. FDI on the other hand has been one of the pillars of the development strategies for the continent (Bbaala, 2015).

In parallel with these developments, the subject of Chinese investment in Sub-Saharan Africa has received scant attention in the research literature. Although studies have recognised both negative and positive impacts of Chinese investment in Sub-Saharan Africa, research has yet to systematically investigate the competitiveness of Sub-Saharan African countries, specifically Chad, Ethiopia, and Ghana, using Porter's Diamond Model (1990), and assess the impact of Chinese investments on those countries' global competitiveness. In other words, several studies have been conducted on the Chinese investment in Sub-Saharan Africa including Abdullahi (2020); Bbaala (2015); Niu (2019) and Breivik (2014) however, specifically, no work has been done to evaluate both the competitiveness of Chad, Ethiopia, and Ghana by applying Porter's Diamond Model (1990) and investigate the impact of Chinese investments on global competitiveness on those countries, at least to the best of this researcher's knowledge. Consequently, this work aims to collect data that will help in filling these gaps.

1.3. Research Objectives

The primary goal of this dissertation is to critically unravel some of the mysteries surrounding the competitiveness of Sub-Saharan African countries, specifically Chad, Ethiopia, and Ghana, using Porter's Diamond Model (1990), as well as to investigate the impact of Chinese investments on global competitiveness. Therefore, this study will highlight each factor within Porter's Diamond Framework which include factor conditions; demand conditions; firm strategy, structure, and rivalry; related and supporting industries; and the two subsequent factors, the role of government and chance. The study will also look at the impact of Chinese investments on global competitiveness, with a particular emphasis on the Sub-Saharan African countries of Chad, Ethiopia, and Ghana. Specifically, the following issues will be addressed:

²Ying, Z. (2018). China's Diplomacy in Africa: Ideas and Practices. *China International Studies*, 28 (1), 28-46.

- (i) The competitiveness of Sub-Saharan African countries, specifically Chad, Ethiopia, and Ghana by applying Porter's Diamond Model (1990).
- (ii) The impact of Chinese investments on the global competitiveness, specifically Chad, Ethiopia, and Ghana.

1.4. Research Questions

To operationalize the above-mentioned objectives, the study sought to answer the following specific research questions:

- (i) How can the Porter's diamond model be applied to evaluate the competitiveness of Sub-Saharan African countries of Chad, Ethiopia, and Ghana?
- (ii) How do Chinese investments affect global competitiveness in general, and Chad, Ethiopia, and Ghana in particular?
- (iii) What intervention measures should be taken to enhance competitiveness of Sub-Saharan Africa within the context of Chinese investment?

1.5. Methodology

This study uses a deductive approach to evaluate competitiveness of Sub-Saharan African countries, specifically Chad, Ethiopia, and Ghana, using Porter's Diamond Model (1990) and investigate the impact of Chinese investments on global competitiveness. As the existing literature on research methodology suggests, the selected approach is the best research methodology for testing the existing theories, including Porter's Competitive Advantage of Nations theory (Arlbjorn & Halldorsson, 2002; Yin, 2003). The Deductive approach is concerned with testing theories by identifying variables and collecting data which utterly confirm or refute the existing theory. This being the case, the present study sets out to critically test Porter's framework by using predetermined variables and so draws together the various strands of the thesis. Another reason why choosing this method is the complex nature of the Chinese African relation, particularly Chinese investments. As most experts such as Brautigam (2009) also points out, the Chinese- African relationship in general and the investments and projects carried out by China in particular, are very complex and ambiguous areas in the field. Therefore, using deductive, qualitative research methods can help better understanding of the subject as well as explaining it. Qualitative research techniques can also aid in reaching and forming accurate conclusions about the issue, especially when taking into consideration the debate mode that surrounds the subject as described above. It must be born in mind that the present study is of great significance as it marks the first attempt to test the validity of this model (Porter's Competitive Advantage of Nations theory) within the context of Chinese investment in Sub-Saharan Africa, particularly Chad, Ethiopia, and Ghana. Therefore, the study emphasises each of the factors in Porter's Diamond

Framework, which include factor conditions; demand conditions; firm strategy, structure, and rivalry; related and supporting industries; and the two subsequent factors, the role of government and chance (Porter, 1990).

1.6. Method of Data Collection

Going deeper into the thesis, this work uses semi structured interviews as a main data collection instrument, where in-depth interviews were conducted with professionals and experts of the field. The reason why this instrument was selected is that it is the most appropriate method for this study, especially when it comes to providing better understanding of the subject under study. As it allows collecting the required data to determine factors of Chinese investment affecting competitiveness in Sub-Saharan Africa using Porter's Model and as a semi structured; it also provides enough space for flexibility, clarification, and discussion, where the interviewees can share their opinions, attitudes, and strategies in an unrestricted manner (Topolansky Barbe, 2008). On that note, managers, professionals, chief executives, and key-decision makers who have sufficient knowledge and experience in the field were interviewed. To put it more explicitly, the interviewees were aware of the Chinese investment in Sub-Saharan Africa, especially Chad, Ethiopia, and Ghana and so they were deliberately selected from these countries which included in this work. This was important especially when it comes to obtaining the right information from the right sources. Furthermore, the questionnaire designed for the research considers both Chinese investment and Porter's (1990) theoretical framework and is composed of two parts which include open ended questions and closed-ended questions respectively. Following the broad questions asked at the start of the interview, participants were asked more specific questions to test all aspects of Porter's "Diamond" theory. According to the literature, such a structure helps prevent misleading comments during the interviews (Robson, 2002). The researcher prepared the questionnaire in English and then translated it into Turkish and Arabic. Appendix 1 (English version) and appendix 2 (Turkish version) and appendix 3 (Arabic version) each contain a copy of the interview plan.

In addition to the primary data driven from the in-depth semi structured interviews, the research will also utilise secondary sources including but not limited to books, articles, academic journals; and benefits from works provided by experts such as Deborah Bräutigam & Justin Yifu Lin, among others. Moreover, it will make use of data collected from various institutions such as the World Bank, International Monetary Fund (IMF), and so forth. The reason why secondary sources are preferred in this work is that they simply save time and money, especially when considering the case of China and Africa. Considering the complexity of the subject however, secondary sources can provide important background data that is usually difficult to reach through primary sources. In this regard, they will not

only help to know what is going on the field and so avoiding repetition but also offer chance to explore new angles in the study area and so show an alternative view (Reddy & Agrawal, 2012), as is the case with this research which marks the first attempt to assess the competitiveness of Sub-Saharan African countries, specifically Chad, Ethiopia, and Ghana by applying Porter's Diamond Model (1990) as well as investigating the impact of Chinese investments on global competitiveness.

1.7. Research Hypothesis

As stated previously, the purpose of this study is to shine new light on the competitiveness of Sub-Saharan African countries, focusing on Chad, Ethiopia, and Ghana by applying Porter's Diamond model (1990) and investigate the effects of Chinese investments on global competitiveness. Therefore, it is hypothesised that China's investment in Sub-Saharan Africa has positive impacts on the global competitiveness of the region, Chad, Ethiopia, and Ghana in particular. The study also assumes that Porter's Competitive Advantage of Nations theory (1990) is appropriate for examining the competitive advantage of the above-mentioned countries within the context of Chinese investment. Because the study approaches the subject through the lenses of Porter's Competitive Advantage of Nations theory (1990), the hypotheses are formed based on Porter's six factor Diamond Model. Previous works such as that conducted by Aistleitner (2016); Alemu (2010) and Fathi & Ahmadian (2016) have also used similar hypotheses. Therefore, the specific hypotheses which drive the research are as followed:

H1: Firms' strategic structure and rivalry is one of the most important elements of Porter's Diamond Model which positively contributes to competitiveness in sub-Saharan African countries.

H2: Demand conditions is one of the most important elements of Porter's Diamond Model which positively contributes to competitiveness in sub-Saharan African countries.

H3: Related and supporting industries is one of the most important elements of Porter's Diamond Model which positively contributes to competitiveness in sub-Saharan African countries.

H4: Factor conditions is one of the most important elements of Porter's Diamond Model which positively contributes to competitiveness in sub-Saharan African countries.

H5: Chance is one of the most important elements of Porter's Diamond Model which positively contributes to competitiveness in sub-Saharan African countries.

H6: Government is one of the most important elements of Porter's Diamond Model which positively contributes to competitiveness in sub-Saharan African countries.

1.8. Scope and Limitation of the Study

The reader should bear in mind that this dissertation is designed to investigate the competitiveness of Sub-Saharan African nations, focusing on Chad, Ethiopia, and Ghana, using Porter's Diamond model

(1990), and examine the effects of Chinese investments on global competitiveness. Even though the Sub-Saharan Africa region includes as many as forty-six countries, the study mainly focuses on Chad, Ethiopia, and Ghana. Secondly, the study sets out to assess the competitive level of these countries within the context of Chinese investment by using Porter's Diamond Model as framework; therefore, a full discussion of the overall economic performance of these countries lies beyond the scope of this study. It is also beyond the scope of this study to examine the quantitative factors of competitiveness. The study is based on the Porter's (1990) Diamond Model which only includes qualitative factors. Consequently, a qualitative research method is used in this investigation.

Further to that, the present study was subject to several weaknesses. The most important limitation lies in the fact that the researcher faced with several problem regarding collecting the related data, particularly primary data, where some firms and experts selected from the related countries were not able share well-structured information concerning the Chinese investment and its impacts on the national competitiveness in their respective countries and some interview respondents were not fully able to respond to the questions that especially related to Porter's (1990) Diamond Model. These problems mainly originated from time and finance constraints which restrained the researcher from conducting the interviews in some of the selected countries especially, Ethiopia, and Ghana. Another important reason for the above-stated problems is the lack of related works that specially investigate the impacts of Chinese investment on the global competitiveness of Sub-Saharan Africa by applying Porter's Diamond Model. In this respect, this thesis is the first study to undertake a longitudinal analysis of the subject. What is more, the present study was subject to several potential methodological weaknesses. As noted by Topolansky Barbe (2008), the difficulties in interviewing key decision makers, non-response bias, lack of representativeness, data validity, and the interviewer's personal bias are the main downsides connected with using this research technique. Because of these limitations, study findings must be treated with some caution.

1.9. Outline of the Study

The overall structure of the study takes the form of four chapters. Chapter 1 considers both the sources and methods of study which will include Background of the Study, Problem of the Study, Research Objectives, Research Questions, Methodology, Method of Data Collection, Research Hypothesis, Scope and Limitation of the Study, Outline of the Study as well as Significance of the Study. Chapter 2 begins by outlining the theoretical aspects of the study and looks at the related literature which contains Competitiveness: Concepts and Measures, Porter's Theory of National Competitive Advantage, Relationship Between Investment and Competitiveness, Overview of Chinese Investments in Sub-Saharan Africa, particularly Chad, Ethiopia, and Ghana. Chapter 3 analyses the

data gathered including the results of the survey and in-depth interviews and addresses each of the research questions in turn. In this regard the chapter introduces Chad's Competitiveness Analysis through PEST, Ethiopia's Competitiveness Analysis through PEST, Ghana's Competitiveness Analysis through PEST, Comparison of the Countries' Competitiveness through PEST Analysis, Findings from Survey: Competitiveness in the Context of Porter's Model, Comparison of the Countries' Competitiveness through Porter's Model as well as Findings from Interviews: Impact of Chinese Investments on Global Competitiveness. Chapter 4 summarises the main findings and discussions of this project and provides some recommendations which urge specific actions to be taken for future policy, practice, and research. In this regard it introduces conclusions, implications as well as recommendations.

1.10. Significance of the Study

As it has been mentioned earlier, although extensive research has been carried out on Chinese investment in Africa in general, no single study exists which investigate the competitiveness of Sub-Saharan Africa (especially Chad, Ethiopia, and Ghana) through the lenses of Porter's Competitive Advantage of Nations theory (1990) and analyse the effects of Chinese investments on the global competitiveness. This study will therefore seek to obtain data which will help to address these research gaps. Consequently, the work will be a useful source for academicians and researchers who want to conduct future research in the field. In addition to its academic contribution, this study will also provide valuable insights that can help governments, investors and policy making institutions in taking the right steps while developing policies. Moreover, recent studies from the literature suggest that the bilateral cooperation between China and the Africa is on the rise (Ewelukwa Ofodile, 2008) which makes the study of this topic unavoidable for both Africa and China. Especially that the topic is not given much importance by many Africans, and so most of the literature is written and published by Western or Chinese academics. Whereas African academicians are supposed to bring out genuine, distinctive, and original studies in the field, simply because this is their topic or even their issue in a sense, which affects not only the overall economic performance of their countries but also directly influences the well-being of the whole communities. This is all to say that the effect of this topic is not only restricted to academia but also extends to the daily life of every citizen, regardless of their socio-economic statue in the respective countries. Therefore, approaching the subject from both the Western and the Eastern perspectives and more importantly presenting an authentic African stance will be a great contribution to the literature as whole. This being the case, the present study will therefore provide a valuable contribution to the literature in this area.

CHAPTER TWO: REVIEW OF LITERATURE

2.1 Introduction

The section will first discuss the concept of competitiveness and why it is important in economics. While the methods for measuring competition based on Porter's Diamond Model will be discussed in the second half of the first section where the four main determinants of competitiveness of Porter's Diamond model (factor condition, demand condition, related and supporting industries, and structure and rivalry) will be put under the scope. Porter's model also includes two additional determinants such as government and chance which will be examined at the conclusion of this chapter.

As is known, Competitiveness is one of the most essential factors of both economic and technological development. It has become a crucial issue in the field of economics due to its driving force of the capital system. Yet according to the classical theory, Competitiveness increases the level of production between firms and labourers. For this and similar reasons, Competitiveness has been studied many years and nowadays has turned into an honourable subject in economy (Semizoğlu, 2019).

2.2 Competitiveness: Concepts and Measures

Competitiveness refers to the ability to add more value to services or products than competitors, which means that in order to compete, one must be more successful or better than others who are also attempting to do the same. To be competitive, one needs to create an environment in which an organization must outperform others in terms of goods or services. Therefore, a company or organisation must be competitive by producing superior quality goods or services at a lower cost than its domestic and international rivals. According to Arun (2018, as cited in Pearcy, 2018, p. 1) "Competition is always a good thing. It forces us to do our best. A monopoly renders people complacent and satisfied with mediocrity". World Economic Forum (WEF) defines Competitiveness as "the set of institutions, policies, and factors that determine the level of productivity of a country" (Cann, 2016). Based on the view of La Falce, De Muylder, & Santos (2020) on the concept, competitiveness is the capability of a nation to sustain and extend its markets. However, the most common way to understand the meaning of competitiveness has been defined by Clark & Guy (1998) as a firm's ability to enhance its shape, market, and profitability. Organisation for Economic Co-operation and Development (OECD) refers to firm competitiveness as the "capacity of firms to compete, to increase their profits and to grow. It is based on costs and prices, but more vitally on the capacity of the firms to use technology and quality and performance of the products" (OECD, 1992, as cited in Wignaraja, 2003, p. 22). According to Okereafor, Ogunbangbe, & Anyanwu (2015, as cited in Porter, 1986) the sole understandable way of defining competitiveness at the typical level is

productivity which stress that the growth of productivity that is related with national competitiveness strategy. Porter also averred that the development or growth of any economy is calculated by its efficiency to nourish competitiveness, produce, keep, and tempt economic activities which make sure enrichment.

2.3 Porter's Theory of National Competitive Advantage

Michael Porter who is a professor at the Harvard Business School and well known to the world due to his deep research on competition. Putting an emphasis on competition, Arslan & Tatlidil (2012) stated that the strength of competition can be prescribed as the capability to compete with rivals and so acquire competitive advantage. In 1990, Michael Porter established the theory of national competitive advantage of industries in his Diamond model where he tried to explain why some firms in certain countries are internationally competitive and why the others are not (Vidjak, 2019). In the Diamond framework, Porter has included four main determinants of national advantage which are factor conditions, demand conditions, related and supporting industries, firm strategy, structure, and rivalry. There are also two additional determinants such as the role of government and the role of chance which are also included in the model (Bashiri, Baziyar, Balakshahi, & Mojib, 2013).

2.3.1 Factor of Conditions

The first determinant of national competitive advantage in the Diamond model is factor condition, which consists of production factors, human resources, physical resources, knowledge resources, capital and infrastructure are the indispensable parts of this factor. These factors are crucial for competing in any industry, yet different industries in different parts of the world may have varied qualities and quantities of these factors (Porter, 1990).

There is also classification between the factors. They can be divided into two parts. The first section has been divided between basic and advanced factors. Basic factors belong to natural resources, climate, location, unskilled or semi-skilled labour and debt capital. Modern infrastructure in terms of digital data communication, adroit labour, and academic research institutes are the example of an advance factor. Basic factors are quite different from advanced factors. Basic factors are inherited by the country and require a small portion of effort to produce them where advance factors are not naturally inherited as basic factors. These factors are developed through a lengthy process of human and capital investment. The second portion of this factor has been classified between two parts. Generalised and specialised factors. Generalised factors are available to use by many industries such as highway systems where specialised factors are used by a limited number or a single industry. Narrowly skilled labourers are the example of this factor who are useful to a particular type of

industry. Specialised factors provide more benefits compared to generalised factors. However, these specialised factors demand an appropriate level of general factor to build on (Konsolas, 1999).

2.3.2 Demand Conditions

The second crucial determinant of national competitive advantage in the Diamond model is demand conditions. In this determinant, Porter (1990) asserted that domestic demand is the most subtle matter to improve competitive advantage because the embodiment of any product is enormously affected by necessity and nature of the domestic demand. Porter also stated in his model that educated and enlightened people play a significant role in the development of products by creating pressure on domestic firms to improve their products (Andersson & Odlander, 2014). In his article regarding the Diamond model, Porter has argued that firm competitiveness can be earned from sophisticated demand of customers, meaning that sophistication plays a great role in firm's competitiveness rather than market size or market potential (Porter, 1990).

2.3.3 Related and Supporting Industries

To sustain competitiveness in the industries, Porter (1990) has introduced the third factor to his Diamond model which is related to supporting industries and their proper appearance provides a national advantage to a given industry. Porter argued in his model that domestic firms which have already acquired international competitive advantage can offer to national level firms high quality machinery or inputs such as materials, parts etc. This is how an international level firm can give a competitive advantage to downstream firms. After having these statements, Porter also averred that the availability of inputs or materials are not sufficient to gain competitive advantage. To gain perfect competitive advantage, firms must utilise their available materials or input properly rather than having just availability and this is how firms can gain competitive advantage over rivals. Having strong home-based suppliers, downstream industries can be benefited in various ways, for instance suppliers' industry can give permission to domestic firms to have access to important information and new technology. Working together with each other can help them to benefit from each other's research and solving problems faster. Porter has also argued that in terms of communication, home-based suppliers bring more advantage to downstream domestic industries due to geographical location, same cultural values etc. which also assist them to reduce transportation costs (Aistleitner, 2016).

2.3.4 Firm Strategy, Structure, and Rivalry

The fourth and the last determinant among the main four factors of Porter's Diamond model is firms' strategy, structure, and rivalry. For firms' strategy and structure, there are some aspects such as management practises, shape of organisation, strong desire to compete internationally, and the

company's mission or goals, which must be in a proper manner to acquire competitive advantage (Mitschke, 2008). Porter (1990) stressed that the way organisations are formed and conducted is influenced by state conditions such as the educational system, historical trend etc. Porter also stated that a domestic firm's success depends on its demanding nature if it matches the state's governing organisational structure. The trend of domestic rivalry is also regarded as one of the key qualities which form or bring competitive advantage because firms which are in a domestic competition, force each other to improve, develop and innovate as home competition is more discernible compared to foreign firms (Konsolas, 1999). As previously stated, two additional determinants of Porter's model which are the role of government and the role of chance, are discussed further below.

2.3.5 Role of Chance

Porter did not write anything regarding the role of chance or luck in his paper, but it has been included in his Diamond model as a probability that any war or natural disaster can negatively affect a country or an industry (Bruin, 2018). According to Astarlioğlu (2012), the role of chance or luck refers to a situation which is not at the hand of a firm's control such as invention, oil shocks, war, political impact, a major shift in foreign market demand and so forth.

2.3.6 Role of Government

The fifth determinant of Porter's Diamond Model is the role of government. Government plays an important role in affecting competitiveness as well as to bring competitive advantage to all firms at the national level. The role of the government to bring national advantage to domestic firms can be seen by examining how all policies which are imposed by the government influences each of the determinants (McRee, 2002). There are many ways determinants can be affected by government policies such as antitrust policies that influence domestic rivalry, regulation can change home condition, investment which can alter the factor of condition. Sometimes any purchases from the government can encourage related and supporting industry. On the contrary, if the government imposes policies without taking into consideration its future results, in this case the impact of government can bring a negative effect on national competitive advantage (Tuna, 2006). According to Kharub & Sharma (2016, as cited in Stevenson & Fredendall, 2013, p. 8), policy-making and imposing regulations to the industries are some of the fundamental roles of government which affect all the determinants of Diamond model but based on government's position and policies, these determinants can be influenced in both positive and negative ways.

2.4 Relationship Between Investment and Competitiveness

To date, the link between investment and competition has received scant attention in the research literature. Most especially, there are several perspectives regarding the impact of competition on investment. However, Adam Smith's competitive structure-based theory which later developed the school of Harvard and so goes by the name of structure-conduct-performance (S.C.P.) and the Austrian school's critical view of structure-conduct-performance (S.C.P.) are two main confronting views on the link between competition and investment in this regard (Bain, 1956). Smith's view which mainly emphasises on the impacts of competition on investment suggest that competition ensures both allocative efficiency and productive efficiency where consumers' wants, and needs are best met (consumer satisfaction); Competition also reduces the amount of rent left to the enterprises, allowing consumers to take advantage of the entire surplus created by trade. Smith's theoretical point of view also stresses on the role of the state in creating and maintaining a competitive environment. Suggesting that the state or competition authorities are required to keep greater numbers of firms in the market by helping small firms to survive, while also restraining big firms from dominating the market. This view therefore emphasises on both competitive market system and government intervention (Sand-Zantman & Mathis, 2014).

The structure-conduct-performance (S.C.P.) paradigm however has been vigorously challenged in recent years by a number of scholars. In this regard, the second approach developed by the economists of the Austrian school led by Hayek, criticises the paradigm and lays stress on the competitive process as the prime aspect of competition rather than the competitive structure itself. So much so that the structure-conduct-performance paradigm's idea of keeping greater numbers of firms in the market is seen as irrelevant and placeless and so having new or more efficient firms is more important. The bottom line is that competitive process matters, not competitive structure. Because the existence of more firms does not necessarily mean the markets are well-functioning; but simply means that these large corporations are more effective and efficient than smaller businesses and consequently more successful (Bain, 1956). In addition, some scholars suggest even more sceptical views regarding the link between investment and competitiveness, particularly the conditions where such a link occurs. More explicitly, although most of the studies in the literature have agreed on the existence of a relationship between investment and competitiveness, however some of these studies have not acknowledged the condition in which this relationship takes place. For example, there is a debate as to whether this relationship can take place in a competitive or monopolistic market. In this regard, some studies suggest that a market with competitive conditions would result in more investment compared to that with monopolistic characteristics; while others claim the opposite by acknowledging that better incentives for investment can only be achieved under monopoly (Dube, 2009). On that

note, the study by Schumpeter (1939) offers probably one of the most interesting analyses of the subject by claiming that concentrated market structures such as monopolistic markets are best fit for competition. This is because when economies of scale exist, the number of small firms in the market is more likely to shrink or decrease too. According to Schumpeter, the most important reason why a monopolistic market is optimal for competition is the desire of firms to monopolise the market in the future. This desire also serves as a driving force for firms to improve the production process. With this purpose in mind, these firms are expected to invest and innovate today for their own benefits in the future, which also benefit other firms. From this point of view, Schumpeter (1939) concludes that concentrated market structures (with monopolistic characteristics) promote economic growth. Following in Schumpeter's footsteps, Bucci (2005) has argued that markets with low competitive environment are more suitable for producing intermediates and innovation¹ activity than the highly competitive ones. Other scholars such as Dube (2009) however, criticise this "one-size-fits-all-approach" which generalises the relationship between investment and competitiveness across sectors. Dube (2009) therefore concludes that deciding on whether a sector will open up for competition should depend on the sector-specific characteristics. Simply because there are some sectors which are more beneficial to investment in monopolistic conditions than competitive conditions.

Within the scope of the investment-competitiveness connection, the relative importance of competitiveness has been subject to considerable discussion. Much of the literature pays particular attention to the positive impacts of competitiveness on investment and the economic environment in general. Some of these studies suggest that promoting competition has an important role to play in pushing firms to improve efficiency and contribute to prosperity and well-being by offering wide-ranging quality products and services at affordable prices. Effective competition has been and continues to be an effective means to increase accountability and transparency, especially when it comes to business-government relations and decision-making. It also helps reduce the possibility of corruption, rent-seeking behaviours, lobbying and the like (Dube, 2009). However, when there is no effective competition, firms, especially dominant firms are likely to attain significant market power. This means that these firms can look to earn excessive profit and even may try to influence public policy and so play the card. In addition to these, the positive impacts of competition, especially on investment have been recognised by many countries today. As over a hundred countries now have adopted competition-based legislations. The better part of these countries has been implementing and reinforcing competition-related policies since the beginning of the 1990s. Serving as a system of checks and balances, competition law-policies on the other hand, have not only created and promoted competitive environments in these nations but also prevented certain restrictive business practises arising from both public and private sectors here and there (Khemani & Carrasco-Martin, 2008).

In the light of all facts that has been mentioned so far, one may say that there is positive correlation between investment and competition. In other words, results from earlier studies demonstrate a strong and consistent association between investment and competition. Although some may claim the opposite, many studies clearly indicate that competition is beneficial for investment, because the decision as to whether to invest is largely depending on the incentives to change or modify market structure. In this context, the amount of investment, particularly private investment in a market tends to be high when there is a fierce competition environment in the market. That is to say, there often exists a wide range of evidence which highlights that the amount and levels of investment, particularly private investment in a market tends to be high when there is a fierce competition environment in the market (Alesina, Ardagna, Nicoletti & Schiantarelli, 2005).

2.5 Overview of Chinese Investments in Sub-Saharan Africa

Many studies have identified China-Africa relations as one of the most notable examples of South-South cooperation (SSC) over the last six decades. This cooperation began in earnest after Southern countries or developing countries from Africa and Asia were subjected to a series of injustices, political and economic exploitations caused the Western Powers (the North) during the colonial era. As a result, many South countries began to shift their focus and so collaborated with the Eastern rather than the Western bloc. Since then, “a lot of water has gone under the bridge” and as a South country, China has begun to take the lead, particularly after establishing itself as one of the world's most powerful industrial powers. It began to compete with the already established hegemonic nations such as the United States and Japan (Bbaala, 2015). Competition between great powers on the other hand remains an ever-present phenomenon in Africa, especially when considering the anarchic nature of the international arena, where every country is looking for its self-interest (Jackson & Sørensen, 2013). The United States and China for instance, have strained relations in a time when they need to cooperate more than ever. Recently the United States had taken numerous legal actions in an effort to punish China for “irresponsible actions” in Africa and some other parts of the world (Carroll, 2018). These actions were actually built up on the National Security Strategy adopted in December 2017. A strategy that describes China as “revisionist power”. Followed by an investigation conducted by US trade representative in March 2018. Later, several reports by the Trade and Manufacturing Council and the US trade representative were prepared, the later prepared two annual reports (2018 and 2019) to the Congress, which were about “China’s WTO Compliance”. In all these documents, China is severely criticised for several actions including violation of intellectual property rights, dishonest and unfair trade practises, state enterprises subsidising, economic aggression, imposing restrictions on foreign business, cyber espionage and so on (Al-Ubaydli, 2020). The United States also denounced

China's "state-directed mercantilism", an approach which the U.S believes causes exchange rate manipulation and unemployment even domestically. Not that, the United States has said on numerous occasions that it will do whatever it takes to stop Chinese policy whether or not it complies with WTO's rules and regulations. China, on the other hand, retaliated by introducing more tariffs on goods imported from the U.S in 2018. During June, September, and October 2019, the two parties imposed a new package of duties on some commodity items, which led to even more tension. Even though the two parties signed a deal on January 15, 2020, which aims to ease the ongoing trade war, however; many scholars believe that the war will not end soon. No matter who wins the fight at the end, the biggest loser will always be Africa and the rest of the world. In addition to the economic confrontation between the two great powers, it is also important to consider the impacts that these hegemonic powers produce on the "third party countries" or the world as result of this binary war. To put it in a different way, as Salitskii & Salitskaya (2020) also reports, many economists and analysts believe that the fierce competition among great powers, particularly U.S and China has indirect drawbacks on the world economy. Further to that, some see it as one of the gradual factors that lead to recession in 2020. More precisely, during the second half of 2019, the exports rate and the GDP of most East Asian countries showed a significant falling tendency, while the economic growth in Europe also decreased. Similarly, at the end of 2019, both Japan and Hong Kong have witnessed a slow in their respective GDP growth. With the COVID-19 epidemic still having an impact on all global economies, the US-China rivalry is going to escalate. That is to say, the US-China competition is expected to continue even during the pandemic and so its negative effects on the world economy (Al-Ubaydli, 2020).

Returning to the relationship between China and Africa, despite the fierce competition, China continued to cooperate more with the southern countries, especially Africa's resource-rich countries. Thanks to this collaboration, China gained access to natural resources such gas, oil, minerals, and forests, as well as the ability to expand into new markets (Mutasa, 2018). Besides, the existing literature on potential determinants of China's involvement in Africa cites resource seeking, efficiency seeking, market seeking, and strategic asset seeking as primary reasons for China's involvement in Africa (Dunning, 1993). Another study done by Breivik (2014) to investigate the motives behind China's presence in Africa between 2003 -2011 using panel data from 49 African countries concludes that China is mainly driven by natural resources, GDP, market size and trade openness. Nevertheless, recent studies have cited Foreign direct investment (FDI) as the most important aspects of China's activities in the continent. While a variety of definitions of the term Foreign direct investment (FDI) have been suggested, this thesis will use the definition suggested by Niu (2019) who saw it as "a form of a controlling ownership in a business in one country by an entity based in another country. It is thus distinguished from a foreign portfolio investment by a notion of direct control. The Organization

of Economic Cooperation and Development (OECD) defines control as owning 10% or more of the business. Businesses that make foreign direct investments are often called multinational corporations or multinational enterprises. A multinational enterprise may make a direct investment by creating a new foreign enterprise, which is called a greenfield investment, or by the acquisition of a foreign firm, either called an acquisition or brownfield investment” (p. 7). World Investment Report provided by United Nations Conference on Trade and Development (UNCTAD) (2018) reveals that though global foreign direct investment (FDI) flows dropped from \$1.87 in 2016 to \$1.43 2017 (23% fall), developing economies have received 47% of the total share of global FDI inflows in 2017 in contrast with 36 percent in 2016. China on the other hand was the third largest investing country in 2017 right after the United States and Japan which invested \$342.27 billion and \$160.45 billion respectively (Ministry of Commerce of the People’s Republic of China, 2018). China also has FDI stock of \$40 billion in Africa, which makes the country the fourth largest FDI stock provider in the continent, only behind the United States, the United Kingdom, and France (UNCTAD, 2018). The main destinations for this stock are South Africa, Congo (Kinshasa), Zambia, Nigeria, Angola, Ethiopia, Algeria, Zimbabwe, Ghana, Kenya, Tanzania, Sudan, and Mauritius among others. When it comes to FDI flows however, the top 10 recipient countries are respectively Angola, Kenya, Congo (DRC), South Africa, Zambia, Guinea, Congo (Brazzaville), Sudan, Ethiopia, Nigeria, Tanzania, and they hold more than 75% of China’s total FDI flows in the continent (Ministry of Commerce of the People’s Republic of China, 2018).

Likewise, Foreign direct investment is considered by many scholars as one of the prime ways of attracting international capital flow, bringing technology, transferring skills, bridging the gap in both foreign exchange and saving-investment, enhancing capital allocation and efficacy as well as contributing to economic growth, especially developing countries. To put it another way, Foreign direct investment (FDI) not only provides capital for domestic investment, but it also creates jobs in developing countries. FDI also facilitates the transfer of managerial and technological skills and hastens infrastructure development and brings wealth to recipient countries. Underdevelopment, large population (the second largest continent after Asia and with more than 1.2 billion people) and the presence of natural sources (such as bauxite, iron, silver, petroleum et cetera) however, have pushed many African countries to attract foreign investors (Niu, 2019). This being the case, many African countries had signed more than 972 bilateral investment treaties (BITs) since 1960. China on the other hand has been an important partner since then. For instance, the Forum on China-Africa Cooperation (FOCAC) was signed in 2000 and aimed to increase Chinese investments and trade in the continent by effectively exchanging information and communication between the two parties to decrease the transaction cost of the cooperation. FOCAC has brought a new dimension to Sino- Africa relations,

as China joined the World Trade Organisation in the next year (2001). FOCAC became even more important after the formulation of "the Belt and Road Initiative" in 2013. Before FOCAC, China-Africa Development Fund (CAD) was formulated in 2007 to afford assistance and encourage Chinese firms to make more investments and so benefit from the African market. Thus, today there are more than 3,400 settled Chinese enterprises operating in various parts of the continent (Guijarro, 2022). In 2015, China's President Xi Jinping adopted ten major projects related to infrastructure construction, investment, trade, finance, industrialization, modern agriculture, green development, poverty reduction, public health, people's welfare, people-to-people exchanges, peace and security. Later in September 2018, "The Beijing Summit of the Forum on China Africa Cooperation" was declared with the participation of 53 African countries (out of 54). In the summit, Chinese President Xi Jinping has emphasised on priority areas of China in the continent for the next three years. In this context President announced "Eight Actions" to replace the "Ten Cooperation Plans" which were adopted within the scope of the FOCAC Johannesburg Summit back in 2015. President Xi Jinping has also declared \$60 billion financial support to Africa which will be given as government aid and investment. The support will be distributed to several areas including credit lines (\$20 billion), concessional loans, interest-free loans and grants (\$15 billion) and investment financing (\$10 billion) (Niu, 2019).

When it comes to investment areas however, China's outward FDI stock is concentrated in several industries. A report on China's outward investment published by Ministry of Commerce of the People's Republic of China (MOFCOM) reveals that construction sector (29.8%), mining sector (22.5%), financial services sector (14%) manufacturing (13.2%) leasing and business services (5.3%) are the top five industries in Africa which attract China's outward FDI stock the most (Ministry of Commerce of the People's Republic of China, 2018). As is also understood from the above-mentioned works, the existing literature on China's outward FDI stock in Africa is extensive and focuses particularly on infrastructure as the largest sector for China's investment on a continent-wide scale. Chinese infrastructure investment in Sub-Saharan Africa on the other hand, dates back to 1976, when a railway was built in Zambia. Bilateral trade between China and African countries increased by 700 percent in the 1990s. The Forum on China-Africa Cooperation (FOCAC) was established in 2000, and in 2006, the "Africa Policy Paper" was released. Following that, there were some significant developments, such as the "Beijing Summit of the Forum on China-Africa Cooperation" in 2006, and the "Beijing Action Plan" from 2007 to 2009 (Guijarro, 2022).

That being the case, two conflicting perspectives on the Sino-African relationship have emerged: Chinese and Western perspectives. The Chinese perspective, which is also supported by African leaders, advocates for strengthening the relationship for mutual benefit and win-win outcomes for

both parties. “Chinese investment model”, “Chinese foreign aid” as well as “the cultural and educational exchanges between China and Africa” are the most common examples used to support this viewpoint. The Western perspective, on the other hand, which is mostly promoted by Western academics and researchers, asserts the opposite. It exemplifies China’s “unfair trade practices”, “labour Exploitation” and “dumping effects or price cutting” for this claim. It criticises every aspect of China's activities, even raising questions about “Neo-colonialism”, “Debt-trap Diplomacy” and a “New scramble for Africa” (Adam, 2018). It is crucial to highlight, however, that while China has displayed certain activities that may suggest a “neo-colonialist” or “hegemonic approach”, it would be unfair to compare China's presence in the continent to what the Western Powers did during the “scramble of Africa” in the 19th century (Ewelukwa Ofodile, 2008).

The first point of view on China's collaboration with Africa, which is widely held by Western powers, claims that China has engaged in a number of "unfair trade practises" while dominating local markets. For instance, the Chinese are often accused of eliminating small domestic businesses and thus dominating the market (Olorunfemi, 2021). The sale of cheap Chinese goods has made the situation even worse, as small local producers of basic goods and materials such as fruits, vegetables and handicrafts unable to compete with Chinese investors. “It has been reported that China’s competition on the African market is having some harmful effects on certain sectors. For example, in countries such as Lesotho, Madagascar, Kenya and South Africa, sectors like clothing have faced very stiff competition from cheap Chinese products to the extent that some local firms have had to scale-down their operations and lay off some workers” (Bbaala, 2015, p. 113). Similarly in Zambia, Dipak Patel, the country's previous Trade, Commerce and Industry Minister who was also worried with regards to the issue, brought up the issue whether Zambia truly need Chinese investors selling basic products such as eggs, food, chicken, and clothing that locals can already produce (Alden & Alves, 2009). Another emerging issue related to "Chinese unfair trade practises" in Africa is the "dumping effects" which refer to Chinese multinational firms decreasing their prices to achieve a larger market share in many African local marketplaces. As the African countries continue to depend significantly on commodities exported from China, it is possible to discuss a “South-South dumping policy” that will pose a real threat to the continent's manufacturing sector in the future. Especially that “this problem is not limited to consumer goods alone, because Africa has also become an end user of both simple and sophisticated Chinese technology...Clearly, some of the practises in Sino-Africa relations expose the weaker African economies to technological dumping effects and the nurturing of a Sino-dependency syndrome among African countries and peoples” (Bbaala, 2015, p. 113). The "lack of transparency and fair-play" were also mentioned in the literature as "Chinese unfair trade practises", with the case of Zambia serving as a perfect example. As with regards to Bbaala who reports that the

Chinese were associated with a corruption scandal with the Zambian government while acquiring the Sinazeze Coal Mine and the Chambishi Copper Mine. The Zambian government grants these mines to Chinese investors taxlessly, while local firms were never given such privilege. In addition to "unfair trade practises," critics of China's presence on the continent usually raise the issue of labour exploitation. These exploitations are usually linked to hazardous working conditions, low pay, excessive working hours, and violations of workers' rights. According to Alden (2007), with construction operations expanding in many African countries due to China's active engagement, the Chinese choose to incorporate Chinese employees in their infrastructure projects while excluding African labourers in most cases. The main motivation for such action is because Chinese labourers are paid lesser wages than the African workers. As one study suggests, Chinese workers in Angola are paid \$1 per day (including food and shelter), whereas non-Chinese corporations are required to spend \$3-4 per day for Angolan workers (Bbaala, 2015). In fact, these and similar practises prevent local workers from contributing to the local economy, despite the fact that they must be included in the process and trained as technicians, unskilled or semi-skilled workers. Furthermore, "dangerous working conditions" and "lack of workplace safety" are among the "labour exploitation practices" used by Chinese-owned businesses in Africa. Abuse of labour and strange episodes of accidents are growing more common in many countries. Alden and Alves (2009) discovered in their research that in Katanga, DRC, Chinese mining corporations use underage labour, provide inadequate health and safety conditions, and have forced over 600 Chinese workers to flee the country after cooperating with local authorities. "In Zambia, similarly, Chinese-owned mines have been found culpable of endangering Zambian workers. An explosion at the munitions factory serving Chambishi (mine) in April 2005, which killed 46 Zambian workers" (Alden, 2007, p. 7). One of the most highly debated aspects of China's African cooperation is the "Non-interference policy" (Ying, 2018), which emphasises that China will not, under any circumstances, challenge any country's sovereignty and will. The policy's critics are ironically claiming that China is aiding and shielding totalitarian regimes in Africa while also violating human rights. However, China's strong presence in countries led by totalitarian regimes and despots, such as Zimbabwe, the Niger Delta, and Sudan, casts serious doubt on the country's "non-interference policy" (Campbell, 2008). Certain human rights campaigners in the respective countries have often considered the presence of China in certain areas as evidence of such tendencies. China's firms have been criticized for supplying some Africa's resource-rich and war-torn countries such as South Sudan, with military vehicles which are used to commit crimes against humanity (Bbaala, 2015). All in all, this and similar evidence indicate that China will act in its personal and economic interests, even if it means violating human rights.

The second point of view on China's cooperation with Africa is one that is widely shared by both Chinese and African people, who see the collaboration as a chance for both parties to benefit. It should be noted that, while many scholars have legitimate concerns about China's involvement in Africa, it is also true that there are far more benefits than drawbacks to this unique collaboration. Before diving into the subject further, it is significant to remember that contrary to the past Western engagements in the continent during colonisation periods, when Africa was divided, invaded, and colonised by the European powers, China has strong support from Africans themselves. Rather than a zero-sum game, many Africans now see the partnership with China as an opportunity for mutual benefit and win-win outcomes. In describing the nature of this relationship, "African analysts contrast the PRC government's massive investment in infrastructure and support services within China with their own governments' failure to provide these prerequisites for development. They also compare it to Western economic practises, which are seen as exploiting "unequal and disparate exchange" to lock in underdevelopment" (Sautman & Hairong, 2007, p. 80). It should also come as no surprise that, in comparison to the Western Powers, China appears to be more ready to share its development experiences with Africa and other developing countries. China, for example, has been supplying Africa with bilateral aid, infrastructural investments and maintenance support services that have played a significant part in the continent's socio-economic development. Especially after years of European colonization that contributed considerably to the continent's backwardness. Beyond the fact that China invests more than other European countries, China's investment model, the "Chinese model," fully meets the needs of Africa. For instance, China, unlike the Western one, does not require cash payments in exchange for investments. That is to say, China accepts natural resources rather than cash in exchange for investments, a practice known as Infrastructure-for-resources (IFR) or Resources-for-infrastructure (RFI). These investments are generally made in resource-rich African countries including but not limited to Nigeria, Gabon, the Democratic Republic of the Congo, and Kenya. For instance, China had completed the Mombasa-Nairobi Railway in Kenya in 2017, the country's largest ever project since independence (Bbaala, 2015). Another distinguishing feature of the "Chinese model of investment" or the "Beijing consensus" which emerged as an opponent to the well-known "Washington consensus" is that it does not impose any neoliberal reform package such as privatisation, deregulation, and social spending cuts, which are also known as "IMF conditionality". The primary reason for such an approach is China's aforementioned "Non-intervention policy". This being the case, the principle of Non-interference has been a central tenet of China's Africa policy from the beginning. "In its relations with Africa, China consistently upholds the principles of sovereignty, equality and non-interference into other countries' internal affairs. They remain the fundamental principles of China's diplomacy toward Africa" (Ying, 2018, p. 31). The Angola Model is a prime example of how Chinese investment model has directly contributed to the creation of sustainable

development in the continent. “Economic data show that by 2010, about 2,180 Chinese companies had spread their commercial interests across Africa while nearly 8,000 development projects, financed by China, were underway. These projects were mainly in areas of investment that have long gestation periods such as electricity power stations, ports, airports, freeways, among others” (Bbaala, 2015, p. 106).

Regarding the bilateral aid however, China has given many African countries a larger share of its total foreign aid, which helps to build the socio- economic situations in these countries. A study done by Ying (2018) shows that by the end of 2014, China has provided more than 47 percent of the total foreign aid, to Africa. More than 1,071 infrastructure and road projects, including ports, railways, bridges, power plants, and aviation facilities, have been delivered to different African countries. Moreover, China has supplied 68 hospitals, provided emergency food help, constructed 23 agricultural-technical institutions, and established roughly 30 malaria preventive facilities as part of bilateral aid. By this time, the Chinese had trained more than 24,500 medical workers and 81,000 local technicians in different parts of the continent. During the Ebola crisis, China set a new record by providing the longest and most comprehensive relief and support to Africa. Furthermore, there have been cultural and educational connections between China and Africa, which is a crucial indicator of this unrepresented economic collaboration. Especially that “recent years have particularly seen an expansion of Sino-Africa educational and cultural exchanges, the emergence of new business areas like financial services, increased investments in agriculture and recalibrated long-term supply agreements for infrastructure to cover new social offsets not seen in deals hitherto” (Bbaala, 2015, p. 111). China has been expanding its educational cooperation with Africa, assisting numerous African countries in improving human resources through cultural, educational, and technological projects including providing scholarships, organising training courses, and building cultural and educational institutes like those of Confucius institutes. More than 40,000 African students are thought to be studying at Chinese universities currently (Huang & Askary, 2022). The Confucius institutes in various parts of Africa for instance, offer training in paper-cutting, Chinese martial arts, calligraphy, and traditional operas, to name a few examples of cultural exchanges between China and Africa. China and Africa are also collaborating on a variety of cultural and educational programs, such as the "China-Africa People-to-People Friendship Action", "the China-Africa Cultural Cooperation Partnership Program", "National Year" activities, and tourism promotion. It should be noted that these cultural activities not only help China and Africa get to know one another, but also help improve the economic cooperation (Gonondo, 2021).

However, in order to gain a deeper grasp of the topic and so cast light on the continuing dispute, it is beneficial to provide some prominent specialists from both sides of the debate. Dr. Deborah Bräutigam, a Professor of Political Economy at Johns Hopkins University, is a well-known expert on the Sino-African relationship. Many academics view Bräutigam as a major expert in the discipline, she has authored and published numerous books and articles on the subject. Bräutigam points out in her book 'The Dragon's Gift' (2009) that the China-Africa relationship is becoming increasingly ambiguous, making the subject “highly blurry”. The Western scepticism towards the relationship in general, China's excellent picture of the partnership, African leaders' unquestionable eagerness to engage with China, and the common myths and fallacies surrounding China's presence in Africa are some noteworthy reasons for such a picture. 'The Dragon's Gift' tries to answer certain important questions such as “what are the Chinese doing in their new wave of aid and economic cooperation across Africa? What will this mean for poverty and development in Africa? And what will it mean for the West and our approach to development and aid?” (Brautigam, 2009, p. 3). Bräutigam (2009) goes on to say that academics in the subject have yet to respond to those central questions. In addition to 'The Dragon's Gift' (2009), Brautigam recently published a book called 'Will China Feed Africa?' in 2016. The book investigates Chinese agricultural investments in Africa. After undertaking fieldwork in both China and Africa, Brautigam (2016) concludes that China's investments in the sector are limited, ineffective and unsuccessful. The author also points out that agricultural investment differs significantly from other sectors including infrastructure. Despite this, these studies show no evidence to support the assumption that China is only utilising Africa for food production. Even though the agriculture sector may appear to be unrelated to the purpose of this study, however it can provide insight into what is going on in the partnership and whether China is beneficial to Africa.

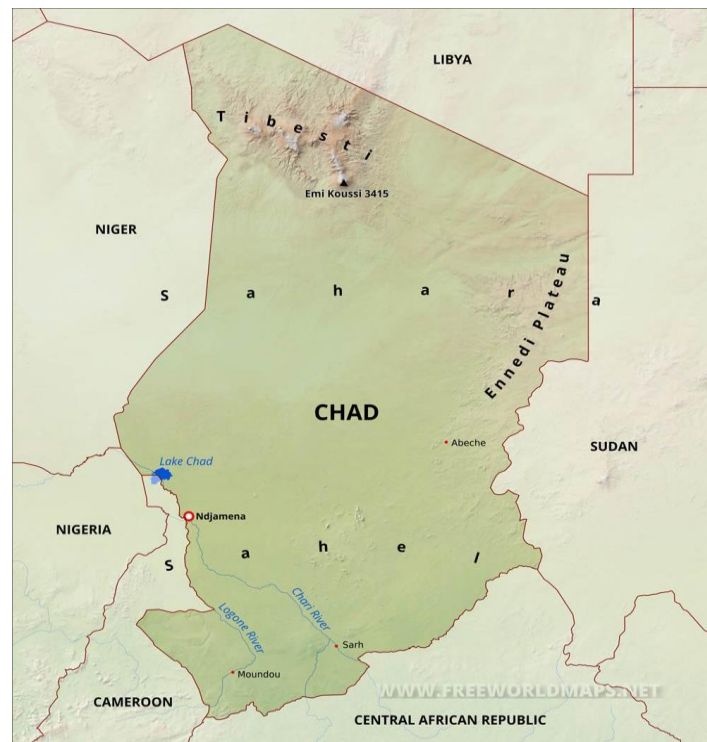
Dr. Justin Yifu Lin, a Chinese economist and former president of the World Bank, is another important person to mention when discussing China-Africa relations. Justin Yifu Lin, a strong supporter of Sino-African cooperation, feels that the current connection is an unprecedented fact that should not be compared to the colonial era. Lin claims that the globalised world and economic opening helped many low-income African countries to flourish, citing recent studies that show economic growth in various Sub-Saharan African countries in terms of living standards and other indicators. Lin further emphasises that, thanks to new policies and measures implemented by Africans, this economic progress should be referred to as "African growth" rather than "Chinese growth" (Lin, 2011). Lin's position, however, leads to the flying geese model, a concept that some academics employ when debating China-Africa relations. The concept essentially highlights the importance of countries learning from one another's successes. Besides being the “contentious business” of the literature, these two opposing viewpoints however reflect the importance of the continent to global powers,

particularly the United States, Russia, and China. So much so that in 2018, US President Donald J. Trump launched a new policy called "Trump's Strategy for Africa," in which former National Security Advisor John Bolton emphasises Africa's importance to the US while denouncing China's efforts on the continent (Anna & Danilova, 2018). Other similar great powers such as Russia, France, and Germany, have made similar moves as well. The common goal of these countries is to gain control of Africa's natural resources and find new markets for their respective goods and services (Mutasa, 2018).

2.5.1 Chad

Chad is a landlocked country in Central Africa bordered on the north by Libya, the east by Sudan, the west by Niger and Nigeria, and the south by Cameroon and the Central African Republic. The Republic of Chad, whose capital is N'djamena, has a population of 14 million. The officially recognized languages in Chad are French and Arabic (DEİK, 2021). According to IMF data, Chad economy grew by %5,1 in 2018. The economy of Chad, which has no coastline, is based on oil and livestock and agriculture. In 2015, the share of agriculture was 52%, services 34%, and industry 14% (3% of manufacturing) in the 10.8 billion dollars GDP. About 60% of Chad's export earnings comes from oil, with the majority coming from cotton, cattle, livestock, and gum arabic (DEİK, 2017).

Figure 1. Chad Physical Map



Source: (Free World Maps, 2021).

The diplomatic relations between Chad and China established in the 1990s. The relationship, however, was suspended after Chad recognised Taiwan and severed diplomatic ties with China in 1997. However, following pressure from Senegal, Chad re-established the diplomatic relations with the People's Republic of China on August 5, 2006. When it comes to China's investment areas in Chad however, China's FDI is largely focused on social services, energy, infrastructure including road-paving, health, and military assistance. However, oil exploration and refining are China's main investments in the country. China wanted to expand its involvement in oil resource development and so find other ways to benefit from Chad's investment opportunities (Global Security, 2016). (Appendix 4).

2.5.2 Ethiopia

Ethiopia (former name Abyssinia), surrounded by Somalia to the east, Djibouti and Eritrea to the north, Sudan to the west, and Somalia and Kenya to the south, is one of the largest countries in Africa with an area of 1,106,060 km². The capital city of the country is Addis Ababa. With a population of approximately 100 million, Ethiopia is the second most populous country in Africa after Nigeria (T.R. Ministry of Commerce, 2022). The agriculture sector is the backbone of Ethiopia's economy, accounting for roughly 37% of GDP, 62% of exports, and 70% of total workforce. In terms of animal husbandry, Ethiopia ranks first in Africa and ninth worldwide. Animal husbandry; are adversely affected by epidemic diseases and drought. The Manufacturing industry consists of leather, textile and ready-made clothing, construction materials, metal, chemical products, food, and beverage sectors. Ethiopia, which has a long history in terms of mining, has various mineral resources. While the share of mining in GDP is less than 1%, there has been a significant increase in the extraction and sale of gold in recent years compared to the past. Ethiopia has mines in addition to producing gold, marble, limestone, and tantalum (World Bank, 2022).

Figure 2. Ethiopia Physical Map



Source: (Free World Maps, 2021).

China and Ethiopia established diplomatic ties in 1998. Since then, Chinese FDI has steadily increased, reaching a peak in 2018. Following this, a growing number of Chinese companies operating in a variety of industries have entered the Ethiopian market. According to data from the Chinese embassy in Ethiopia, China is Ethiopia's largest trade, investment, and development partner (Gebrehiwot, Gebreeyesus, & Weldesilassie, 2020). (Appendix 5).

2.5.3 Ghana

Located on the coast of the Gulf of Guinea, Republic of Ghana is surrounded by the Atlantic Ocean to the south, Togo to the east, Burkina Faso to the north, and Ivory Coast to the west. The estimated population of Ghana in 2022 is 32.32 million. Accra is the capital of Ghana, which consists of ten regions (T.R. Ministry of Commerce, 2022). The officially recognized language in Ghana is English. Ghana's GDP was 68.5 billion dollars in 2020 and is expected to increase to 75.5 billion dollars in 2021, but the agricultural sector's contribution to GDP has decreased significantly in recent years, from 35 percent to 19 %. The services sector accounts for approximately 56 % of GDP, industry accounts for 25 %, and the mining and petroleum sector, which is included in the industrial sector, accounts for 10 % (Food and Agriculture Organization, 2019).

Figure 3. Ghana Physical Map



Source: (Free World Maps, 2021).

Ghana and China established diplomatic relations in 1960, especially after China recognised Ghana as a loyal socialist ally. However, the relationship was put on hold after Ghana's first president Kwame Nkrumah was deposed in 1966. The bilateral connection was restored in 1972, and it has been steadily increasing since then (Wang, 2018). China provided Ghana a variety of aid projects during this time, including but not limited to farms, textile factories, and hospitals. When it comes to China's investment areas in the country however, China's FDI is largely concentrated in the mining sector, general trade and manufacturing, service and infrastructure sectors which includes telecommunications, roads, railway construction, stadiums, and government buildings (Tsikata, Fenny, & Aryeetey, 2010). (Appendix 6).

CHAPTER THREE: RESEARCH FINDING AND DISCUSSION

The study's final stage includes PEST analyses of Chad, Ethiopia, and Ghana, as well as a survey and semi-structured interviews with professionals and experts who were aware of Chinese investment in Sub-Saharan Africa, namely, Ethiopia, Chad, and Ghana. In this context, the PEST analyses of the countries in question will be reviewed first, followed by an examination of the survey and interview results.

3.1 Chad's Competitiveness Analysis through PEST

PEST analysis is primarily used to investigate an economy's macroenvironment, which includes political, economic, social, and technological factors. Consequently, PEST analysis is a strategic management technique that assists organisations in analysing risks and opportunities, evaluating market growth or decline, company position, and the potential and direction of operations, all of which can help firms become more competitive (Euromonitor International, 2021).

Political Environment Analysis in Chad

Opportunities	Challenges
Solid government finances: Government finances remained unaffected, thanks to the steps taken by the government to mitigate the economic and social impact of the Coronavirus (COVID- 19) pandemic. The budget surplus for 2020 was 1.5 percent of GDP, whereas public debt was 41.7 percent of GDP, which was lower than in 2019. Revenues collected by the government from the country's hydrocarbon activities were key in this regard. In 2020 for instance, public debt was sustainable and did not pose a danger to stability. Financial payments from organizations such as the International Monetary Fund (IMF) and the World Bank assist Chad with its debt sustainability.	'Mostly unfree' for Economic Freedom: Chad is ranked 158th in the world on the Index of Economic Freedom 2021, placing it in the 'mostly unfree' category. Weak rule-of-law indicators such as 'government integrity' was among the lowest scores in this sense. The new 2018 constitution which expanded the power of the executive branch has led to poor 'government integrity' score, which could lead to an increase in corruption and autocratic tendencies. Indeed, even though Chad has held elections since 1996, the status quo remained unchanged till president Idriss Déby Itno was killed in battle in the Northern part of the country in April 2021. Following the death of Déby, his son, Mahamat Déby, has taken over as acting president, indicating nepotism in the country. While also raises the risk of election fraud, which has been emphasised by the opposition for years. Using the Coronavirus (COVID-19) pandemic, the government has further restricted people's freedoms by prohibiting public gatherings and cracking down on opposition groups. There may be political instability in

	the country due to the power vacuum that may occur with the death of Déby.
.	Corruption is pervasive: Chad's score of 160th in the Corruption Perceptions Index 2020 reflects the country's serious corruption problem. Corruption is mainly seen in public procurement, the customs authorities, as well as tax collection. Corruption on the other hand undermines government's legitimacy and increases businesses costs.
	Unfavourable Global Peace and Terrorism rankings: Chad is ranked extremely low in both the Global Peace Index and the Global Terrorism Index. This is owing to the government's ongoing war against insurgent forces in the country's north, as well as Boko Haram in the country's border territories with Nigeria. Consumers and businesses are destabilized by the heightened threat of terrorism and the lack of peace. As both customers' daily activities and businesses operations are at constant risk.
	Many international issues outstanding: Chad and Libya have a territorial dispute over several islands in Lake Chad. Controversy over international boundaries around the area of Lake Chad has also caused several border confrontations in the past. However, Cameroon, Chad, Niger, and Nigeria had to ratify a judgement issued by the International Court of Justice about the subject. Chad and Sudan have accused each other of supporting the rebels that occasionally emerge between the borders of the two countries.

Source: Euromonitor International

Economic Environment Analysis in Chad

Opportunities	Challenges
<p>Economy to outperform peers: Chad's real GDP fell in 2020 however, it was at a slower rate than the Middle East and Africa. Nonetheless, the worldwide oil price fall, (to which Chad is strongly vulnerable due to its hydrocarbon activities), as well as the temporary suspension of oil production, along with border closures to prevent the spread of the COVID-19 pandemic had harmed economic development. Chad's economy is set to profit from the increase in demand for oil products as global conditions normalize and oil productivity restarts. Textile sector including cotton ginning, as well as gold production are also expected to play role in the country's economic recovery process. Therefore, Chad's economy should outperform regional competitors in the short and medium term.</p>	<p>Overly reliant on primary sectors: Since the discovery of oil in Chad in the early 2000s, the hydrocarbon industry has become a major factor in economic development. According to trade data, oil accounts for roughly 60.0 percent of export revenues. In addition, agriculture especially cotton production, cattle herding in the central regions and farm activities such livestock breeding and gum Arabic production are some key drivers of economic progress. Therefore, because of its reliance on those primary industries, Chad is vulnerable to commodity price changes, especially fluctuations in the global oil price, while cotton productivity can be harmed by natural disasters such as droughts and floods.</p>
<p>Currency peg creates some stability: As a member of the Central African Economic and Monetary Union (CEMAC), Chad's currency is the Central African (CFA) franc, which is fixed to the euro at a rate of XAF656 per EUR. This has made the country's currency more stable in comparison to its regional peers. As it reduces exchange rate volatility and prevents considerable depreciation against major currencies such as the US dollar. Even though the inflation rate has increased to 2.9 percent in 2020 because of the COVID-19 pandemic and food costs have increased, however, the former (inflation) is set to drop in the period from 2025 to 2025 and will be significantly lower than the Middle East and Africa average.</p>	
<p>FDI a very important economic driver: As an important driver of economic development, FDI inflows contributes for 5.2 percent of GDP in 2020. Indeed, FDI intensity remained stable from 2015 to</p>	

<p>2020, thanks to the opportunities provided to foreign investors in the hydrocarbon sector and cotton production, which receive the majority of FDI. ExxonMobil is one of the country's largest investors. COVID- 19 pandemic has pushed the country to diversify the economy by seeking foreign investment in new sectors such as agriculture, agribusiness, gold mining, infrastructure, environmental technologies including solar energy as well as information and communications technology (ICT). Investment is hindered by a low-skilled workforce, a volatile business environment, electricity supply instability, and a high tax load on the private sector. With this, the abundance of natural resources, the constant availability of sunlight for solar energy production, the rapidly growing population, and the recent progress made in the field of telecommunications and agribusiness are some of the country's positive sites.</p>	
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Source: Euromonitor International

Social Environment Analysis in Chad

Opportunities	Challenges
<p>Rapidly growing population: Chad's population is predicted to rise rapidly due to extremely high (but declining) fertility rates. The overall population is set to grow by 63.4 percent, far higher than the Middle East and Africa average of 46.9% over the period 2021-2040. The population projected to reach 27.6 million by 2040, increasing the consumer market's attraction. The population boom is likely to benefit especially consumer-facing firms that provide products and services in essential categories.</p>	<p>One of poorest countries globally: Chad continues to be one of the world's poorest countries, despite the fact that oil discoveries in the 2000s increased the country's GDP. In 2020, 78.7% of the population was living on less than USD3.10 per day, which was the international poverty level. According to this measure, the country was the world's poorest. Deprivation on the other hand has a significant effect on consumer spending, limiting it to basic categories such as food and non-alcoholic beverages. As a result, discretionary expenditure is restricted. Therefore, because consumer spending makes up nearly three-quarters of GDP, changes in consumption habits have an impact on the economy.</p>

.	<p>Refugees causing humanitarian crisis: Chad is home to a considerable number of refugees fleeing Boko Haram-inspired terrorism and violence in neighbouring countries including the Central African Republic, Nigeria and Sudan. This puts more strain on the already weak (Chad) economy. Therefore, this humanitarian crisis may affect the country's own development goals in the short and medium term.</p>
	<p>Compromised human development: Chad's human development is hindered by extreme poverty and a lack of education. For instance, due to extreme poverty and a lack of education, the World Bank projects that a Chadian child will have 71.0 percent poorer productivity than a kid grown in the developed countries. Similarly, mortality rates for mothers are among the worst in the region. All those elements are set to affect to the country life expectancy, which is anticipated to reach 59.7 years in 2040, approximately 10 years lower than the Middle East and Africa average. Urbanisation is anticipated to increase by 126 percent between 2021 and 2040, when only 32.8 percent of the population will live in cities.</p>
	<p>Young populace could create social tensions: Most of Chad's population will stay young, despite the fact that the 65-year-old generation is expected to grow by 80.4 percent between 2021 and 2040. As the population's median age will be 19.8 years in 2040. While the old-age dependence ratio will be only 4.8 percent in the same year. All those figures are well below the regional and global average and therefore indicate a potential demographic dividend. As authorities may not be able to meet job demand of this demographic dividend, this therefore could push youth to some activities such as violence and crime, which finally could lead to some societal tensions (unrest).</p>

Source: Euromonitor International

Technological Environment Analysis in Chad

Opportunities	Challenges
Mobile subscriptions rising solidly: Mobile technology is making significant progress in Chad's telecommunications sector, especially that the country has no robust fixed line network. The total figure of mobile phone subscribers is set to increase from 8.7 million (in 2020) to 12.0 million. The fall in phone prices will be key factor for this trend, while also making mobile technology the country's primary mode of communication.	Extremely low internet usage: In 2020, internet usage is 13.0 %; by 2025, this figure will be 30.0 %, the world's sixth lowest. The key reason for low internet usage is a lack of investment in telecommunications. Despite this, the market will provide excellent potential for technology enterprises in the long run.
Support for connection and the ICT sector: The European Investment Bank (EIB) announced a series of programs in December 2020, including those aimed at boosting Chad's digitalization and connectivity. To find the best strategy to provide broadband internet and improving connectivity in rural locations, feasibility studies will be conducted. Knowledge sharing will be key in this regard. Chad's 2030 strategic plan which aims to improve ICT infrastructure, will include establishment of several multi-media centres in the country.	Significant fall in fixed lines in use: The number of fixed telephone lines use decreased dramatically between 2012 and 2020, falling to 5,400, much below the population's demands. The fall in telecoms investment, and the increase in popularity of mobile phones use are key for such decrease in fixed lines usage.
	Lacks capacity for innovation: Chad scored poorly in the Innovation Capability and ICT Adoption pillars of the Global Competitiveness Index (GCI) 2019, which indicate a lack of innovation, especially that the government have been more focused on reducing poverty and improving the country's economic status at the expense of innovation. This situation will make the country uncompetitive in the medium term, especially when compared to more dynamic regional competitors.

Source: Euromonitor International

3.1.1 Conclusion

In short, as a country, Chad is characterized by widespread corruption and dictatorial governance, as well as the threat of terrorism from neighbouring countries. Thanks to the oil sector, a relatively strong economic recovery is predicted in the near run, and the capacity of attracting foreign investment is

strong. The consumer market on the other hand is expanding due to rapid population expansion, yet poverty is endemic and human development is limited. Although internet usage is among the lowest in the world, mobile technology is making ground.

3.2 Ethiopia's Competitiveness Analysis through PEST

PEST analysis, which is used to examine an economy's macroenvironment, including political, economic, social, and technical aspects, is a strategic management technique that assists businesses in analysing risks and opportunities, evaluating market growth or decline, company position, and the potential and direction of operations, all of which can help businesses become more competitive. Therefore, the primary goal of PEST analysis is to conduct a systematic examination of external elements that may have an impact on a company's operations so that businesses can properly define their strategies (Euromonitor International, 2021).

Political Environment Analysis in Ethiopia

Opportunities	Challenges
Improving corruption ranking: According to Corruption Perceptions Index 2020, Ethiopia's corruption rank has improved since 2018. The establishment of an anti-corruption unit by Abiy Ahmed's government is one of the key reasons for the improvement. Nonetheless, the judiciary power is still vulnerable to political influence and government's will. While State-owned firms (SOEs) have privileged access to certain resources including but not limited to credit and land leases.	Poor position for Economic Freedom: As the Index of Economic Freedom 2021 reports, Ethiopia slipped further down the list of countries that are "largely unfree." According to Index of Economic Freedom 2021, land disputes and an unstable political landscape has been and continues to be the driving factors in this regard.
Relatively contained government spending: In a worldwide viewpoint, the state budget increased in real terms every year from 2019 to 2020, however the growth was very modest comparing to other countries. In 2020, the public debt as a proportion of GDP was lower than in 2019, but it is still manageable. Indeed, government spending was pillar with the best results in the Index of Economic Freedom 2021 which indicates that the country's government spending is unlikely to cause difficulties. Yet, Public debt is supposed to raise as	Shaken by political instability: Following Omoro tribal demonstrations in 2018, the prime minister, Aby Ahmed, gained more power and began on a reform program that many viewed as ambitious. There has been political instability in 2019, because members of the ruling coalition broke away to join a new party, the Prosperity Party. The existence of more than 82 ethnic groups and separatist movements have always created tensions in the country. Parliamentary elections on the other hand, have been postponed until the COVID-19 outbreak has been contained.

result of the economic stimulus package which introduced to lessen the effect of the Coronavirus (COVID-19) pandemic.	
	Deteriorating Global Peace and Terrorism rankings: Ethiopia's score in the Global Peace Index has dropped between 2016 -2020 as a result of the Omoro tribe's militancy in recent years. Moreover, Ethiopia's ranking in the Global Terrorism Index worsened over that timeframe due to growing infiltration of Islamist organizations in East Africa, notably Al-Shabab. Protests and terrorism on the other hand, have negatively affected country's business and consumer markets.

Source: Euromonitor International

Economic Environment Analysis in Ethiopia

Opportunities	Challenges
Economy expected to rebound strongly over medium term: Even though the Ethiopian economy is expected to rebound strongly in the medium term, owing to increased foreign direct investment (FDI) inflows, annual real GDP growth slowed in 2020 because of the COVID-19 pandemic. Manufacturing and services sectors are projected to contribute to the recovery of the economy. However, the so-called locust invasion can slow down the recovery, especially that locust seen as a direct threat to both agriculture and food security.	Extremely high inflation and currency depreciation: Inflation increased in 2020 as a result of growing shortages and consequently higher food and energy prices. Imported goods became more expensive for domestic consumers because of the currency depreciation. While the Locust-19 swarms, which partly damaged the domestic agriculture, worsened the situation. Due to low foreign exchange reserves, the Ethiopian birr was substantially depreciated in 2020. The International Monetary Fund (IMF) has advised Ethiopia to devalue its currency against the euro and the US dollar, as part of its macroeconomic policy to stabilize the country's financial markets. As a result of the currency devaluation, Ethiopia's National Bank raised the base interest rate to 7.0 percent. The COVID-19 pandemic has accelerated the depreciation of the local currency, leading to a much-reduced number of remittances and less intensive foreign trade

FDI to be boosted by privatisation drive: Due to unfavourable economic and political environment, FDI inflows decreased in real terms in 2020. Nonetheless, the government moved forward with plans to boost the role of private sector in the economy, adopting the Home-Grown Reform Plan for 2020-2023 and privatizing the transportation and energy sectors. FDI, particularly from Saudi Arabia, China, the United States, and India is predicted to expand due to privatization. Ethiopia was the third-highest recipient of FDI in terms of value in East Africa in 2020, attracting significant foreign funding projects. For example, in 2020, Alibaba, the Chinese e-commerce company, introduced Ethiopian coffee to the Chinese market. While Fortescue Metals Group Ltd, the Australian company, has expressed interest in investing USD10.0 billion in Ethiopia's power sector.	Significant exposure to agricultural products: Ethiopia's economic performance is heavily reliant on the agricultural sector. As vegetable products account for about two-thirds of total exports, while agriculture accounts for more than a third of gross value added (GVA). This puts the country extremely exposed to global commodity price fluctuations, as the country's export is mainly consisting of agricultural products such as coffee, tea, and flowers. However, weather and climate disasters, such as the recent locust invasion, have a severe impact on agriculture.
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Source: Euromonitor International

Social Environment Analysis in Ethiopia

Opportunities	Challenges
Gen Z to influence discretionary spending: By 2040, the population aged 40-44, often known as Generation Z (Gen Z), is expected to continue to be the most dominating group in the top-earners band (those with an annual gross income of more than USD250,000). Furthermore, by 2040, Gen Z is expected to make up around one-third of the entire population, showing its growing significance in the consumer market.	Poverty to persist: Social Class E (the lowest income group) is expected to be the most prevalent group between 2021-2040. One-third of the population was still living in poverty by 2020 (USD3.1 a day). Research by UNICEF, approximately 88.0% of Ethiopian children are in poverty, which will have a long-term impact on consumption and economic development. Social Classes B (the upper middle level) and A (the highest income class) on the other hand are expected to show weak growth. These developments are predicted to increase income inequality and limit discretionary spending between 2021-2040.

<p>Population to grow strongly but ageing not an issue: Natural increase will account for 48.9% of Ethiopia's population growth between 2021 and 2040, while net migration will be negative for most of the period. Ethiopia will remain the Middle East and Africa's second-largest country after Nigeria when its population reaches 175 million in 2040. The country should be more attractive to consumer firms due to its large and growing consumer base, economic development, and rising earnings.</p>	<p>Health remains a problem, whilst rapid urbanisation creates challenges: Recent advancements in living standards and healthcare are set to make a significant contribution to the increase of life expectancy. However, poverty, high infant mortality, lack of clean water and sanitation, and poor healthcare will continue to affect many people. Obesity and diabetes on the other hand are expected to become more prevalent, with diabetes affecting 9.1% of the population aged 20 to 79 by 2040.</p>
<p>Over the period 2021-2040, rapid expansion in the 30 age groups will increase the ageing trend, with the median age expected to rise by over five years, just above the Middle East and Africa average. Ethiopia, on the other hand, will stay a very young country in the global context, with approximately 60.0 percent of the population under the age of 30 in 2040. If job creation maintains, robust gains in the working-age population could boost competitiveness. Meanwhile, the dependency ratio for the elderly will continue to be among the lowest in the world.</p>	<p>Between 2021 and 2040, the urban population is expected to grow at a rate more than four times that of the rural population. Meaning that the urban population will account for about a third of the overall population. Due to the rapid pace of urbanisation and migration in the major cities, household spending on housing is predicted to climb significantly by 2040 and remain the second highest expenditure category. High housing demand by 2040 may result in affordable housing shortages, while also reducing Ethiopian discretionary spending.</p>
<p>Falling but still high fertility rate: Fertility and birth rates should continue to drop as contraceptive access improves; nonetheless, they will remain quite high in the global context. Despite dropping fertility rates, the number of live births will climb every year through 2040 due to an increase in the number of women of childbearing age. As the number of children grows and incomes rise, child-related segments should see increased demand in the future.</p>	

Source: Euromonitor International

Technological Environment Analysis in Ethiopia

Opportunities	Challenges
By 2040, internet usage will have tripled: From 30.0 percent in 2020 to 90.0 percent in 2040, the percentage of the internet users is expected to increase dramatically. This can enhance technological businesses and social media usage, as well as e-commerce activities by retailers.	Rise in mobile subscriptions limited by infrastructure gaps: Even though the number of mobile phone subscribers is set to rise dramatically to 78.2 million by 2040, it will still be less for the entire population of 175 million that year. Meaning that insufficient information and communications technology (ICT) infrastructure is limiting mobile penetration growth. Smartphone ownership is also expected as result of high poverty rates, which will remain extremely expensive for a considerable part of the population, a tendency that could limit the mobile market's future growth.
Growth in fixed line network: Over the period 2012-2020, the number of fixed telephone lines in use increased, underlining the importance of network for some rural areas. Conversely, mobile technology is more accessible to Ethiopians compared to traditional fixed lines, which is anticipated to limit future expansion in the fixed line network, especially that future telecommunications capital expenditure is set to target mobile technology.	Subdued rankings point to low innovation: According to the Global Competitiveness Index (GCI) 2019, Ethiopia's scores in the Innovation Capability and ICT Adoption pillars were among the lowest in the world. Furthermore, the government's low R&D (research and development) spending (0.3 percent of GDP in 2020) demonstrates that innovation is not a priority for the government, which instead focuses on reducing poverty. Lack of IT skills, coupled by low levels of education, may limit competitiveness on the global and especially regional stage which has more superior rivals in this regard.
Privatisation could enhance telecoms sector: The government is still dominating the telecoms sector, including Ethio Telecom, Ethiopia's telecom company. Moreover, internet shutdowns on a selective basis have been common for several years. Ethiopia's technology services sector is being affected by those shutdowns, which are hindering the country's potential regional competitiveness and restricting the effectiveness of telecoms sector reform. However, under the new investment law, Ethio Telecom offered up to 40.0 percent ownership to overseas investors. In attempt to attract foreign	

<p>investors to access the market, the government plans to announce two new licences in the future. Those structural improvements in the telecommunications sector are expected to increase competition, improve accessibility, and reduce prices. Ethiopia's rating in key Network Readiness Index (NRI) pillars is likely to improve as internet and telecoms infrastructure expands. In fact, in 2020, several telecom operators such as Kenya's Safaricom, France's Orange and South Africa's Vodacom attempted to obtain those licenses. However, the submission deadline for the licenses was postponed until April 2021 as result of the COVID-19 pandemic.</p>	
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Source: Euromonitor International

3.2.1 Conclusion

In brief, Ethiopia's PEST analysis reveals that the country's political situation has been unstable, and economic freedom has remained limited. The economy is anticipated to outperform regional counterparts in the long run, thanks to increased foreign investment, however high inflation is expected to remain. Although poverty persists, the consumer market becomes more appealing as the population grows. Long-term internet usage is expected to triple; however, infrastructural constraints are limiting higher mobile penetration. The innovation capability on the other hand is still limited.

3.3 Ghana's Competitiveness Analysis through PEST

PEST analysis is a strategic management technique that helps businesses analyse risks and opportunities, evaluate market growth or decline, company position, and the potential and direction of operations, all of which can help businesses become more competitive. Therefore, the main purpose of PEST analysis is to perform an analysis of external factors that may affect the business so that firms can determine their respective strategies correctly (Euromonitor International, 2021).

Political Environment Analysis in Ghana

Opportunities	Challenges
Tax burden falling: Individual income tax rates have been decreased to 30.0%, while corporation tax rates have been reduced to 25.0 %. This is a good sign for a better tax environment for consumers, while a low tax burden for firms allows for better profit distribution and investment in corporate operations, as a result the private sector may be strengthened.	Remains ‘mostly unfree’ for Economic Freedom: According to the Index of Economic Freedom 2021, the rule of law is weak. judicial effectiveness declined, since judges don’t have enough ability and capacity to deal with their caseloads, they are subjected to political interference. Firms face a difficult environment to navigate because of bureaucracy and an inefficient regulatory environment.
	Ethnic and international tensions remain: While Ghana is generally stable in comparison to other countries in the region, ethnic disputes persist in the northern section of the country, notably among the herder and farmer population. Moreover, Ghana and Togo have a territorial dispute in the east of the country, as well as the southern coastal area near Lomé.
	Worsening corruption perceptions: Ghana's position in the Corruption Perceptions Index declined from 2015 to 2020, albeit it did improve somewhat in 2020 compared to the prior year. Despite the existence of anti-corruption legislation, graft still a serious concern, so much so that it has become an important part of election campaign promise for many politicians in the country.
	Deteriorating state finances: As a result of the COVID-19 pandemic's negative impact, Ghana's budget deficit widened significantly to more than 10.0 % of GDP, and its public debt increased to more than 77.0 % of GDP in 2020. Some funds were set aside to help the most disadvantaged households with water and power bills, as well as small and medium-sized enterprises (SMEs). Furthermore, state tax collection was subdued during 2020. Even though increased debt is unlikely to be a problem in the short term because economic stimulus will be required to mitigate the risks of a liquidity crisis, it could put further strain on the economy in the long

	run. Ghana's debt repayments, which account for nearly one-third of overall expenditures, are already a substantial burden on the country's budget as of 2020.
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Source: Euromonitor International

Economic Environment Analysis in Ghana

Opportunities	Challenges
Economy shows resilience: The COVID-19 epidemic slowed Ghana's economic growth in 2020, yet it remained positive in actual terms. Due to timely social distancing efforts, a warm climate, and a young population, the pandemic spread in the country was comparatively modest. In addition, increased global uncertainty boosted gold demand, which was Ghana's largest export commodity in 2020. The Ghanaian economy is expected to grow in the short to medium term thanks to higher exports, increased business confidence and assistance from the “Ghana COVID-19 Alleviation and Revitalization of Enterprise Support” program. Surging domestic demand by rising incomes and developing urban regions, will be another of Ghana's primary economic drivers. As a result, the economy is predicted to beat the average for the Middle East and Africa in the medium term, up to 2025.	High inflation: Owing to currency devaluation, inflation in Ghana reached double digits in 2020, which above the Bank of Ghana's target of 6.0-10.0 percent. At the beginning of 2020, Corona virus fears and higher import prices have triggered dramatic increase in food prices. In the medium run, however, the global easing of the epidemic, a stabilizing local currency, and rising food prices are likely to reduce inflationary price increases, however inflation in the short run is expected to stay higher than the Middle East and Africa average.
FDI an important economic driver: Ghana is one of Western Africa's most important investment destinations so much so that the country is competing with Nigeria for the title of regional economic hub. Despite the instability of the region and the country's rich natural resources, the political environment in the country is relatively stable. In 2020, there were no substantial delays or losses in foreign direct investment (FDI), with the energy and commodity industries continuing to attract the majority of investment. FDI intensity was above 4.0	Large exposure to global commodity prices: Ghana's economy is heavily dependent on agriculture and mining, and the country is the world's second largest cocoa producer, accounting for 40.0% of export revenues in some years. Following South Africa, Ghana is the continent's second-largest gold producer and one of the major oil producers. As a result, the Ghanaian economy is very vulnerable to global commodity price variations and demand shock such as the early phases of the COVID-19 epidemic, when oil prices crashed.

percent of GDP from 2012 to 2019, demonstrating that it is a significant driver of economic development. FDI is projected to flow to the country as the economy diversifies into industries such as agriculture and manufacturing. Despite this, a big public sector, corruption, and insufficient infrastructure continue to be obstacles to investment.	
	Unemployment to remain elevated: As a result of the COVID-19 pandemic's devastating effects, Ghana's unemployment rate increased to roughly 10% in 2020. The increases in wages in recent years can have negative impacts on both competitiveness and economy. Government's recent action of removing around 50,000 'ghost workers' from the public sector may also put upward pressure on the unemployment rate in the short to medium term which is expected to be higher than the Middle East and Africa average by 2025.

Source: Euromonitor International

Social Environment Analysis in Ghana

Opportunities	Challenges
Growing population: Natural population growth is expected to be the main factor behind Ghana's population growth until 2040, while brain drain will continue as net migration stays negative. Ghana's population is predicted to grow by 41.4 percent between 2021 and 2040, reaching 44.9 million in 2040. (This will make the country the 16th largest country in the Middle East & Africa region.). The country is expected to be more appealing to consumer firms because of its large and growing consumer base and rising income levels. However, low incomes and poverty will remain as major obstacles for consumer market potential.	Poverty and inequality to continue: In 2020, the country's lowest-income social class, Social Class E, remained dominant. Social Class E is expected to grow at the quickest rate over the period 2021-2040. In 2020, more than a quarter of the country's population lived below the national poverty line. Rapid population growth, considerable infrastructure underinvestment, limited access, and employment gap serve as the driving factors behind this situation. Therefore, the expenditure will be more on convenience goods such as food and non-alcoholic beverages. Ghana's highest-income class, Social Class A however, is expected to have the second-fastest growth rate among all socioeconomic classes by 2040. As a result, Ghana's

	income inequality is expected to prevail on a medium to long-term basis.
Ageing not an issue: Over the period 2021-2040, rising life expectancy and falling birth rates are predicted to accelerate Ghana's aging process. As a result, Ghana will continue to be a very young country in the global context, and so consumer preferences will not change dramatically. On the other hand, although the elderly group will increase, the country will continue to have a young population in regional and global terms.	Some health issues to persist: Due to growing living standards and some healthcare breakthroughs, life expectancy is expected to increase until 2040, however, it will continue much lower than the regional and the global average. Poverty, Malaria, malnutrition, infant mortality, and limited of healthcare access will continue to be important concerns. Although will be lower than the regional and the global average, obesity and diabetes prevalence should increase. As diabetes prevalence is set to increase to 3.1% by 2040.
Rapid urbanisation: Urbanization trend will continue to increase in Ghana as people continue to migrate to cities in search of opportunities. This will therefore put further strain on urban infrastructure. The urban population is expected to grow by 67.2 percent between 2021 and 2040, resulting in 68.6 percent of the total population living in urban areas. This figure is much higher than the regional average. Therefore, city-dwellers will be the targeted consumer group. While construction sector including urban infrastructure will be attraction centre for investors, as in accordance with the estimates, 100,000 housing unit are required per year to meet the housing deficit in the urban areas.	

Source: Euromonitor International

Technological Environment Analysis in Ghana

Opportunities	Challenges
Rising internet use: Internet users' percentage is predicted to rise from 50.0 percent in 2020 to 68.0 percent in 2025. Technology businesses will be able to expand their reach in Ghana as a result of this strong growth. Social media such as Facebook and Instagram and E-commerce could gain further ground in the market.	Relatively low innovation capacity: According to the Innovation Capability pillar of the Global Competitiveness Index (GCI) 2019 Ghana was more favourable compared to regional rivals and ranked as the seventh best in Sub-Saharan Africa that year. However, the country's innovation capacity remained relatively low by worldwide standards. For instance, in 2020, R&D (Research and Development) expenditure was only 0.6 percent of the GDP; similarly international co-inventions and patent were low.
More than one mobile subscription per capita: Ghana's mobile phone subscribers will reach 48.1 million by 2025, greatly exceeding the country's total population. This indicates that each person has more than one mobile subscription, pointing out the increased use of mobile devices for work. The growing number of mobile users reflects Ghana's adoption of mobile technology as the primary mode of communication. The fall in handset prices, increased competition among network providers, and the availability of faster-speed networks such as 4G are all expected to contribute to the growing trend in mobile usage.	
New digital strategy to drive e-governance: Ghana's government announced a new digital strategy in 2019, focusing on improving the country's digitalization of public services and expanding on existing services including online port system and digital passport applications. E-governance will help increasing transparency and reduce bureaucracy. More people will be able to access financial services thanks to mobile banking and online payment options.	

<p>5G launch imminent: MTN Ghana announced in August 2021 that the company will be able to establish a commercial 5G network in the country in 2022. In another announcement, MTN has also allocated a budget of \$200 million to renew its network infrastructure in the country. The sharp increase in internet usage, especially during the COVID-19 pandemic and the jump in stay-at-home orders have pushed the company to allocate this budget. 5G will give Ghana a competitive advantage in the African continent</p>	
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Source: Euromonitor International

3.3.1 Conclusion

Ghana's PEST analysis shows that the country is politically stable, but corruption is widespread, and the rule of law is weak. As a significant gold producer, Ghana has escaped the worst consequences of the Coronavirus (COVID-19) pandemic, however, the country is vulnerable to global commodity price fluctuations, as is the case with oil. Moreover, the consumer market is becoming more attractive due to a young and growing population, but inequality continues. The usage of the internet and mobile phones on the other hand is increasing, yet innovation capacity is still limited.

3.4 Comparison of the Countries' Competitiveness through PEST Analysis

To conclude, PEST analysis is a strategic technique for scanning the macro-environment, namely political, economic, social, and technical aspects, analysing risks and opportunities, market growth or decline, firm position, and potential and direction for operations. Therefore, PEST analysis is a method of analysing external factors that can affect companies' competitiveness in the market (Euromonitor International, 2021).

When the PEST analyses of Chad, Ethiopia, and Ghana are compared, the conclusion to be drawn is that Ghana and Ethiopia, respectively, are the best of these three countries. While Chad, is the worst of the three. To put it another way, Ghana is in a better position than Ethiopia and Chad. Chad, on the other hand, has a much worse position than Ethiopia. As a country with the best credit among these three countries, Ghana has a relatively strong economy and a relatively large capacity to attract foreign investment. Moreover, the consumer market in the country is becoming more attractive due to a young and growing population; internet usage is among the highest in the continent and mobile technology

is making ground. Ethiopia and Chad on the other hand are characterized by widespread corruption, dictatorial governance, threat of terrorism, endemic poverty, lack of economic freedom and limited human development.

3.5 Findings from Survey: Competitiveness in the Context of Porter's Model

This part of the study presents the survey findings and results. The questionnaire designed for the research considers both Chinese investment and Porter's (1990) theoretical framework and is composed of two parts which include open ended questions and closed-ended questions respectively. The first part (A) contains personal and professional information of the individuals surveyed. The second part (B) on the other hand includes the evaluation of the countries' competitiveness according to Porter's Diamond Framework. Following the broad questions asked at the start of the interview, participants were asked more specific questions to test all aspects of Porter's "diamond" theory.

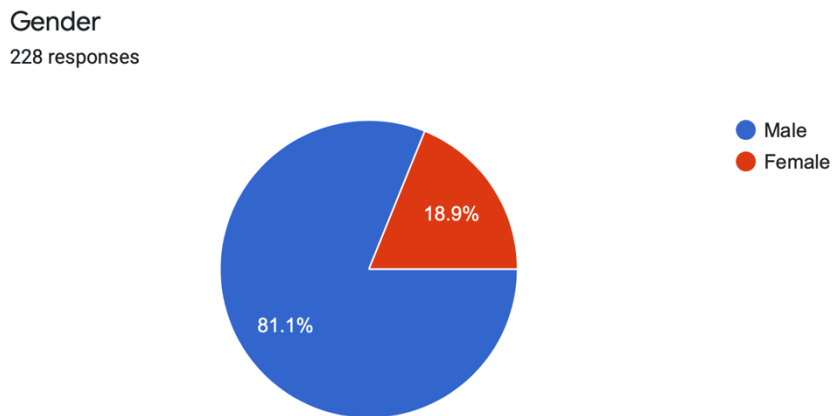
Survey: A

The results and findings from the 228 (Chad:78, Ethiopia:74 & Ghana:76) respondents are as follows:

a) Question 1: What is your gender?

Male: 185 (81.1 %) Female: 43 (18.9 %)

Figure 4. Gender Status of the Respondents



Source: Survey results obtained within the scope of the study

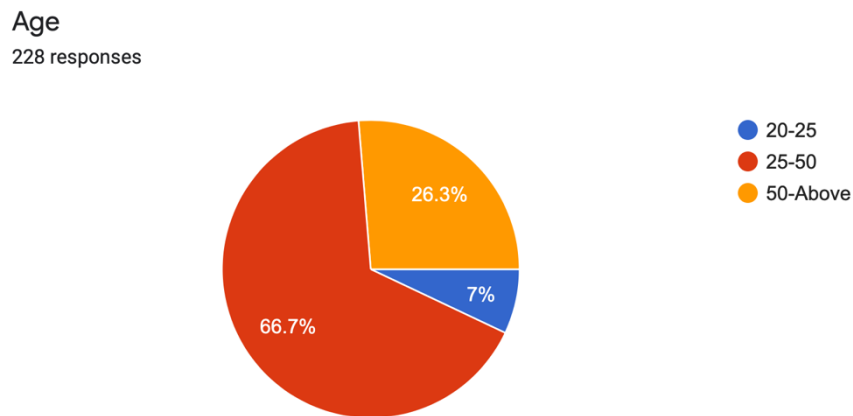
Looking at figure 4, it is apparent that participants in this survey are 185 (81.1 %) males and 43 (18.9 %) females professionals from three different countries, namely Chad, Ethiopia, and Ghana. What stands out in the chart is that there were more businessmen than businesswomen participated in this survey.

The results and findings from the 228 (Chad:78, Ethiopia:74 & Ghana:76) respondents are as follows:

a) Question 2: How old are you?

25-50: 152 (66.7 %), 50-Above: 60 (26.3 %), 20-25: 16 (7 %)

Figure 5. Age Status of the Respondents



Source: Survey results obtained within the scope of the study

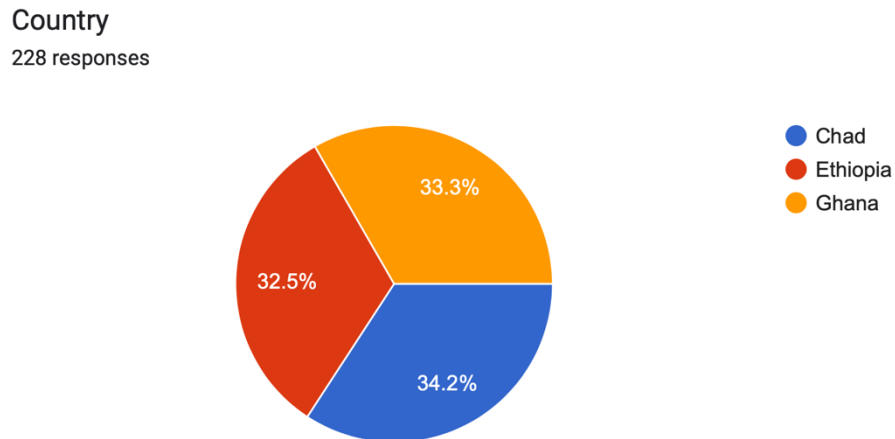
As for the age of the businessmen and businesswomen participated in the survey, the participants are aged 25-50: 152 (66.7%), 50-Above: 60 (26.3%), 20-25: 16 (7%) respectively. However, most of the respondents are aged 25-50: 152 (66.7%), 50-Above: 60 (26.3%). This shows that most of the participants are experienced expert people in their field.

The results and findings from the 228 (Chad:78, Ethiopia:74 & Ghana:76) respondents are as follows:

a) Question 3: Where are you from?

Chad:78 (34.2 %), Ghana:76 (33.3 %) & Ethiopia:74 (32.5 %)

Figure 6. Nationality of the Respondents



Source: Survey results obtained within the scope of the study

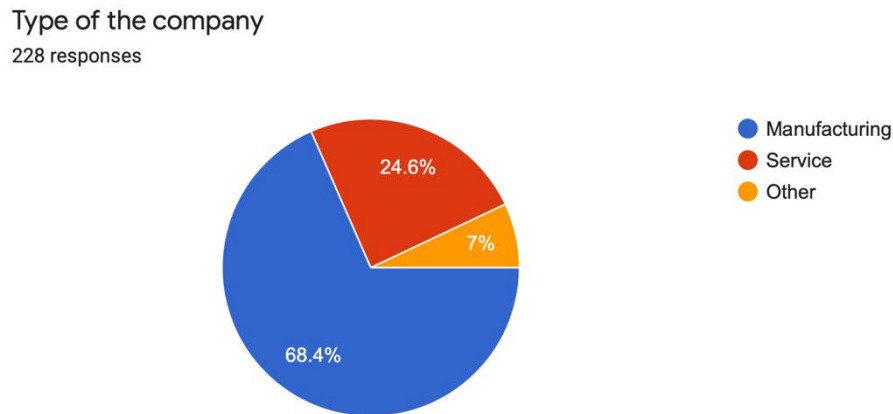
It can be seen from the data in chart that the participants are from Chad, Ethiopia, and Ghana. However, most participants surveyed, though by a small margin, are businessmen from Chad and Ghana, respectively: Chad: 78 (34.2 %), Ghana 76: 60 (33.3 %).

The results and findings from the 228 (Chad:78, Ethiopia:74 & Ghana:76) respondents are as follows:

a) Question 4: What is the type of your company?

Manufacturing: 156 (68.4 %), Service: 56 (24.6 %), Other: 70 (7 %)

Figure 7. Type of Company the Participants Work for



Source: Survey results obtained within the scope of the study

From the chart above one can see that the majority of the businessmen and businesswomen surveyed from Chad, Ethiopia, and Ghana work in either manufacturing 156 (68.4 %) or service 56 (24.6 %) companies.

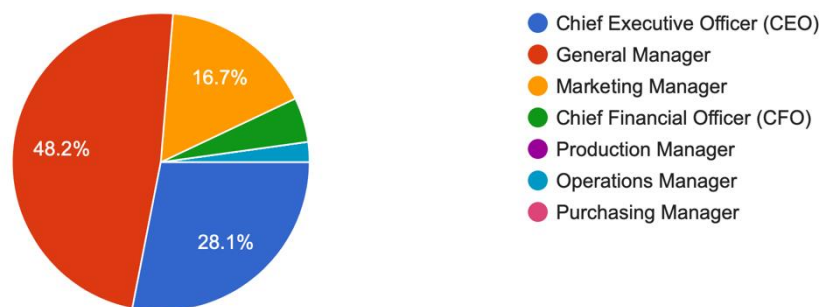
The results and findings from the 228 (Chad:78, Ethiopia:74 & Ghana:76) respondents are as follows:

a) Question 5: What is your position in the company?

General Manager: 110 (48.2 %), Chief Executive Officer (CEO): 64 (28.1 %), Marketing Manager 38 (16.7 %), Chief Financial Officer (CFO): 11 (4.8 %), Operations Manager: 5 (2.2 %), Production Manager: 0 (0 %), Purchasing Manager: 0 (0 %)

Figure 8. Position of the Respondents in the Company they Work for

Position in the company
228 responses



Source: Survey results obtained within the scope of the study

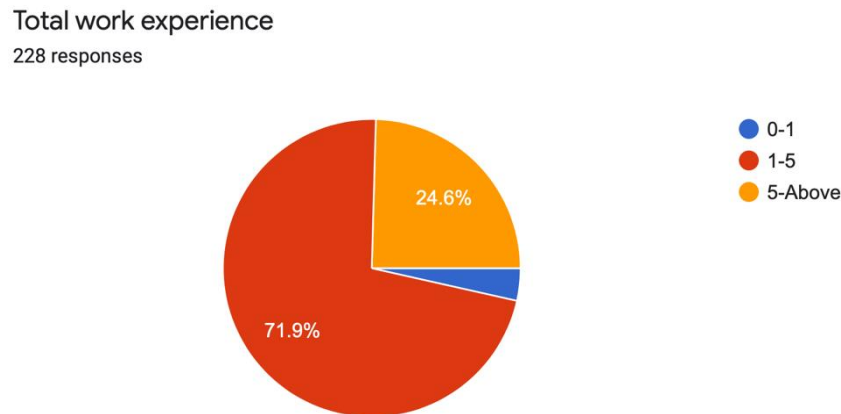
It is apparent from this chart that the people who participated in the survey are managers who have important roles in the companies they work for, and so they work as General Manager: 110 (48.2 %), Chief Executive Officer (CEO): 64 (28.1 %), Marketing Manager 38 (16.7 %), Chief Financial Officer (CFO): 11 (4.8 %), Operations Manager: 5 (2.2 %), Production Manager: 0 (0 %), Purchasing Manager: 0 (0 %) respectively. A detail investigation of the chart reveals that the individuals participated in the survey are managers who are experts in their fields.

The results and findings from the 228 (Chad:78, Ethiopia:74 & Ghana:76) respondents are as follows:

a) Question 6: What is your total work experience?

1-5: 164 (71.9 %), 5-Above: 56 (24.6 %), 0-1: 8 (3.5 %)

Figure 9. Respondents' overall Work Experience



Source: Survey results obtained within the scope of the study

In response to the question: What is your total work experience? a range of responses was elicited. However, most of those surveyed 164 (71.9 %) have indicated 1-5 years of work experience. While 56 (24.6 %) have reported 5-Above years of work experience. Only a small number of respondents, 8: (3.5 %), indicated that they have 0-1 years of work experience. These results suggest that most of the participants are experienced expert people in their field.

Survey: B

In this section of the questionnaire, respondents were asked to rate their respective countries Chad, Ethiopia, and Ghana by ranking each variable in Porter's Diamond Framework on a scale of "Very Poor" to "Very Good." In this regard, participants were required to rank factor conditions; demand conditions; firm strategy, structure, and rivalry; related and supporting industries; the role of government and chance (elements of the Diamond model). With this in mind, the study aims to test the model's (Porter's Competitive Advantage of Nations theory) validity in the context of Chinese investment in Sub-Saharan Africa, specifically Chad, Ethiopia, and Ghana. Each question in this section of the questionnaire received a total of 228 responses.

3.5.1 Chad's Competitiveness in the Context of Porter's Model

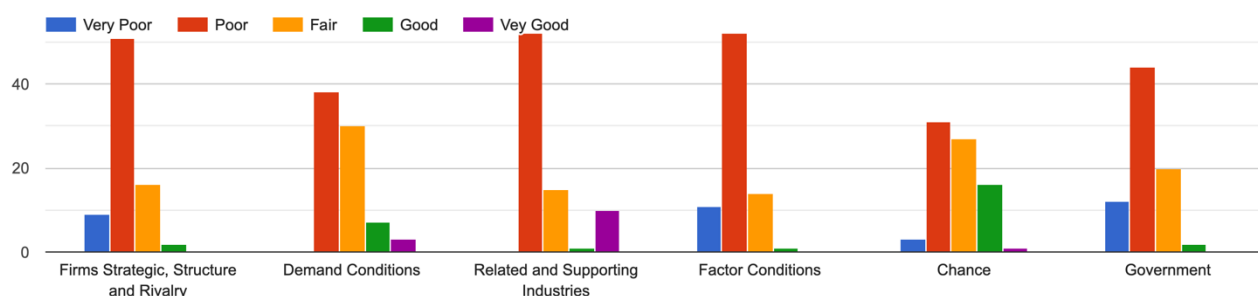
The results and findings from the 78 (60 Male - 18 Female) respondents are as follows:

b) Question 1: Can you evaluate your country by ranking each of the factors in Porter's Diamond Model?

Firm strategy, Structure, and Rivalry 51 (Poor), Demand Conditions: 38 (Poor), Related and Supporting Industries: 52 (Poor), Factor Conditions: 52 (Poor), Chance: 31 (Poor), Government 44 (Poor)

Figure 10. Chad's Competitiveness Based on Porter's Diamond Model

Chad: 78 (60 Male - 18 Female)



Source: Survey results obtained within the scope of the study

When asked to grade Chad's "Firm strategy, Structure, and Rivalry", 51 out of 78 respondents gave it a "Poor", while only 16 gave it a "Fair." As for the "Demand Conditions" factor, most respondents rated the element as "Poor" (38 out of 78) and only 30 rated it "Fair". However, when it comes to the "Related and Supporting Industries" component, the majority of individuals who replied (52 out of 78) said Chad's "Related and Supporting Industries" is "Poor," only 15 out of 78 felt it is "Fair." Similarly, over half of the participants (52 out of 78) rated Chad's "Factor Conditions" as "Poor", whereas 14 rated the element as "Fair." Again, the majority of respondents (31 out of 78) rated the "Chance" element as "Poor," with only a small number (27 out of 78) rating it as "Fair". When it comes to the "Government" component, however; most people (44 out of 78) rated Chad's "Government" as "Poor," while only 20 out of 78 rated it as "Fair."

In summary, figure 10 presents the summary breakdown of Chad's competitiveness according to Porter's Diamond Framework which include but not limited to factor conditions; demand conditions; firm strategy, structure, and rivalry; related and supporting industries; and the two subsequent factors,

the role of government and chance. What stands out in the figure is that there is common negative view amongst interviewees regarding Chad's competitiveness. So much so that all the elements in the model were evaluated as either "Poor" or "Very Poor". Therefore, the single most striking conclusion to emerge from the data is that the country is clearly uncompetitive and so lacks basic facilities for competition.

3.5.2 Ethiopia's Competitiveness in the Context of Porter's Model

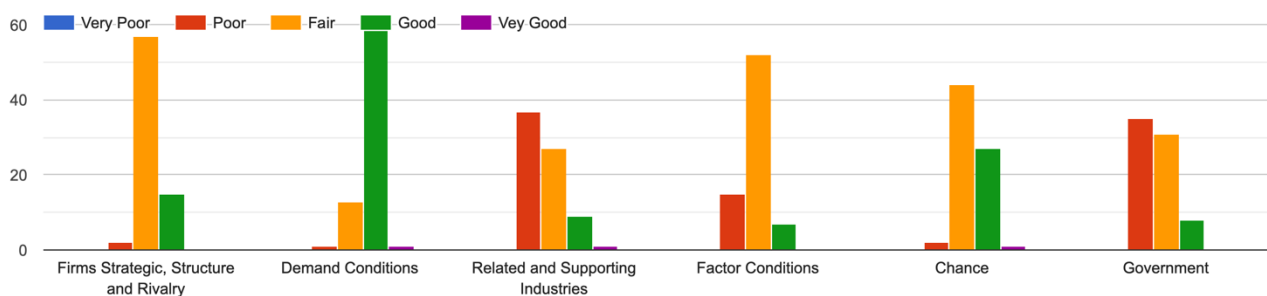
The results and findings from the 74 (63 Male - 11 Female) respondents are as follows:

b) Question 2: Can you evaluate your country by ranking each of the factors in Porter's Diamond Model?

Firm strategy, Structure, and Rivalry 57 (Fair), Demand Conditions: 59 (Good), Related and Supporting Industries: 37 (Poor), Factor Conditions: 52 (Fair), Chance: 44 (Fair), Government 35 (Poor)

Figure 11. Ethiopia's Competitiveness Based on Porter's Diamond model

Ethiopia: 74 (63 Male - 11 Female)



Source: Survey results obtained within the scope of the study

Ethiopia's "Firm strategy, Structure, and Rivalry" category received a "Fair" rating from 57 of the total 74 respondents, with only 15 rating it as "Good". However, 59 of the total 74 respondents rated Ethiopia's "Demand Conditions" category as "Good". Yet the same element received a "Fair" rating from only 13 respondents. Furthermore, the "Related and Supporting Industries" factor was rated "Poor" by the majority of respondents (37 out of 74), with only a small proportion (27 out of 74) assessing it "Fair". Nevertheless, the country's "Factor Conditions" category received "Fair" ratings from 52 of 74 respondents. With only 15 people rated this element as "Poor". Ethiopia's "Chance" category, on the other hand, was rated "Fair" by 44 of 74 respondents, however; only 27 people thought it as "Good". Besides, most respondents (35 out of 74) gave the "Government" category a "Poor" rating, with only a tiny percentage (31 out of 74) giving it a "Fair" rating.

In short, the figure 11 illustrates the rates of different categories of Ethiopia's competitiveness within the scope of Porter's Diamond Framework which include but not limited to factor conditions; demand conditions; firm strategy, structure, and rivalry; related and supporting industries; and the two subsequent factors, the role of government and chance. As shown in Figure 11, the overall rate of Ethiopia's competitiveness is negative. That is to say, almost every element of Porter's Diamond Framework is rated "Fair" or "Poor," with only the "Factor Conditions" part receiving a "Good" rating. Therefore, the most obvious finding to emerge from the analysis is that although Ethiopia is in a better position when compared to Chad in terms of competition, however; the country still needs to do more.

3.5.3 Ghana's Competitiveness in the Context of Porter's Model

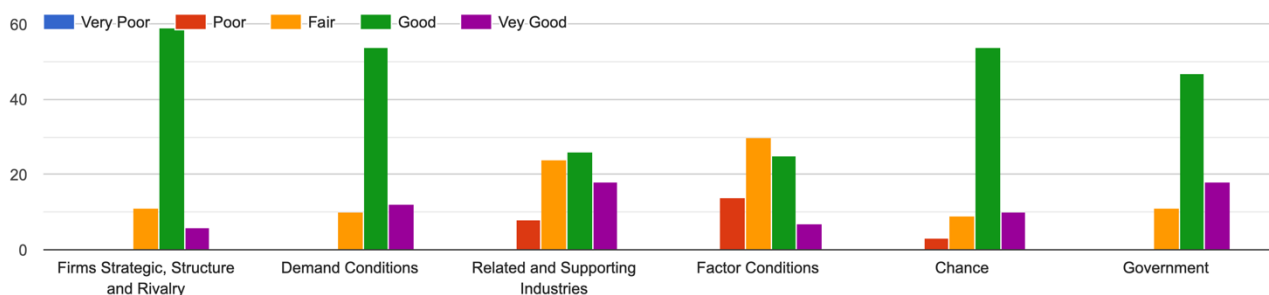
The results and findings from the 76 (66 Male - 10 Female) respondents are as follows:

b) Question 3: Can you evaluate your country by ranking each of the factors in Porter's Diamond Model?

Firm strategy, Structure, and Rivalry: 59 (Good), Demand Conditions: 54 (Good), Related and Supporting Industries: 26 (Good), Factor Conditions: 30 (Fair), Chance: 54 (Good), Government 47 (Good)

Figure 12. Ghana's Competitiveness Based on Porter's Diamond model

Ghana: 76 (66 Male - 10 Female)



Source: Survey results obtained within the scope of the study

It can be seen from the data in figure 12 that Ghana's "Firm strategy, Structure, and Rivalry" category received "Good" ratings from 59 of 76 respondents. However, only 11 respondents rated this factor as "Fair." As for the "Demand Conditions" component, majority of the individuals who replied (54 out of 76) stated that Ghana's "Demand Conditions" is "Good", while 12 out of 76 said the element is "Very Good". Furthermore, the majority of those who responded (26 out of 76) to the "Related and Supporting Industries" factor reported that Ghana's "Related and Supporting Industries" is "Good"

and 24 out of 76 the respondents rated the element as “Fair”. Nonetheless, Ghana's "Factor Conditions" category received 30 out of 76 "Fair" ratings, with 25 respondents rating it "Good “. Yet the country scored 54 of 76 "Good" grades in the "Chance" category. While a total of 10 individuals assessed the country's "Chance" as " Very Good." When asked to grade Ghana's "Government" category however, 47 of the total 76 respondents rated it as "Good". Meanwhile 18 of the respondents gave this element a "Very Good" rating.

In brief, figure 12 displays the results obtained from the preliminary analysis of Ghana’s competitiveness within the scope of Porter's Diamond Framework. What is striking about the data in this figure is that the overall rating was very positive. Because, except for the “Factor conditions” component, which was rated “Fair”, all the remaining elements were evaluated as either “Good” or “Very Good” by most of the participants. Therefore, the most obvious finding to emerge from the analysis is that Ghana is clearly in a better position in terms of competition compared to the other two countries, Chad, and Ethiopia.

3.6 Comparison of the Countries’ competitiveness through Porter's Model

In this section, the study examined the competitiveness of Chad, Ethiopia, and Ghana in the context of Chinese investment in Sub-Saharan Africa using Porter's diamond model. The analysis of the collected data revealed that Ghana and Ethiopia have the best potential to be competitive respectively. While Chad with limited resources has no potential to compete.

In this regard, the competitiveness diamond model of Ghana indicates that the country has a positive competitive factor in Firm strategy, Structure, and Rivalry: 59 (Good), Demand Conditions: 54 (Good), Related and Supporting Industries: 26 (Good), Chance: 54 (Good), Government 47 (Good). However, Ghana received a moderate level in the Factor Conditions: 30. (Fair) (see Figure 12). Moreover, the results obtained from the preliminary analysis of Ethiopia's competitiveness in relation to the model reveals that though the country has a competitive advantage in Demand Conditions: 59 (Good), on the contrary its competitiveness has been constrained by poor and fragile Related and Supporting Industries: 37 (Poor), Factor Conditions: 52 (Fair), and lack of improved Firm strategy, Structure, and Rivalry 57 (Fair), Chance: 44 (Fair), Government 35 (Poor) (see Figure 11). Besides, Chad's diamond model of competitiveness in the backdrop of Chinese investment in Sub-Saharan Africa shows that the country lacks a competitive advantage in every component of the diamond model. Indeed, all of Porter's determinants including but not limited to Firm strategy, Structure, and Rivalry 51 (Poor), Demand Conditions: 38 (Poor), Related and Supporting Industries: 52 (Poor), Factor Conditions: 52 (Poor), Chance: 31 (Poor), and Government 44 (Poor) received a negative rating

(see Figure 10). It appears that Chad's lack of an established economic structure makes it difficult for the country to achieve certain level of competitiveness. In this respect, Chad is in a worse position than Ethiopia. Consequently, the single most striking observation to emerge from the data comparison (figure 10, 11 & 12) is that Ghana has a competitive advantage over both Ethiopia and Chad, while Ethiopia has a competitive advantage over Chad.

3.7 Findings from Interviews: Impact of Chinese Investments on Global Competitiveness

The final stage of the study comprised a semi-structured interviews with professionals and experts who were aware of the Chinese investment in Sub-Saharan Africa, namely, Chad, Ethiopia, and Ghana. The interviewees were deliberately selected from these countries which included in the work. The interviewees were field's professionals and experts with a mean age of 25-50 (66.7%), 50-Above (26.3%), and 20-25 (7%) respectively. To make each interviewee feel as comfortable as possible, the interviewers were given enough space for flexibility, clarification, and discussion during the interviews. To ensure respondent confidentiality, all interviewees were assured that their comments would be kept anonymous and that the information they provided would be used solely for academic purposes. Therefore, the names of interviewees quoted in this chapter as a part of the primary data will not be revealed. Instead, they will be identified as CI (Chadian interviewee), EI (Ethiopian interviewee), and GI (Ghanaian interviewee).

3.7.1 Chad's Interview Results

The results and findings from the respondents are as follows:

- b) Question 1: To what extent do you consider Chinese investments sufficient in terms of competitiveness, do you have any suggestions?**

China's Investment and Chad's Competitiveness

When it comes to the question of whether Chinese investments are sufficient in Chad, the interviewee responded that Chinese investments are not enough. Because the Chinese investments in Chad have not reached the desired point yet.

- b) Question 2: What are your thoughts on the Chinese investments and competitiveness when considering both global and local market conditions including your company and sector?**

Effects of Chinese Investment on Chadian and Global Competitiveness

The truth is that China competes with producing countries all over the world. Today Chinese goods compete with all world products including Chad's products. One of the most important reasons why Chinese products stand out in the world market is that they are cheap. Another reason is that China offers products according to the purchasing power of its customers. For example, while it offers high quality and expensive products to a market with high purchasing power like Europe, it offers cheap and low-quality products to a market with low purchasing power like Africa.

“Chinese investments are sufficient in terms of competitiveness...Today Chinese goods compete with all world products. China offers products according to the purchasing power of its customers. It offers high quality and expensive products to Europe and offers just the opposite for the Africa” (C.I, personal communication, January 21, 2022).

- b) Question 3: What are your expectations from your authority when it comes to using investment as a tool to enforce competition?**

Expectations from Chad to Enforce Competition

For Chad, government should redesign the trade and business environment in the country. For example, trade in the country is still traditional, as business is usually done by merchants who lack know-how, innovation, and of technology. Most traders are not aware of the basic rights and responsibilities in business. Some local businessmen have no idea how to work with foreign banks, especially money transferring. In this case, government should introduce special programs and activities to raise the awareness of these businessmen, especially the uneducated ones. The government should provide expertise to assist those business owners in keeping up with the times.

“Government should redesign the country’s business: Government should promote know-how, innovation, use of technology, and carry out programs and activities to improve the local business environment as whole” (C.I, personal communication, January 21, 2022).

b) Question 4: What are your expectations from the Chinese authorities when it comes to using investment as a tool to enforce competition?

Expectations from China to Enforce Competition

As a superpower country, China uses soft power rather than hard power in its relations with other countries. Political values, culture, and foreign policy are the main pillars of its soft power. Unlike other superpowers such as U.S, China does not use hard power due to its "Non-Interference Policy," which implies that China will not intervene in any political scenario and thus will not impose its will on any other sovereign country. The United States on the other hand has directly or indirectly intervened in the political issues of many African countries. For example, it has made efforts to promote neoliberal values such as democratization, privatization, deregulation, and reductions in social spending, among others. The recent case of Sudan stands as a supreme example of such reality. As U.S has imposed economic sanctions on Sudan for years, but without much success. Within the scope of soft power, the interviewed expert added that China uses tools such as Media, humanitarian aid and educational institutes including Confucius institutes. For example, China established Hôpital de l'Amitié Tchad-Chine (HATC), formerly named as Hôpital de la Liberté in 1996, one of the largest and the most deep-rooted hospitals in Chad. Palais du 15 janvier, one of the most important symbols of the country, was also built by China in 1993. China also planted Raffinerie de Djermaya in 2015 which is one of the most important petroleum refineries in the country. Located 60 kilometres North of the capital N'Djamena, Raffinerie de Djermaya not only meets Chad's energy needs, but also sales oil throughout Central Africa. The interviewee's viewpoints are summarized in the following quote:

“China now uses soft power rather than hard power. Political values, culture, and foreign policy are the main pillars of its soft power. Within the scope of soft power, the interviewed expert added that China uses tools such as the Media, humanitarian aid and educational institutes such as Confucius Institutes” (C.I, personal communication, January 21, 2022).

b) Question 5: What are the impacts of Chinese investments on the local market and customers by considering its role in fostering competitiveness?

Effects of Chinese Investment on the Chadian Market and Customers

The interviewee from Chad used this part of the interview to highlight that Chad is a consuming country. Because most consumed goods, particularly manufactured goods such as packaged goods,

paper, textiles, machinery, clothing, and vehicles, are imported from countries such as Nigeria, Cameroon, Sudan, and China. In this scenario, local consumers are looking for high quality and affordable products at the same time.

Consumers in the country, on the other hand, have limited purchasing power due to low earnings. This being the case, China has begun to offer affordable products to consumers, including but not limited to technological devices such as cell phones, clothing, and shoes. When viewed from this aspect, one can conclude that China's presence in Chad has benefited regular customers. Especially that China introduces a wide range of products with average quality and affordable prices that suit purchasing power of the local customers. While this situation benefits consumers, it also pushes manufacturers to compete. Therefore, it is possible to say that Chinese investments and products have positive effects on the Chadian market, as it contributes to the competitive environment in the country. To explain the impacts of Chinese investment on local market, the interviewees from Chad expressed the belief that unlike developed or developing countries, the private sector in the country is very weak compared to the public sector. Because the country's overall economy remains fragile, and conflict-affected. This situation has an impact on not only employment but also the country's competitive climate. As a result, local investors are still unable to compete with foreign investors like China. The following quote summarizes the interviewee's views:

“Chad is a consuming country that generally import from countries such as Nigeria, Cameroon, Sudan, and China. Consumers in the country, on the other hand, have limited purchasing power due to low earnings. This being the case, China has begun to offer a wide range of products with average quality and affordable prices that suit the purchasing power of the local customers. All those suggest that China's presence in Chad has benefited regular customers” (C.I, personal communication, January 21, 2022).

b) Question 6: How do you see the future of Chinese investments and it's impacts on the competitiveness of your country, any comments, or suggestions for future improvements?

Future of Chinese Investment in Chad and its Impacts on Competitiveness

Even though China is currently focused on economy rather than politics, there are many question marks about the country's future direction. Many experts are now questioning whether China, which has grown stronger in Africa over time, will interfere in African politics in the future, as present superpowers such as the United States and France do, and whether China will use hard power rather than soft power. The debt policy that China has recently adopted in countries such as Kenya and Ethiopia may turn into a trap for these countries in the future. Indeed, China took over the Kilindini

Harbour Mombasa Port, the biggest port in east Africa and so China has managed the harbour in exchange for release of the debt. Moreover, China wants to have a place in Africa in the military sense. For example, China currently has a military base in Djibouti, and this number may increase in the future as African Chinese relations develop.

Yet because Chinese investors have a competitive advantage in nearly every aspect, local investors are unable to compete, which does have a negative impact on the local market's ability to improve. Instead of having an unbalanced partnership in which China benefits at the expense of the Sub-Saharan African countries, the relationship should be designed to benefit African countries too. The interviewee's viewpoints are summarized in the following quote:

“China is currently focused on economy rather than politics, however, there are many question marks regarding the country's future direction. Experts are questioning whether China will interfere in African politics in the future, and whether China will use hard power rather than soft power” (C.I, personal communication, January 21, 2022).

3.7.2 Ethiopia's Interview Results

The results and findings from the respondents are as follows:

b) Question 1: To what extent do you consider Chinese investments sufficient in terms of competitiveness, do you have any suggestions?

China's Investment and Ethiopia's Competitiveness

As a matter of fact, China has overpoweringly broken into the African market, especially Ethiopia. As it has fearlessly and unsmilingly invested in various areas and parts of the country. It made investment from construction to mining to manufacturing and financial services. The reason why Chinese investors are unfearfully investing in the continent is that they are fully supported by both China and the local governments in Africa. For instance, Chinese investors are financially supported by China while also granted some privileges in some legal and bureaucratic procedures in Africa. With this mind, China has made various agreements with the local governments in Africa to provide investment environment for its citizens. Therefore, when there is a problem, the problem remains between the countries. Chinese government provides even advocacy services to the Chinese investors in such cases.

Another important feature of Chinese investors is that they can communicate well with local businessmen and therefore they can easily establish partnerships. Because they are more business-oriented, Chinese investors use local investors as an asset to benefit from their experiences in the local

market. Due to these and similar reasons, it is possible to say that Chinese investors are doing a good job in the Ethiopian market in terms of competition. In response to the question, the interviewee highlights that:

“China has overpoweringly broken into the Ethiopian market. It has fearlessly and unsmilingly invested in various areas construction to mining to manufacturing and financial services. The reason why Chinese investors are investing in the continent is that they are fully supported legally and financially by both China and the local governments in Africa. China doing a good job in the Ethiopian market in terms of competition” (E.I, personal communication, January 14, 2022).

b) Question 2: What are your thoughts on the Chinese investments and competitiveness when considering both global and local market conditions including your company and sector?

Effects of Chinese Investment on Ethiopian and Global Competitiveness

Commenting on impacts of Chinese investment on competitiveness in Ethiopia, the interviewee emphasised that China’s investment in Ethiopia has some positive and negative aspects. One of the positive sides of China’s investment is that it opens up new employment opportunities for the local markets, especially when considering country’s huge working capacity. While also creates business spaces for local businessmen who lack resources and so desperately look to form partnerships with others. China’s investment also helps transferring technology, brings knowledge and experiences to the country which lacks experience in this regard.

The negative side is that because Chinese investors have competitive advantage in nearly all aspects, local investors cannot compete with them which negatively impact the local market to flourish, especially in the long run. As in this case, there will not be a fierce competition environment in the market.

“China's investment creates jobs and partnerships, transfers technology, brings knowledge and experiences to Ethiopia. With this, local investors cannot compete with them which negatively impact the local market to flourish, especially in the long run... and there will be no severe competition in the market in this regard” (E.I, personal communication, January 14, 2022).

On sectoral basis, however, the results have shown that there are a lot of Chinese firms operating in various sectors such as the paint industry. Even though Chinese firms do not negatively affect the local firms in the foreseeable future, however this condition may change over the long term. This is

mainly because of the demand and supply gap in the market. When asked for more specific examples, interviewees provided the following:

“In the paint industry, where my company also operates, there are many Chinese firms operating on a sectoral basis. Even though Chinese firms do not have a negative impact on local firms in the near future, this situation may change in the long run. Since there is a demand-supply mismatch in the market” (E.I, personal communication, January 14, 2022).

b) Question 3: What are your expectations from your authority when it comes to using investment as a tool to enforce competition?

Expectations from Ethiopia to Enforce Competition

In response to Question 3, the interviewee indicated that African governments should support local businessmen and help increase local firms' capacities. Government should encourage entrepreneurialism and provide loans, financial supports, tax exemption and investment incentives for the local investors. Governments should organize exchange programs that allow local investors to gain overseas experiences by meeting with investors from other countries including China. Such initiatives can not only provide local investors with opportunities to share experiences with colleagues from around the world, but also keep them up to date on the latest developments in their respective industries. These moves will also help balancing China's market domination in Ethiopia, while at the same time creating fair competitive environment, especially when considering the local investors who mostly suffer from China's superiority in the local market.

“African governments should support locals by encouraging entrepreneurialism, organising experience share programs as well as providing loans, financial supports, tax exemption and investment incentives for the locals. Such moves will help creating fair competitive environment in the country” (E.I, personal communication, January 14, 2022).

b) Question 4: What are your expectations from the Chinese authorities when it comes to using investment as a tool to enforce competition?

Expectations from China to Enforce Competition

Several discourses regarding China's presence in Africa have been developed in the recent times. For example, China is recently accused of invasion in Africa. This is mainly because of the so-called Debt-trap Diplomacy. Debt-trap diplomacy is mainly used to describe a case in which a creditor country or organization extending debt to a borrowing country to boost the lender's political leverage. Similarly, China tends to extend high interest rate loan and credit to some African countries so as to

bring them under control in the future. In fact, the recent case of Kenya can be cited as evidence for this claim. As China took over the Kilindini Harbour Mombasa Port, the biggest port in east Africa and the only international seaport in Kenya. China managed the harbour because Kenya could not pay off the debt. Therefore, China has managed the harbour in exchange for release of the debt.

The reinvasion of Chinese workers to the local market is another worth-pondering issue in recent years. The Chinese labourers who are mainly paid lesser wages than the local African workers are brought to work in place of the locals. Such behaviour will not help the local workers who should be included in the process and trained as technicians, unskilled or semi-skilled labourers to contribute to the local economy. With this, China should act as a partner rather than an opponent in its engagement with the continent. There should be sense of right and wrong and sense of decency in the relation and so China should not act solely in line with its self-interest in the continent. In short, the interviewee expressed the belief that:

“China is recently accused of invasion, mainly because of the so-called Debt-trap Diplomacy. In fact, the recent case of Kenya is shown as evidence for this claim. The reinvasion of Chinese workers to the local market is another issue...In this case, China should not act solely in line with its self-interest in its relationship with the continent” (E.I, personal communication, January 14, 2022).

b) Question 5: What are the impacts of Chinese investments on the local market and customers by considering its role in fostering competitiveness?

Effects of Chinese Investment on the Ethiopian Market and Customers

Talking about impacts of Chinese investment on local market and customers in Ethiopia, the interviewee expressed that know-how, innovation, and technology transfer are the main assets that can positively contribute to competitive environment in the country if the local government establish an environment that is based on mutual gain and trust. Another advantage is that because Chinese products are generally of poor quality, local manufacturers can win the competition, especially when they offer quality products. However, due to its raw material inventory advantage and economies of scale, China continues to outperform the competition. The interviewee cited the following example to explain why China's low quality cannot compete with locally produced high-quality products:

“For example, in the paint industry where my firm operates, customers prefer the products we produce in the country much more than the Chinese products. Despite this, China still beat the competition thanks to its raw material inventory and economies of scale” (E.I, personal communication, January 14, 2022).

b) Question 6: How do you see the future of Chinese investments and its impacts on the competitiveness of your country, any comments, or suggestions for future improvements?

Future of Chinese Investment in Ethiopia and its Impacts on Competitiveness

In response to the question: ‘How do you see the future of Chinese investments and its impacts on the competitiveness of your country, any comments, or suggestions for future improvements? the interviewee highlights that:

“Considering the current course, one can argue that Chinese investments in Ethiopia and Africa will increase in the future. However, I think that China-Africa link should be a win-win type of relationship” (E.I, personal communication, January 14, 2022).

3.7.3 Ghana’s Interview Results

The results and findings from the respondents are as follows:

b) Question 1: To what extent do you consider Chinese investments sufficient in terms of competitiveness, do you have any suggestions?

China's Investment and Ghana's Competitiveness

In response to Question 1, the interviewee indicated that China is mostly operating in the retail sector. For instance, China has made significant shopping mall investments in Ghana. Even in the mining sector, prior to the arrival of the China, people were primarily engaged in manual mining until the China arrived and introduced sophisticated machinery. This process has been accelerated by the presence of new technology. As nearly every gold-bearing region in Ghana has been discovered thanks to Chinese influence and technology. The interviewee explained how Chinese investments in Ghana had changed the game:

“Prior to the coming of the Chinese to Ghana, people were mainly doing manual type of mining until the Chinese came to introduce sophisticated equipment in the mining sector... Places before then we never even thought of now with the influence of the Chinese has made it possible for mining to be discovered in otherwise unknown environment” (G.I, personal communication, January 09, 2022).

In explaining the role played by technology, the interviewee also added that:

“In terms of positive aspects, the Chinese have introduced technology that was previously unknown. A technology which has made it possible for new discoveries in otherwise unknown places that we normally never thought of having gold there, now we have discovered almost every part of Ghana that has gold deposit” (G.I, personal communication, January 09, 2022).

However, one must admit that the introduction of those sophisticated equipment to the Ghanaian territory came with its own negative consequence. The environment has been damaged because of the kind of tools used by China, and people have begun to express their dissatisfaction with the situation. For instance, the mining activities took place in the forest has destroyed the water bodies which are also having negative consequences for the time being, and possibly in the future. When asked for more specific examples, interviewees provided the following:

“The impact on the environment is so severe. As China is aggressively operating in forests and natural places, the water bodies and the aquatic animals in the country are being destroyed and we know for sure that if the last three dies mankind can no longer survive. Yes, to a larger extend China has impacted us in both positive and negative ways” (G.I, personal communication, January 09, 2022).

In fact, according to estimates, if precautions are not taken, almost all of Ghana's water bodies will be destroyed within the next few years. As major rivers, such as the Oti and Ofin, have been negatively impacted. It should not be forgotten that Ghana's top export commodity is cocoa, followed by gold, and that these two commodities generate a significant portion of the country's revenue. As a result, the more the country mines, the more revenue it generates; however, a cost-benefit analysis shows that Ghana may benefit today, but there is a risk in the future. Therefore, Ghana must take a step back and consider these environmental consequences. The following quote summarizes interviewee views regarding the first question:

“In accordance with the estimates, in the next couple of years all most all of Ghana’s water bodies as well big rivers such as Oti River, Ofin River are going to be destroyed if care is not taken. Therefore, if you do the balancing in terms of cost-benefit analysis you can see that we may benefit today but in the future the danger is there. So, there is a need for Ghana to pause a little bit and think about these environmental consequences” (G.I, personal communication, January 09, 2022).

b) Question 2: What are your thoughts on the Chinese investments and competitiveness when considering both global and local market conditions including your company and sector?

Effects of Chinese Investment on Ghanaian and Global Competitiveness

As stated before, China has now started investing in retail sector, almost all household items in the Ghanaian market are either made in China or supplied from China. Before the Chinese presence, most of the Ghanaian traders were traveling to China, but in recent times, China itself is coming down to establish businesses in the country. China is now competing with indigens and so there is no space in

the market. The interviewee does believe that such trend is not limited to Ghana, but also applies to almost the entire Sub-Saharan African region. Because the current trend in Africa is that China is invading those countries and so definitely having impact on the local markets. The local market is therefore unable to compete with China, particularly in household items, where China benefits from large-scale production, economies of scale, and tax breaks provided by the local governments. All these factors help reducing the cost of production to a considerable extent.

“The China has now started investing in retail sector, especially household items. In recent times the Chinese are coming to establish businesses in Ghana. Now China is competing with indigens and there's no space in the market. Such trend is not only limited to Ghana, but it also applies to almost all Sub-Saharan Africa. The common trend is that Chinese are invading these countries and so definitely having impact on the local markets” (G.I, personal communication, January 09, 2022).

In terms of competition, however, China uses pricing as one of the strategies in breaking down the competitors in the local market. Therefore, when viewed from this perspective, those are so much on the indigens, and so China is taking businesses away from them. When one looked at the other way around, profits that are made in the end transferred from Ghana to China. To highlight the impacts of Chinese investment on the local markets, the interviewee asked:

“Who benefits at the end of the day? The local market is rather helping Chinese market to be stronger whereas the Ghanaian market becomes weaker” (G.I, personal communication, January 09, 2022).

b) Question 3: What are your expectations from your authority when it comes to using investment as a tool to enforce competition?

Expectations from Ghana to Enforce Competition

The expeditions for now are that going forward, the Chinese are still going to be aggressive. The indigenes on the other hand have come to realize that the presence of the Chinese has positive and negative aspects. Indigenes have also come to realize that if care is not taken the local market will soon collapse. For this reason, there has recently been agitation on the local level as people put pressure on the government to act. For the sake of example, recently, local manufacturers and traders who primarily import from China and the Far East objected to the government's decision to grant importers a lower tariff regime. The government defends its move by claiming that local manufacturers were unable to meet local demand. However, because the local manufacturers were very strong and determined, the government had to give up and so reversed its decision. The following quote summarizes the interviewee's views:

“The local were complaining: How can you give cheaper tariff to the importers when we can also produce to satisfy the local market?... Therefore, the intention was that both local manufacturers and the government were trying to minimize the influence the Chinese which is seen in almost every part of the economy. Because it has long-term negative effects on the economy” (G.I, personal communication, January 09, 2022).

b) Question 4: What are your expectations from the Chinese authorities when it comes to using investment as a tool to enforce competition?

Expectations from China to Enforce Competition

First and foremost, business is supposed to be a win-win type of relationship. As far as the Saharan African countries are concerned, they have opened their doors to everything coming from China. However, the reverse is not the same. As African products are still not given a fair chance to enter the Chinese market. If this relationship is to last, China will have to open its doors and perhaps allow some African products free access to the local market, as it does in Africa. In this regard, both raw materials as well as processed products should be allowed. If that cannot be granted, then the relationship may not last long. China on the other hand aware that Africans are pressing for equal access to the Chinese market. In this case, China must listen to those critics if it wants to continue to keep its market share in Sub-Saharan Africa.

“Africa has opened its door to China; however, the reverse is not the same. African products are not still given fair space to enter the Chinese market, and this cannot continue. If this relationship will last for a longer period, then China will have to open its door and perhaps allow some African products to have free access to the local market as China does in Africa” (G.I, personal communication, January 09, 2022).

So far China tends to import raw materials rather than processed products. Especially that China has huge industries that requires raw materials. For example, most of quality furniture made in China are raw woods that are generally taken from Africa. Currently China has been importing raw wood called Rosewood, one of the rarest woods in the world. What makes these Rosewood trees valuable is that they take about a hundred years to mature. The unfortunate reality is that the Rosewood trees are only grown in the dry part of Ghana which raise about possible environmental effects in the country. Therefore, these woods may bring revenue to the country in the short term; however, they may lead up to some negative consequences including environmental problems in the long-term.

“There will be a fair balance when especially allow African finish goods enter the market, this will benefit the Sub-Saharan countries as well. Because finished products have more value than the raw materials, especially in terms of prices etc.” (G.I, personal communication, January 09, 2022).

b) Question 5: What are the impacts of Chinese investments on the local market and customers by considering its role in fostering competitiveness?

Effects of Chinese Investment on the Ethiopian Market and Customers

For the consumers, one must admit that most of the Chinese products are cheap relative to the European products, namely low-end goods. China’s strong presence in the African market has made it possible for many African people to have access to certain facilities, products as well as technological devices including mobile phones. Another aspect is that Chinese products are relatively affordable, and less low-quality products that cannot last for quiet long time (short life items). In other words, China provides consumers with low-cost, but short-life products.

“Because of China's presence in the African market, many Africans now have affordable access to various facilities, products, and technological devices such as mobile phones and so on” (G.I, personal communication, January 09, 2022).

6- How do you see the future of Chinese investments and it’s impacts on the competitiveness of your country, any comments, or suggestions for future improvements?

Future of Chinese Investment in Ghana and its Impacts on Competitiveness

The respondent from Ghana forecasted that China will continue to have a strong presence in the African market. Because, like it or not, the world's power has shifted to China, particularly given China's enormous global market impact. China has now surpassed the United States in almost every aspect of trade and investment. For this reason, China will continue to act in accordance with its competitive advantage in the global economy. Even when viewed through the lens of Porter's Model, China now has competitive advantage not only in terms of supply and demand conditions, but also in terms of structure and rivalry. As Porter also stated, these are the primary determinants that contribute to the creation of a national environment in which businesses can emerge and learn how to compete. However, as China benefits from its competitive advantage, it must be mindful of the rights of others so that the relationship can always been a win-win situation. In this case, China will benefit and so the Sub-Saharan African countries which are mostly at the weaker end of the relationship. Instead of being a lopsided relation where China has advantage over the Sub-Saharan countries, the relationship should be structured in such way that benefit all. That is to say, there should be a sense of balance in the cooperation.

“China will continue to have a strong presence in the African market. However, instead of being a lopsided relationship in which China has an advantage over Sub-Saharan African countries, the relationship should be structured in such a way that all parties benefit” (G.I, personal communication, January 09, 2022).



CHAPTER FOUR: CONCLUSION AND RECOMMENDATIONS

4.1 Conclusions

To conclude, the study used Porter's diamond model to examine the competitiveness of Chad, Ethiopia, and Ghana in the context of Chinese investment in sub-Saharan Africa and the impact of Chinese investments on global competitiveness in general, Chad, Ethiopia, and Ghana in particular. Findings from the survey and later from in-depth interviews reveal several discourses regarding China's presence in the continent:

1- In terms of competitiveness sufficiency, collected data from the semi-structured interviews has shown that China has overpoweringly broken into the African market. It has fearlessly and unsmilingly invested in various areas from construction to mining to manufacturing and financial services. Despite some negative environmental consequences such as damage to forests and water bodies, the introduction of new technologies has accelerated this process. The reason why Chinese investors are investing in the continent is that they are fully supported legally and financially by both China and the local governments in Africa. As a major investor, China doing a good job in the African market in terms of competition.

2- Regarding the effects of Chinese investment on Africa's and the world's competitiveness, the analysis of the collected data revealed that Chinese investments are sufficient in terms of competitiveness. As today Chinese goods compete with all world products. Moreover, China's investments create jobs and partnerships, transfer technology, bring knowledge and experiences to Africa including Chad, Ethiopia, and Ghana. Domestic investors on the other hand are unable to compete with China, which could have negative influence on both local market and competitiveness. For instance, the local market is unable to compete with China in household items where China benefits from large-scale production, economies of scale, and tax breaks provided by the local governments. With this, China uses pricing as one of the strategies in breaking down competitors in the local market. China also provides products based on the purchasing power of its customers. For example, it offers high-quality, expensive products to Europe while doing the inverse for Africa.

3- The information gathered from the semi-structured interviews also reveals that local governments are expected to support locals by encouraging entrepreneurialism, organising experience share programs as well as providing loans, financial supports, tax exemption and investment incentives for the locals. Governments should also promote know-how, innovation, use of technology, and carry out

programs and activities to improve the local business environment. Such moves are expected to help create fairer competitive environment in the continent.

4- Moreover, there are several expectations from Chinese authorities in terms of competition enforcement. Data analysis revealed that China employs soft power rather than hard power in its relations with other countries due to its "Policy of Non-Interference". The main pillars of China's soft power are political values, culture, and foreign policy. Within the scope of soft power, China uses tools such as Media, humanitarian aid and educational institutes including but not limited to Confucius Institutes. Yet, several discourses regarding China's presence in Africa have been developed in the recent times. For example, China is recently accused of invasion, mainly because of the so-called Debt-trap Diplomacy. In fact, the recent case of Kenya is shown as evidence for this claim. The reinvasion of Chinese workers to the local market is another worth-pondering issue in recent years. The Chinese labourers who are mainly paid lesser wages than the local African workers are brought to work in place of the locals. With this, China should act as a partner rather than an opponent in its engagement with the continent. There should be sense of right and wrong and sense of decency in the relation and so China should not act solely in line with its self-interest in the continent.

5- Talking about the impacts of Chinese investment on local market and customers, the interviewees expressed that know-how, innovation, and technology transfer are the main assets that can positively contribute to competitive environment in the continent. Despite this, China still beat the competition thanks to its raw material inventory and economies of scale. Consumers in the continent, on the other hand, have limited purchasing power due to low earnings. This being the case, China offers a wide range of products with average quality and affordable prices that suit the purchasing power of the local customers. This has enabled many Africans to have access to certain facilities, products, and technological devices such as mobile phones. When viewed from this aspect, China's presence in continent has benefited the local customers. However, because the Chinese products are relatively affordable, they are less low-quality products that cannot last for quiet long time (short life items).

5- It is forecasted that China will continue to have a strong presence in the African market. Especially that China has now surpassed the United States in almost every aspect of trade and investment. For this reason, China will continue to act in accordance with its competitive advantage in Africa. China is currently focused on economy rather than politics, however, there are many question marks regarding the country's future direction. Experts are questioning whether China will interfere in African politics in the future, and whether China will use hard power rather than soft power. The debt policy that China has recently adopted in countries such as Kenya and Ethiopia may turn into a trap for these countries in the future. Indeed, China took over the Kilindini Harbour Mombasa Port, the

biggest port in east Africa and so it has managed the harbour in exchange for release of the debt. Instead of being a lopsided relationship in which China has an advantage over Sub-Saharan African countries, the relationship should be structured in such a way that all parties benefit.

6- However, when the three competing countries of Chad, Ethiopia, and Ghana are compared, the single conclusion to be drawn from the survey and later from the in-depth interviews in this study is that Ghana and Ethiopia have the best potential to be competitive, respectively. While Chad with limited resources has no potential to compete. This is all to say that Ghana has a competitive advantage over Ethiopia and Chad. Ethiopia, on the other hand, has a competitive advantage over Chad. Therefore, Chad is in a worse position than Ethiopia. It appears that Chad has been unable to compete due to a lack of a well-established economic system.

4.2 Implications

The study's findings highlight key elements that could have a significant impact on Sub-Saharan Africa's economic development. Having used Porter's (1990) diamond model as a framework to examine factors affecting Chad, Ethiopia, and Ghana's competitiveness in the context of Chinese investment, it is crucial to emphasise that the elements of Porter's (1990) model have the potential to help these countries improve competitiveness and contribute to economic development. However, because competitiveness policy is comprehensive in nature, the implications and recommendations presented here are much more focused on infrastructure and the overall structure of the economy. As a result, the study's findings have several important implications for future practice.

1- Economic openness should be increased through more liberalised economic policies, as openness is widely acknowledged as a key factor in FDI inflows as well as fostering competitiveness. Removing investment and trade restrictions such as taxes, quotas, exchange controls, and embargoes should be the first step to be taken in this regard. International organisations and partners such China can also help improve and stabilise democratic institutions in the continent.

2- The private sector is the portion of the economy that is controlled or financed by private institutions or individuals. In the private sector, the primary goal of business is to make a profit. The private sector, however, offers products and services, generates tax revenues to fund basic social and economic infrastructure, and finds new and inventive solutions to aid in development. Given the positive and statistically significant effect of the private sector on competitiveness and economic growth, Sub-Saharan African countries, especially Chad should prioritise private sector development. Private sectors can be enhanced by reviewing existing investment legislation and introducing

incentives including but not limited to tax relief, legal arrangements, privatisations. While doing so, it is important to keep the public and private sectors in harmony. As public-private sector consultation has proven to be tremendously beneficial in increasing the efficacy of government policy and investment decisions.

3- To better use the abundance of natural resources and attract foreign investment, countries with natural resources should pursue policies aiming to completely liberalize (privatize) natural resource sectors. Natural resource-related conflicts and instability must be addressed to maximise natural resource development and production while encouraging a fair distribution of income.

4- Some of the major goals of governments are to increase wealth, reduce unemployment, improve job quality, reduce inequalities, protect the natural environment, assist firms in gaining a competitive advantage, and so on. However, different measures can be used by governments to impact the business environment including but limited to taxation, competition policy, government purchasing practices, inflation, protections, export incentives, and environmental regulations. As such, governments of Sub-Saharan Africa should play an active role in creating and promoting business-friendly environments, if they want to attract more foreign investment and boost competitiveness. Governments can help firms gain competitiveness by providing finance, research, information, professional advice, and trainings as well as developing infrastructure. However, before all of these, fundamental obstacles such as political instability, corruption, and poor governance must be addressed.

5- As is known, infrastructure capacity is extremely important for competitiveness and economic development. Infrastructure services such as transportation, communication, water, and power systems are critical for keeping up with economic changes brought about by industrialization, urbanisation, and globalisation. In this regard, Africa should benefit from China's technology and experience. Therefore, infrastructure investment from China should be prioritised, however, it must be ensured that these investments are long-term (sustainable). The private sector should also provide alternative sources for infrastructure investment in this regard. For example, the private sector can promote the use of renewable energy sources including solar, wind, and hydropower.

6- Serious attention should be paid to human resource development if competitiveness and economic development are to be achieved. Human capital accumulation is key in attracting FDI, as investors prefer to invest in markets with dynamic, high-quality, and experienced workforce. However, it is possible to have a healthy workforce by focusing on future industries with the ability to compete in the global market. To achieve this, both local governments and the private sector must work together

to foster and strengthen university-industry collaboration for research and development, skills development, and innovation. Governments also should allocate adequate resources to science and technology education including information technology and digital technologies, as well as other knowledge-based resources.

7- China's presence in the continent has recently raised several concerns. As China has recently been accused of debt trap diplomacy, labour importation, environmental mismanagement, destruction of democracy and human rights, market dominance, and local competition destruction. Some critics have even raised concerns about "neo-colonialism." Given all these concerns, China must recognise that investing in other countries is more than just making profits; it is also fulfilling social and moral obligations, and the failure to do so will harm not only China's reputation, but also the trust of African governments and people. Consequently, China should not act solely for its own self-interest on the continent, but for the mutual benefit and win-win outcomes of all parties. Instead of having an unbalanced partnership in which China benefits at the expense of Sub-Saharan African countries, the relationship should be designed to benefit all sides.

8- The principal theoretical implication of this study is that it contributes to the development of competitiveness measurement by using Porter's Model. As this study marks the first attempt to test the validity of the model (Porter's Competitive Advantage of Nations theory) within the context of Chinese investment in Sub-Saharan Africa, particularly Chad, Ethiopia, and Ghana. Future studies on the current topic are therefore recommended.

4.3 Recommendations

First and foremost, it must be mentioned that the findings of this investigation support the hypothesis that the diamond framework can be used to analyse the competitive advantage of Sub-Saharan African countries like Chad, Ethiopia, and Ghana. Moreover, the study further contributes to the growing body of evidence that Chinese FDI in Sub-Saharan Africa is vertical in nature (resource-seeking). It should also be noted that, because competitiveness policy is so broad in scope, the policies recommended here are much more focused on infrastructure and the overall structure of the economy.

1- Africa-China relationship should be built on common economic values such as mutual gain, mutual trust, mutual respect, and so on.

2- The investments should be strategic, well-planned, and directed to priority areas such as infrastructure and agriculture. However, it must be ensured that these investments are sustainable and environmentally friendly.

3- A business-friendly environment should be established to attract more investment and increase competition. That is to say that governments should create favourable market conditions that are a win-win situation for Africa and investors alike.

4- The investments should transfer knowledge, technology, and experience to the continent. The investments should specifically provide African workers with the opportunity to gain knowledge, skills, and experience in this regard.

5- Instead of the public sector, where local governments have greater state control over economies, the private sector should be prompted not only to create alternatives, but also to foster competitiveness in local markets.

6- Human resource development must receive significant attention, as investors prefer to invest in markets with a dynamic, high-quality, and experienced workforce.

7- Social responsibility should be considered in the investments made. As a result, companies should make efforts to operate in ways that benefit society and the environment rather than destroy them.

8- Further research should be conducted using Porter's Model to investigate the effects of Chinese investment on the global competitiveness of other African countries not mentioned in this study.



APPENDICES

APPENDIX 1. English Version of the Questionnaire

English

Investigating the Impacts of Chinese Investments on the Global Competitiveness of Sub-Saharan countries by using Porter's Diamond model

I Part: Open Ended Questions (*):

Please answer the below questions in detail as much as possible.

- 1- To what extent do you consider Chinese investments sufficient in terms of competitiveness, do you have any suggestions?
- 2- What are your thoughts on the Chinese investments and competitiveness when considering both global and local market conditions including your company and sector?
- 3- What are your expectations from the Chinese authorities when it comes to using investment as a tool to enforce competition?
- 4- What are your expectations from your authority when it comes to using investment as a tool to enforce competition?
- 5- What are the impacts of Chinese investments on the local market and customers by considering its role in fostering competitiveness?
- 6- How do you see the future of Chinese investments and its impacts on the competitiveness of your country, any comments, or suggestions for future improvements?

Note: The aim of this research is to evaluate the impacts of Chinese investments on the global competitiveness of sub-Saharan countries, which is carried out by Imam Hissein Alio, a master student at İstanbul Ticaret University, Turkey. Within the scope of the research, your answers to the questionnaire will not be shared with any third person or institution. The data obtained through this questionnaire will remain confidential and will only be used for scientific purposes. It is essential to protect personal privacy in the survey. Your participation in the research is on a voluntary basis. You can refuse to participate in the research, or you have the right to withdraw at any time after participating in the research.

Thank you for participating in the questionnaire.

II Part: Closed-ended questions

Evaluate the following statements for your country by ranking the below items from very poor to very good	Very poor	Poor	Fair	Good	Very good
Firms strategic, structure and rivalry					
1-the plans of the company regarding the significance and intensity of competitiveness for getting into overseas markets 2-organization chart regarding the type of ownership 3-organization chart regarding management approaches 4-organization chart regarding decision making process 5- the viewpoint of high-ranking managers regarding the success of domestic industry in export					
Demand condition					
1-The purchasing power of overseas customers 2-variety and combination of demand 3-the size of overseas market 4-distribution of overseas market 5-the growth rate of overseas demand 6-terms and conditions of product distribution overseas 7-terms of sale and delivery overseas 8-terms and conditions of after sale services (warrant and guarantee) overseas					
Related and supporting industries					
1-The capability of organizations in each process of the value chain 2-the technological maturity of the country (production, export, marketing process etc.) 3-the quality of communication between various institutions such as universities, organizations and research institutes and Chinese investors and their support 4- the condition of related industries such as electric power, transportation, and communication as well as manufacturers of spare parts					
Factor condition					
1-The process and convenience of supplying raw material 2-access to infrastructures like fuel and other forms of energy 3-access to transportation regarding export 4-cultural and social values regarding the culture of change and trade with foreigners 5-wages and expectations of human resources 6-efficiency and work culture of human resources 7-workers' knowledge and proficiency 8-Knowledge and expertise of the experts and specialists					
Chance					
1-international sanctions 2-the amount of foreign investment 3-the importance of the strategic situation of the country in the area 4-company financial crisis 5-currency fluctuation in global markets 6-oil shocks and the influence of investment 7-the attitude of international community towards the country and its FDI and decisions taken by world unions and foreign groups					
Government					
1-General plans of FDI for competing with other countries 2-investment risks and fluctuation in the value of money and economic growth 3-government's international affairs (agreements, contracts, and cooperation) 4- changes in inflation rate and fluctuation on interest rate and change of return rate of investment due to government performance 5-change in currency rate and causing local financial fluctuations by government 6-financial policies to support investment such as credit guarantee and financial institutions 7-government's conditions in supporting domestic investors regarding taxes and tariffs 8-government's rules to support and encourage investment domestically and overseas					

Note: The aim of this research is to evaluate the impacts of Chinese investments on the global competitiveness of sub-Saharan countries, which is carried out by Imam Hissein Alio, a master student at Istanbul Ticaret University, Turkey. Within the scope of the research, your answers to the questionnaire will not be shared with any third person or institution. The data obtained through this questionnaire will remain confidential and will only be used for scientific purposes. It is essential to protect personal privacy in the survey. Your participation in the research is on a voluntary basis. You can refuse to participate in the research, or you have the right to withdraw at any time after participating in the research.

Thank you for participating in the questionnaire.

APPENDIX 2. Turkish Version of the Questionnaire

Turkish

Çin Yatırımlarının Sahra Altı Ülkelerinin Küresel Rekabet Gücü Üzerindeki Etkilerinin Porter'in Elmas Modeli ile İncelenmesi

I. Bölüm: Açık Uçlu Sorular

Lütfen aşağıdaki soruları mümkün olduğunca ayrıntılı olarak cevaplayınız.

- 1- Çin yatırımlarını rekabetçilik açısından ne derece yeterli görüyorsunuz, önerileriniz olur mu?
- 2- Hem küresel hem de şirket sektörünüz gereği Çin yatırımları ve rekabetçilik üzerine düşünceleriniz nelerdir?
- 3- Rekabetçilik açısından yatırımların yönlendirilmesi konusunda Çin yetkililerinden beklentileriniz nelerdir?
- 4- Rekabetçilik açısından yatırımların yönlendirilmesi konusunda kendi ülkeniz yetkililerinden beklentileriniz nelerdir?
- 5- Rekabetçilik açısından Çin yatırımlarının yerel pazar ve müşteriler üzerinde ne gibi etkileri vardır?
- 6- Çin yatırımlarının geleceğini ve gelecekte ülkenizin rekabet gücüne olan etkilerini nasıl görüyorsunuz, herhangi bir yorumunuz veya gelecekte yapılacaklar için önerileriniz var mı?

Not: Bu çalışma İstanbul Ticaret Üniversitesi'nde yüksek lisans öğrencisi olan İmam Hissein Alio tarafından yürütülmekte olup Çin yatırımlarının Sahra Altı Ülkelerinin Küresel Rekabet Gücü Üzerindeki Etkilerini Porter'in Elmas Modeli ile incelemektedir. Araştırma kapsamında ankete vereceğiniz cevaplar hiçbir üçüncü kişi veya kurumla paylaşılmayacaktır. Bu anket yoluyla elde edilen veriler gizli kalacak ve sadece bilimsel amaçlarla kullanılacaktır. Ankette kişisel gizliliğin korunması esastır. Araştırmaya katılımınız gönüllülük esasına dayalıdır. Araştırmaya katılmayı reddedebilir veya araştırmaya katıldıktan sonra istediğiniz zaman geri çekilme hakkınız vardır.

Ankete katıldığınız için teşekkür ederiz.

II. Bölüm: Kapalı uçlu Sorular

Aşağıdaki maddelere göre ülkenizi “çok zayıf” tan “çok iyiye” doğru değerlendiriniz.	çok	zayıf	Ort	iyi	çok
Strateji, Yapı ve Rekabet (Firms strategic, structure and rivalry)					
1-Şirketin yurtdışı pazarlara açılmak için rekabet gücünün önemi ve yoğunluğuna ilişkin planları					
2- Mülkiyet türüne ilişkin organizasyon şeması					
3-Yönetim yaklaşımlarına ilişkin organizasyon şeması					
4-Karar verme sürecine ilişkin organizasyon şeması					
5- Üst düzey yöneticilerin yerli sanayinin ihracattaki başarısına bakışı					
Talep koşulları (Demand condition)					
1-Yurtdışı müşterilerin satın alma gücü					
2-Çeşitlilik ve talep kombinasyonu					
3-deniz aşırı pazarın büyüklüğü					
4-Yurt dışı pazar dağıtımı					
5-Yurtdışı talebin büyüme hızı					
6-Yurt dışına ürün dağıtım şartları					
7-Yurtdışı satış ve teslimat şartları					
8-Yurtdışı satış sonrası hizmetler (garanti) şart ve koşulları					
İlişkili ve destekleyici sektörler (Related and supporting industries)					
1-Değer zincirinin her sürecinde kuruluşların kapasitesi					
2-Ülkenin teknolojik olgunluğu (üretim, ihracat ve pazarlama süreci ile ilgili)					
3-Üniversiteler, kuruluşlar ve araştırma enstitüleri gibi çeşitli kurumlar ile Çinli yatırımcılar arasındaki iletişimin kalitesi ve destekleri					
4- Elektrik, ulaşım, haberleşme gibi ilgili sektörler ile yedek parça imalatçıların durumu					
Faktör Koşulları (Factor condition)					
1-Hammadde tedarik süreci ve kolaylığı					
2-Yakıt ve diğer enerji türleri gibi altyapılara erişim					
3-Ihracatla ilgili ulaşım erişim					
4-Değişim kültürü ve yabancılarla ticaret ile ilgili kültürel ve sosyal değerler					
5-İnsan kaynaklarının maaşları ve beklentileri					
6-İnsan kaynaklarının verimliliği ve çalışma kültürü					
7-İşçi bilgisi ve yeterliliği					
8-Uzman ve uzmanların bilgi ve birikimleri					
Şans etkinlikleri (Chance)					
1-Uluslararası yaptırımlar					
2-Yabancı yatırım miktarı					
3-Ülkenin bölgedeki stratejik durumunun önemi					
4 Şirket mali krizi					
5-Küresel piyasalarda kur dalgalanması					
6-Petrol şokları ve yatırımın etkisi					
7-Uluslararası toplumun ülkeye ve doğrudan yabancı yatırımlara karşı tutumu ve dünya birlikleri ve yabancı gruplar tarafından alınan kararlar					
Hükümet (Government)					
1-Diğer ülkelerle rekabet etmek için Doğrudan Yabancı Yatırımın genel planları					
2-Yatırım riskleri ve paranın değerinde dalgalanma ve ekonomik büyüme					
3-Hükümetin uluslararası ilişkileri (anlaşmalar, sözleşmeler ve iş birliği)					
4- Hükümet performansına bağlı olarak enflasyon oranındaki değişiklikler ve faiz oranındaki dalgalanma ve yatırım getiri oranındaki değişiklik					
5-Döviz kurunun değişmesi ve hükümet tarafından yerel finansal dalgalanmalara neden olması					
6-Kredi garantisi ve finans kurumları gibi yatırımları destekleyecek finansal politikalar					
7-Devletin vergi ve tarifeler konusunda yerli yatırımcıları destekleme koşulları					
8-Devletin yurt içi ve yurt dışı yatırımları destekleme ve teşvik etme kuralları					

Not: Bu çalışma İstanbul Ticaret Üniversitesi'nde yüksek lisans öğrencisi olan İmam Hissein Alio tarafından yürütülmekte olup Çin yatırımlarının Sahra Altı Ülkelerinin Küresel Rekabet Gücü Üzerindeki Etkilerini Porter'in Elmas Modeli ile incelemektedir. Araştırma kapsamında ankete vereceğiniz cevaplar hiçbir üçüncü kişi veya kuruma paylaşılmayacaktır. Bu anket yoluyla elde edilen veriler gizli kalmak ve sadece bilimsel amaçlarla kullanılacaktır. Ankette kişisel gizliliğin korunması esastır. Araştırmaya katılımınız gönüllülük esasına dayalıdır. Araştırmaya katılmayı reddedebilir veya araştırmaya katıldıktan sonra istediğiniz zaman geri çekilme hakkınız vardır.

Ankete katıldığınız için teşekkür ederiz.

Appendix 3. Arabic Version of the Questionnaire

Arabic

آثار الاستثمارات الصينية على القدرة التنافسية العالمية لدول جنوب الصحراء باستخدام نموذج الماسة لـ Porter

الجزء الأول: أسئلة مفتوحة

- ١- إلى أي مدى تعتبر الاستثمارات الصينية كافية من حيث القدرة التنافسية، هل لديك أي اقتراحات؟
- ٢- ما هي أفكارك حول الاستثمارات الصينية والقدرة التنافسية مع الأخذ بالاعتبار كل من ظروف السوق العالمية والمحلية بما في ذلك شركتك وقطاعك؟
- ٣- ما هي توقعاتك من السلطات الصينية عندما يتعلق الأمر باستخدام الاستثمار كأداة لفرض المنافسة؟
- ٤- ما هي توقعاتك من السلطات المحلية في بلدك فيما يتعلق باستخدام الاستثمار كأداة لفرض المنافسة؟
- ٥- ما هي تأثيرات الاستثمارات الصينية على السوق المحلي والمستهلكين من خلال النظر في دور هذه الاستثمارات في تعزيز القدرة التنافسية؟
- ٦- كيف ترى مستقبل الاستثمارات الصينية وتأثيرها على القدرة التنافسية لبلدك، أي تعليقات أو اقتراحات للتحسينات المستقبلية؟

ملحوظة: الهدف من هذا البحث هو تقييم آثار الاستثمارات الصينية على القدرة التنافسية العالمية لدول جنوب الصحراء باستخدام نموذج الماسة لبورتر، والذي يقوم به إمام حسين عليو، طالب ماجستير في جامعة اسطنبول التجارية، تركيا. ضمن نطاق البحث، لن يتم مشاركة إجاباتكم على الاستبيان مع أي شخص ثالث أو مؤسسة. ستبقى البيانات التي تم الحصول عليها من خلال هذا الاستبيان سرية ولن تستخدم إلا للأغراض العلمية. من الضروري حماية الخصوصية الشخصية في الاستطلاع. مشاركتكم في البحث تكون على أساس تطوعي. يمكنكم رفض المشاركة في البحث، أو يحق لكم الانسحاب في أي وقت بعد المشاركة في البحث.

شكرا لمشاركتكم في الاستبيان.

الجزء الثاني: أسئلة مغلقة

رقم	اسم	نوع	مستوى	نوع	رقم
1	خطوط الشركة فيما يتعلق بأهمية وشدة القدرة التنافسية للدخول إلى الأسواق الخارجية -1				
2	الهيكل التنظيمي لنوع الملكية -2				
3	مخطط تنظيمي بخصوص مناهج الإدارة -3				
4	مخطط تنظيمي لعملية اتخاذ القرار -4				
5	وجهة نظر كبار المديرين في نجاح الصناعة المحلية في التصدير -5				
شروط الطلب (Demand condition)					
1	القوة الشرائية للعملاء في الخارج -1				
2	تنوع وتولية الطلب -2				
3	حجم السوق الخارجية -3				
4	توزيع الأسواق الخارجية -4				
5	معدل نمو الطلب الخارجي -5				
6	شروط وأحكام توزيع المنتج في الخارج -6				
7	شروط البيع والتسليم للخارج -7				
8	أحكام وشروط خدمات ما بعد البيع (الضمان والضمان) في الخارج -8				
الصناعات ذات الصلة والداعمة (Related and supporting industries)					
1	قدرة المنظمات في كل عملية من سلسلة القيمة -1				
2	(النضج التكنولوجي للدولة (فيما يتعلق بعمليات الإنتاج والتصدير والتسويق -2				
3	جودة الاتصال بين المؤسسات المختلفة كالجوامع والمنظمات ومعاهد البحث والمستثمرين الصينيين ودعمهم -3				
4	حالة الصناعات ذات الصلة مثل الطاقة الكهربائية ، والنقل ، والاتصالات ، وكذلك الشركات المصنعة لقطع الغيار -4				
شروط العامل (Factor condition)					
1	عملية وراحة توريد المواد الخام -1				
2	الوصول إلى البنية التحتية مثل الوقود وأنواع الطاقة الأخرى -2				
3	الحصول على وسائل النقل الخاصة بالتصدير -3				
4	القيم الثقافية والاجتماعية فيما يتعلق بثقافة التغيير والتجارة مع الأجانب -4				
5	أجور وتوقعات الموارد البشرية -5				
6	كفاءة وثقافة عمل للموارد البشرية -6				
7	معرفة وكفاءة العاملين -7				
8	معرفة وخبرة الخبراء والمتخصصين -8				
الصدفة (Chance)					
1	العقوبات الدولية -1				
2	حجم الاستثمار الأجنبي -2				
3	أهمية الوضع الاستراتيجي للدولة في المنطقة -3				
4	أزمة مالية للشركات -4				
5	تقلبات أسعار العملات في الأسواق العالمية -5				
6	الصدمات النفطية وتأثير الاستثمار -6				
7	موقف المجتمع الدولي من الدولة واستثماراتها الأجنبية المباشرة والقرارات التي اتخذتها الاتحادات العالمية والجماعات الأجنبية -7				
دور الحكومة (Government)					
1	الخطط العامة للاستثمار الأجنبي المباشر للتنافس مع الدول الأخرى -1				
2	مخاطر الاستثمار وتقلبات قيمة المال والنمو الاقتصادي -2				
3	(الشؤون الدولية الحكومية (اتفاقيات وعقود وتعاون -3				
4	التغيرات في معدل التضخم وتقلبات أسعار الفائدة وتغير معدل عائد الاستثمار نتيجة الأداء الحكومي -4				
5	التغير في سعر العملة والتسبب في تقلبات مالية محلية من قبل الحكومة -5				
6	السياسات المالية لدعم الاستثمار مثل ضمان الائتمان والمؤسسات المالية -6				
7	شروط الحكومة في دعم المستثمرين المحليين فيما يتعلق بالضرائب والتعريفات -7				
8	القواعد الحكومية لدعم وتشجيع الاستثمار محلياً وخارجياً -8				

ملحوظة: الهدف من هذا البحث هو تقييم آثار الاستثمارات الصينية على القدرة التنافسية العالمية لدول جنوب الصحراء باستخدام نموذج الماسة ليورتر ، والذي يقوم به إمام حسين عليو ، طالب ماجستير في جامعة اسطنبول التجارية ، تركيا. ضمن نطاق البحث، لن يتم مشاركة إجاباتكم على الاستبيان مع أي شخص ثالث أو مؤسسة. ستبقى البيانات التي تم الحصول عليها من خلال هذا الاستبيان سرية ولن تستخدم إلا للأغراض العلمية. من الضروري حماية الخصوصية الشخصية في الاستطلاع. مشاركتكم في البحث تكون على أساس تطوعي. يمكنكم رفض المشاركة في البحث، أو يحق لكم الانسحاب في أي وقت بعد المشاركة في البحث.

شكرا لمشاركتكم في الاستبيان.

Appendix 4. Statistical Summary of Chad

	2015	2016	2017	2018	2019	2020
Inflation (% change)	4.8	-1.6	-0.9	4.0	-1.0	4.5
Exchange rate (per US\$)	591.59	593.07	581.98	555.81	586.07	575.70
GDP (% real growth)	1.8	-6.4	-2.4	2.3	3.0	-0.8
GDP (National currency millions)	6,916,770.0	6,158,629.0	6,035,358.0	6,316,526.1	6,604,192.0	6,420,239.9
GDP (US\$ millions)	11,691.9	10,384.3	10,370.4	11,364.6	11,268.6	11,152.1
Birth rate (per '000)	43.7	43.2	42.7	42.2	41.7	41.2
Death rate (per '000)	12.8	12.5	12.3	12.1	11.9	11.7
No. of households ('000)	1,781.7	1,846.3	1,912.4	1,980.2	2,050.0	2,122.2
Total exports (US\$ millions)	2,426.0	2,090.1	2,621.3	3,160.3	3,204.9	2,623.3
Total imports (US\$ millions)	3,700.0	2,465.4	1,851.2	2,550.3	2,666.4	2,675.5
Urban population ('000)	3,177.1	3,302.1	3,432.5	3,569.0	3,712.3	3,863.4
Population aged 0-14 (%)	47.8	47.6	47.3	47.0	46.8	46.5
Urban population (%)	22.5	22.7	22.9	23.1	23.3	23.5
Population aged 15-64 (%)	49.7	50.0	50.2	50.5	50.7	51.0
Population aged 65 (%)	2.4	2.4	2.5	2.5	2.5	2.5
Male population (%)	49.9	49.9	49.9	49.9	49.9	49.9
Female population (%)	50.1	50.1	50.1	50.1	50.1	50.1
Life expectancy male (years)	51.7	52.0	52.3	52.6	52.8	53.1
Life expectancy female (years)	54.6	54.9	55.1	55.4	55.7	55.9
Infant mortality (deaths per '000 live births)	85.6	83.5	81.6	79.6	77.8	76.0
Adult literacy (%)	40.0	40.6	41.1	41.5	41.9	42.2

Source: Euromonitor International 2022

Appendix 5. Statistical Summary of Ethiopia

	2015	2016	2017	2018	2019	2020
Inflation (% change)	10.1	7.3	9.9	13.2	15.5	20.6
Exchange rate (per US\$)	20.58	21.73	23.93	27.63	29.28	35.02
GDP (% real growth)	10.4	7.6	9.6	6.8	8.4	6.1
GDP (National currency millions)	1,297,961.4	1,568,097.5	1,832,786.0	2,200,120.6	2,690,751.4	3,374,349.2
GDP (US\$ millions)	63,078.7	72,157.7	76,604.3	79,631.7	91,899.5	96,342.7
Birth rate (per '000)	33.6	33.2	32.8	32.3	31.9	31.4
Death rate (per '000)	7.0	6.8	6.7	6.6	6.4	6.3
No. of households ('000)	22,261.2	22,956.4	23,659.2	24,369.5	25,087.7	25,813.9
Total exports (US\$ millions)	2,913.5	2,809.1	3,111.3	2,704.0	2,740.0	3,257.5
Total imports (US\$ millions)	16,702.3	16,384.3	15,560.8	15,305.8	14,560.0	13,117.0
Urban population ('000)	19,590.3	20,581.9	21,609.8	22,678.3	23,788.7	24,941.3
Population aged 0-14 (%)	42.2	41.7	41.2	40.7	40.3	39.9
Urban population (%)	19.4	19.9	20.3	20.8	21.2	21.7
Population aged 15-64 (%)	54.4	54.9	55.3	55.8	56.2	56.5
Population aged 65 (%)	3.5	3.5	3.5	3.5	3.5	3.5
Male population (%)	50.0	50.0	50.0	50.0	50.0	50.0
Female population (%)	50.0	50.0	50.0	50.0	50.0	50.0
Life expectancy male (years)	63.2	63.6	64.0	64.4	64.7	65.0
Life expectancy female (years)	66.9	67.4	67.8	68.2	68.5	68.9
Infant mortality (deaths per '000 live births)	40.9	39.2	37.5	35.9	34.3	32.7
Adult literacy (%)	49.1	50.4	51.8	52.4	53.0	53.6

Source: Euromonitor International 2022

Appendix 6. Statistical Summary of Ghana

	2015	2016	2017	2018	2019	2020
Inflation (% change)	17.2	17.5	12.4	9.8	8.7	9.9
Exchange rate (per US\$)	3.72	3.91	4.35	4.59	5.22	5.60
GDP (% real growth)	2.1	3.4	8.1	6.2	6.5	0.4
GDP (national currency millions)	183,525.6	219,594.6	262,798.0	308,587.4	356,544.3	383,486.1
GDP (US\$ millions)	49,397.9	56,165.2	60,404.5	67,272.0	68,338.0	68,518.9
Birth rate (per '000)	30.7	30.3	29.8	29.4	29.0	28.6
Death rate (per '000)	7.7	7.5	7.4	7.3	7.2	7.1
No. of households ('000)	6,642.2	6,883.1	7,123.4	7,362.2	7,598.5	7,831.9
Total exports (US\$ millions)	10,320.6	11,136.9	13,834.9	14,942.7	15,667.5	14,471.5
Total imports (US\$ millions)	13,579.1	12,910.2	12,647.1	13,134.1	13,381.4	12,428.6
Urban population ('000)	15,062.5	15,593.6	16,135.3	16,687.4	17,249.1	17,820.0
Urban population (%)	54.1	54.7	55.4	56.1	56.7	57.3
Population aged 0-14 (%)	38.2	38.0	37.8	37.6	37.4	37.1
Population aged 15-64 (%)	58.8	59.0	59.2	59.4	59.5	59.7
Population aged 65 (%)	3.0	3.0	3.0	3.1	3.1	3.1
Male population (%)	50.6	50.7	50.7	50.7	50.7	50.7
Female population (%)	49.4	49.3	49.3	49.3	49.3	49.3
Life expectancy male (years)	61.8	62.1	62.4	62.7	63.0	63.2
Life expectancy female (years)	63.7	64.1	64.5	64.9	65.2	65.5
Infant mortality (deaths per '000 live births)	43.1	41.9	40.8	39.8	38.8	37.8
Adult literacy (%)	76.6	77.5	78.3	79.0	79.5	79.9

Source: Euromonitor International 2022

REFERENCES

- Abdullahi, H. (2020). *The Assessment of Chinese Commercial Diplomacy and Investment in Africa: Nigeria Case Study*. (Unpublished master's thesis). Istanbul Commerce University. Istanbul. Türkiye.
- Adam, A. (2018). Are We Witnessing a 'New Scramble for Africa'? Retrieved from <https://www.aljazeera.com/opinions/2018/3/27/are-we-witnessing-a-new-scramble-for-africa/>
- Aistleitner, M. (2016). *Assessing the Competitiveness of Shipbuilding Industries in China and South Korea: A Comparative Analysis Based on Porter's Diamond Model*. (Unpublished master's thesis). University of Vienna. Vienna, Austria.
- Al-Ubaydli, O. (2020). Understanding How the Coronavirus Affects the Global Economy: A Guide for Non-Economists. *Munich Personal RePEc Archive (MPRA)*, 1(1), 1- 58. Retrieved from <https://mpa.ub.uni-muenchen.de/99642/>
- Alden, C. (2007). *China in Africa (African Arguments Series)*. New York & London: Zed Books.
- Alden, C., & Alves, A.C. (2009). 'China and Africa's Natural Resources: The Challenges and Implications for Development and Governance. *Braamfontein: South African Institute of International Affairs*. 25(2), 4-26.
- Alemu, H. W. (2010). *Analysis of the Competitiveness of Ethiopian Textile Sub-Sector Under Africa Growth and Opportunity Act (AGOA) Using Porter Diamond Model*. (Unpublished master's thesis). University of Greenwich, London, The United Kingdom.
- Alesina, A., Ardagna, S., Nicoletti, G., & Schiantarelli, F. (2005). Regulation and investment. *Journal of the European Economic Association*, 3(4), 791–825.
- Andersson, G & Odlander, M. (2014). *Information and Communication Technology (ICT) in Kenya: Exploring the Possibilities of a Prosperous Market*. (Unpublished master's thesis). University of Gothenburg, Gothenburg, Sweden.
- Anna, C & Danilova, M. (2018). Trump's New Africa Strategy Takes Sharp Aim at China, Russia. Retrieved from: <https://apnews.com/article/north-america-international-news-john-bolton-politics-china-8481ba1ead434041b199accff1550d92>
- Arlbjorn, J. S., & Halldorsson, A. (2002). Logistics Knowledge Creation: Reflections on Content, Context, and Processes. *International Journal of Physical Distribution & logistics Management*, 32(1), 22-40.
- Arslan, N. & Tatlidil, H. (2012). Defining and Measuring competitiveness: A Comparative Analysis of Turkey with 11 Potential Rivals. *International Journal of Basic and Applied Sciences*, 12 (2), 31-43.

- Arun, A. (2018). Competition: The Importance of Trying Harder. Retrieved from <https://medium.com/@lodfod/competition-the-importance-of-trying-harder-1eab76c1870f>
- Astarlioğlu, M. (2012). Moderating Effect of Porter's Diamond Framework Between Firm Strategies and Export Performance: A Conceptual Model. *EUL Journal of Social Sciences*, 3 (2), 35-64. Retrieved from <https://dergipark.org.tr/en/pub/euljss/issue/6282/84321>
- Bain J. (1956). *Barriers to New Competition: Their Character and Consequences in Manufacturing Industries*. Massachusetts: Harvard University Press.
- Bashiri, M.S., Baziyar, M. Balakshahi, A & Mojib, L.P. (2013). Analysis of Various Aspects of Olive Exports Based on Porter's Diamond Model. *Singaporean Journal of Business Economics and Management Studies*, 1(6), 103-111.
- Bbaala, P. (2015). Emerging Questions on the Shifting Sino-Africa Relations: 'Win-Win' or 'Win-Lose'? *Africa Development / Afrique et Développement*, 40(3), 97-119.
- Brautigam, D. (2009). *The Dragon's Gift: The Real Story of China in Africa*. Oxford: Oxford University Press.
- Brautigam, D. (2016). *Will Africa Feed China?* Oxford: Oxford University Press.
- Breivik, A. L. (2014). *Determinants of Chinese FDI in Africa: An Econometric Analysis* (Unpublished master's thesis). The University of Bergen, Bergen, Norway.
- Brown, C. P. (2018). Trade Policy Toward Supply Chains After the Great Recession. *IMF Economic Review*, 66(3), 602-616.
- Bruin, L. D. (2018). Porter Diamond Model: Why Some Nations are Competitive, and the Others are not. Retrieved from <https://www.business-to-you.com/porter-diamond-model/>.
- Bucci, A. (2005). An inverted-U relationship Between Product market Competition and Growth in an Extended Romerian Model. *Rivista di Politica Economica*, 95(9/10), 1- 27.
- Campbell, H. (2008). China in Africa: Challenging US global hegemony. *Third World Quarterly*, 29(1), 89-105.
- Cann, O. (2016). What is competitiveness? Retrieved from <https://www.weforum.org/agenda/2016/09/what-is-competitiveness/>
- Carroll, A. (2018). Some Thoughts on President Trump's Strategy for Africa. Retrieved from <https://www.cfr.org/blog/some-thoughts-president-trumps-strategy-africa>
- Clark, J. and Guy, K. (1998) "Innovation and Competitiveness: A Review". *Technology Analysis & Strategic Management*, 10 (3), 363-395.
- DEİK (Dış Ekonomik İlişkiler Kurulu). (2017). Çad Ülke Bülteni. Retrieved from <https://www.deik.org.tr/uploads/cad-b44.pdf>
- DEİK (Dış Ekonomik İlişkiler Kurulu). (2021). Çad Cumhuriyet. Retrieved from <https://www.deik.org.tr/uploads/cad-infografik.pdf>

- Dube, C. (2009). The Relationship Between Competition and Investment. Retrieved from http://www.cuts-ccier.org/pdf/The_Relationship_between_Competition_and_Investment.pdf
- Dunning, J. H. (1993). Internationalizing Porter's diamond. *MIR: Management International Review*, 33 (2), 7-15.
- Euromonitor International. (2021). PEST Analysis: Chad. Retrieved from <https://www.euromonitor.com/pest-analysis-chad/report>
- Euromonitor International. (2021). PEST Analysis: Ethiopia. Retrieved from <https://www.euromonitor.com/pest-analysis-ethiopia/report>
- Euromonitor International. (2021). PEST Analysis: Ghana. Retrieved from <https://www.euromonitor.com/pest-analysis-ghana/report>
- Ewelukwa Ofodile, U. (2008). Trade, Empires, and Subjects - China-Africa Trade: A New Fair-Trade Arrangement, or the Third Scramble for Africa. *Vanderbilt Journal of Transnational Law*, 41(2), 505-583.
- Fathi, A., & Ahmadian, S. (2016). Competitiveness of the Iran Automotive Industry for Entrancing into Foreign Markets. *Procedia Economics and Finance*, 36 (2016), 29-41.
- Food and Agriculture Organization (FAO). (2019). Ghana at a glance. Retrieved from <https://www.fao.org/ghana/fao-in-ghana/ghana-at-a-glance/en/>
- Free World Maps. (2021). Chad Physical Map [Image]. Retrieved from <https://www.freeworldmaps.net/africa/chad/map.html>
- Free World Maps. (2021). Ethiopia Physical Map [Image]. Retrieved from <https://www.freeworldmaps.net/africa/ethiopia/map.html>
- Free World Maps. (2021). Ghana Physical Map [Image]. Retrieved from <https://www.freeworldmaps.net/africa/ghana/map.html>
- Gebrehiwot, B. A., Gebreeyesus, M., & Weldesilassie, A. B. (2020). Chinese Investment in Ethiopia: Contribution, Challenges, Opportunities and Policy Recommendations. *PSI Research Report*, 34 (34), 1-48.
- Global Security. (2016). Chad - China Relations. Retrieved from <https://www.globalsecurity.org/military/world/africa/cd-forrel-prc.htm>
- Gonondo, J. (2021). Confucius Institute and the Development of Chinese Language Teaching in Cameroon. *Journal of Education and Practice*, 12 (3), 34-39.
- Guijarro, O. G. (2022). China and Africa, A Geopolitical Pairing that Works. Retrieved from <https://atalayar.com/en/content/china-and-africa-geopolitical-pairing-works>

- Huang, S & Askary, H. (2022). China-Africa Belt and Road Cooperation in Education: Development and Prospects. Retrieved from <https://www.brixsweden.org/china-africa-belt-and-road-cooperation-in-education-development-and-prospects/>
- Jackson, R. & Sørensen, G. (2013). *Introduction to International Relations: Theories and Approaches*. Oxford: Oxford University Press.
- Kharub, M. & Sharma, R.K. (2016). Investigating the Role of Porter Diamond Determinants for Competitiveness in MSMEs. *International Journal of Quality Research*, 10(3), 471-486.
- Khemani, R. S., & Carrasco-Martin, A. (2008). The Investment Climate, Competition Policy, and Economic Development in Latin America. *Chi.-Kent L. Rev*, 83(1), 67-83.
- Konsolas, I. (1999). *The Competitive Advantage of Nations: The case of Greece*. (Unpublished doctoral dissertation). University of London, London, The United Kingdom.
- La Falce, J. L., De Muylder, C. F., & Santos, M. F. (2020). Competitiveness: Theoretical Reflections and Relation with Innovation. *Revista Horizontes Interdisciplinares da Gestão*, 4(2), 1-21.
- Lin, J. Y. (2011). From Flying Geese to Leading Dragons: New Opportunities and Strategies for Structural Transformation in Developing Countries. Retrieved from <https://www.wider.unu.edu/sites/default/files/AL15-2011.pdf>
- Lipsey, R. E. (2006). Measuring the Impacts of FDI in Central and Eastern Europe. Retrieved from https://www.nber.org/system/files/working_papers/w12808/w12808.pdf
- Makuei, A. J. G. (2019). Impacts of Chinese Investment on Economic Growth in Sub-Sahara Africa (2007-2017). *INTL: Economic & Financial Issues, Advance online publication*. doi:10.2139/ssrn.3576348
- McRee, A. N. (2002). *An Analysis of Sub-Saharan Africa's Textile and Apparel Industries*. (Unpublished master's thesis). North Carolina State University, North Carolina, The United States.
- Ministry of Commerce of the People's Republic of China (2018). Report on Development of China's Outward Investment (China's Ministry of Commerce). Retrieved from <http://english.mofcom.gov.cn/index.shtml>
- Mitschke, A. (2008). *The International Competitiveness of Nations. The Influence of National Competition Policy on the International Competitiveness of Nations: A Contribution to the Debate on International Competition Rules*. New York: Physica Heidelberg.
- Mutasa, H. (2018). Russia Competes with World Powers in Africa Investments. Retrieved from <https://www.aljazeera.com/news/2018/03/russia-competes-world-powers-africa-investments-180308190553380.html>
- Niu, F. (2019). *Chinese Foreign Direct Investment in Africa: Determinants and Effects*. (Unpublished master's thesis). Polytechnic University of Turin, Torino, Italy.

- Okerefor, G., Ogungbangbe, B. M., & Anyanwu, A. (2015). Positioning Nigeria for Global Competitiveness in the 21st Century: The Policy Imperatives. *International Journal of Management Science and Business Administration*, 1(10), 56-70.
- Olorunfemi, S. (2021). Changing Africa-China Relations—Colonialism or Partnership? In O. Abidde & T. Ayoola (Eds.), *China in Africa: Between Imperialism and Partnership in Humanitarian Development* (pp. 139-158). London, Lexington Books.
- Porter, M. E. (1990). The competitive Advantage of Nations. Retrieved from <https://hbr.org/1990/03/the-competitive-advantage-of-nations>
- Reddy, K. S., & Agrawal, R. (2012). Designing case studies from secondary sources—A conceptual framework. *International Management Review*, 8 (2), 63-70.
- Robson, C. (2002). *Real World Research: A Resource for Social Scientists and Practitioner-Researchers* (2nd ed.). Oxford: Blackwell Publishers Ltd.
- Rusu, V. D., & Roman, A. (2018). An empirical Analysis of Factors Affecting Competitiveness of CEE Countries. *Economic Research-Ekonomska Istraživanja*, 31(1), 2044-2059.
- Salitskii, A. I., & Salitskaya, E. A. (2020). The United States and China: Deadlocks and Paradoxes of Trade War. *Herald of the Russian Academy of Sciences*, 90(4), 460-469.
- Sand-Zantman, W., & Mathis, J. (2014). *Competition and Investment: What do we know from the literature?* (Research Report hal-02316767). Retrieved from Hal Open Science Archives: <https://hal.archives-ouvertes.fr/hal-02316767/document>
- Sautman, B. & Hairong, Y. (2007). Friends and Interests: China's Distinctive Links with Africa. *African Studies Review*, 50 (3), 75-114. doi:10.1353/ arw.2008.0014
- Schumpeter J. (1939). Business Cycles: A Theoretical, Historical and Statistical Analysis of the Capitalist Process, *The American Historical Review*, 46(1), 96–99. Retrieved from <https://doi.org/10.1086/ahr/46.1.96>
- Semizoğlu, Z.C. (2019). *International Competitiveness of Home Appliance Sector of Turkey*. (Unpublished master's thesis). Yildiz Technical University, Istanbul, Türkiye.
- T.R. Ministry of Commerce. (2022). Etiyopya Ülke Profili. Retrieved from <https://ticaret.gov.tr/data/5f0da7d913b8769ff0574b33/ETİYOPYA2.pdf>
- T.R. Ministry of Commerce. (2022). Gana Ülke Profili. Retrieved from <https://ticaret.gov.tr/data/5f1303cb13b8760aa4896b7d/GANA2.pdf>
- Topolansky Barbe, F. (2008). *MERCOSUR Union, Porter's Diamond, and the Competitiveness of the Uruguayan Broiler industry* (Unpublished doctoral dissertation). University of Gloucestershire, Gloucestershire, England.
- Tsikata, D., Fenny, A. P., & Aryeetey, E. (2010). *Impact of China-Africa Investment Relations: An In-Depth Analysis of the Case of Ghana Draft Final Report*. Retrieved from The Africa Portal

website:<https://www.africaportal.org/publications/impact-of-china-africa-investment-relations-an-in-depth-analysis-of-the-case-of-ghana/>

- Tuna, E. (2006). *The Tobacco Sector in the Republic of Macedonia – Competitiveness Analysis*. (Unpublished master's thesis). Saint Louis University, Missouri, The United States.
- UNCTAD. (2009). *Final Report on the Regional Seminar on Trade and Competition: Prospects and Future Challenges for Latin America and the Caribbean*. Retrieved from SELA (Sistema Económico Latinoamericano y del Caribe) database: http://www.sela.org/media/3201805/t023600003833-0-final_report_-_trade_and_competition_prospects_and_challenges_for_lac.pdf
- UNCTAD. (2009). *The Relationship Between Competition, Competitiveness and Development*. Retrieved from SELA (Sistema Económico Latinoamericano y del Caribe) database: http://www.sela.org/media/3202091/t023600003409-0-competition-competitiveness_and_development.pdf
- United Nations Conference on Trade and Development (UNCTAD). (2018). *World Investment Report 2018: Investment and new Industrial Policies (CNUCED)*. Retrieved from UNCTAD database: https://unctad.org/system/files/official-document/wir2018_en.pdf
- Vidjak, M. (2019). *The Competitive Advantage of Nations: Porter's Diamond Framework for Croatia*. (Unpublished master's thesis). University of Zagreb, Zagreb, Croatia.
- Wang, J. (2018). Perception and Prejudice: Sino-Ghanaian Relations within the Service Sector and the Wavering Perception of China on the Global Stage. Retrieved from https://digitalcollections.sit.edu/isp_collection/2903
- Wignaraja, G. (2003). *Competitiveness Strategy in Developing Countries*. [Taylor and Francis version]. Retrieved from <https://www.perlego.com/book/715394/competitiveness-strategy-in-developing-countries-pdf>
- World Bank (2020). *Data (World Bank)*. Retrieved from World Bank database: <https://www.worldbank.org/>
- World Bank. (2022). Ethiopia. Retrieved from <https://www.worldbank.org/en/country/ethiopia/overview>
- Yin, R. K. (2003). *Design and Methods: Case Study Research*. Thousand Oaks: Sage Publications.
- Ying, Z. (2018). China's Diplomacy in Africa: Ideas and Practices. *China International Studies*, 28 (1), 28-46.