

The Role of Institutional Quality and Chinese Investment in Shaping GDP Growth in COMESA

CHIFUNDO MATOLA

DOI: <https://doi.org/10.5281/zenodo.11617916>

Published Date: 12-June-2024

Abstract: The aim of this study is to examine the mediating effect of domestic institutional quality on the relationship between Chinese foreign direct investment (FDI) and economic growth in COMESA (Common Market for Eastern and Southern Africa) countries. Utilizing a random effects model and annual time series data from 11 countries for the period 2003-2021, the study incorporates robust control variables and performs mediation analysis. Data on Chinese FDI stock was sourced from the China Africa Research Initiative, and GDP per capita growth along with control variables were sourced from World Development Indicators. Institutional quality, used as a moderator and proxied by economic freedom, was sourced from the Fraser Institute. Economic freedom encompasses five distinct areas: size of government, legal system and property rights, sound money, freedom to trade internationally, and regulation. Principal Component Analysis (PCA) yielded a KMO of 0.762, indicating that the economic freedom components effectively captured institutional quality.

The study found that Chinese FDI positively impacts GDP growth at a 5% significance level. Similarly, access to electricity is positively correlated with GDP growth at a 5% significance level. Trade and inflation have negative impacts on GDP growth at 10% and 1% significance levels, respectively. Other factors such as mobile cellular subscriptions, gross fixed capital formation, domestic credit to the private sector by banks, and government final consumption expenditure were statistically insignificant. Additionally, the interaction between Chinese FDI and institutional quality negatively impacts GDP growth.

To enhance GDP growth in COMESA, the study recommends strengthening institutional quality, improving infrastructure, maintaining macroeconomic stability, and liberalizing trade policies.

Keywords: Foreign direct investment (FDI); Economic Growth; Institutional Quality; COMESA; Random Effects Model.

1. INTRODUCTION

1.1. Background of the study

Foreign Direct Investment (FDI) has emerged as a crucial engine of economic development in developing countries in a time of globalization and increased economic interdependence (UNCTAD, 2020). According to Blomström and Kokko (2003), foreign direct investment (FDI), which is defined as investments made by foreign firms in the domestic markets of host nations, has the ability to inject cash, technology, and expertise into recipient economies, hence promoting economic growth and job creation. However, FDI and economic development have a complicated and nuanced relationship influenced by a number of variables that go beyond the simple inflow of foreign capital. The quality of institutions in the host country is one such important factor (Dunning, 1998). The term "institutional quality" describes how well-functioning, accountable, and transparent a nation's institutions are at creating an atmosphere that is favorable for investment. These institutions include the rule of law, governance structures, regulatory agencies, and legal frameworks. Strong institutions offer an

economic environment that is predictable and stable, boosting investor confidence and ensuring that the advantages of FDI are fully realized (Rodrik, 2000). Only by identifying institutional problems and actively changing the investment climate can host countries maximize the benefits from FDI to promote fair and sustainable development.

This study focuses on the Common Market for Eastern and Southern Africa (COMESA) region in which Chinese FDI inflow has rapidly grown in recent years. According to the official COMESA website, "the Common Market for Eastern and Southern Africa" (COMESA) was developed in December 1994 and it comprises 21 African Member States (Burundi, the Comoros, the Democratic Republic of Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Sudan, Swaziland, Seychelles, Somalia, Tunisia, Uganda, Zambia, and Zimbabwe) that came together intending to promote regional integration through trade and the development of natural and human resources for the mutual benefit of all people in the region.

The COMESA area is home to a variety of economies with distinct levels of institutional quality. The influence of foreign direct investment (FDI) on economic growth in this region is dependent on several factors, one of which is the caliber of domestic institutions. Although institutional quality is increasingly recognized as being important in determining the relationship between FDI and economic development, there is still a need for empirical research that examines the processes by which institutions moderate this relationship in developing countries.

While FDI holds the promise of enhancing economic development, the relationship between FDI and economic outcomes is intricate and multifaceted. On one hand, FDI inflows have the potential to create jobs, stimulate innovation, and drive export-led growth in host nations (Blomström, 2003). On the other hand, the extent to which these positive outcomes materialize depends significantly on the quality of the institutional environment within the host country (Dunning, 1998). The protection of property rights, regulatory effectiveness, and governance are only a few examples of the many aspects of institutional quality. It determines whether FDI is successful in promoting economic development or not by influencing the operational environment for businesses and investors (North, 1990).

Scarcity of resources with alternative uses is a core principle of economics (Sowell, 2004). Any economy's ability to develop rests on its ability to allocate resources to economically beneficial sectors that generate significant net economic gains. In an economic environment riddled with problems stemming from low institutional quality, resources tend to be transferred from productive to less productive sectors, thus hurting the nation's economic performance (Kandiero and Wadhawan, 2003).

The caliber and efficiency of institutions differ significantly amongst COMESA member states. While some nations have systems that are effective, open, and welcoming to investors, others struggle with corruption, ineffective government operations, and ambiguous legal frameworks (World Bank, 2020). These discrepancies highlight the need for a careful examination of how institutional quality affects how FDI impacts economic development across a range of circumstances.

This thesis innovatively examines the mediating effect of domestic institutional quality on the relationship between Chinese FDI and GDP growth in COMESA countries. It utilizes a random effects model with data from 2003-2021 and finds that while Chinese FDI positively influences GDP growth, its interaction with institutional quality has a negative impact. This counterintuitive finding suggests a complex relationship between FDI and economic outcomes. The study provides targeted policy recommendations for improving institutional quality, infrastructure, macroeconomic stability, and trade liberalization to enhance the benefits of Chinese FDI in the region.

1.2. Purpose of the study

The primary purpose of this study is to thoroughly analyze the complex and multifaceted relationship between institutional quality, Foreign Direct Investment (FDI), and economic development in COMESA. This study attempts to offer a comprehensive understanding of how the quality of institutions in host nations affects the impact of FDI on economic development by investigating how these variables interact. This study aims to identify the mechanisms by which institutional quality functions as a mediator and affects FDI outcomes through meticulous empirical analysis and a multidimensional methodology. The ultimate goal of the study is to provide information that can help policymakers, investors, and other stakeholders utilize FDI for long-term economic growth in the context of the various institutional landscapes found in COMESA member states.

Research Questions

- What are the key indicators of institutional quality within COMESA member states?
- To what extent does institutional quality explain outcomes of FDI in economic growth and development in COMESA member states?
- What are the specific mechanisms through which institutional quality influences the decision-making processes of Chinese corporations regarding FDI in COMESA member states?
- What kind of policy changes could be advocated to increase the benefits of foreign direct investment (FDI) on economic growth while reducing the risks associated with institutional weaknesses?

1.3. Significance of the study

Understanding how institutional quality affects the relationship between FDI and economic development is crucial for several reasons. First, with the increase in FDI inflows over the past few decades, it is important to identify the precise mechanisms through which FDI supports host country development (UNCTAD, 2020). Second, institutional characteristics in developing nations span a broad spectrum, from those with efficient, open systems to those rife with corruption (World Bank, 2020). Understanding how these variances impact the relationship between FDI and economic development is essential for formulating sensible policy suggestions.

This finding also has significant implications for policy. Authorities and decision-makers in developing nations often search for strategies to attract foreign direct investment (FDI) and leverage its benefits for sustained growth (UNCTAD, 2020). By better understanding how institutional quality drives this relationship, policymakers can be guided in devising and implementing policies aimed at enhancing their investment climate (World Bank, 2020). Additionally, it can inform international businesses and investors about the potential advantages and disadvantages of investing in countries with different institutional capabilities (Javorcik, 2004).

1.4. Conceptual Framework

This study offers a thorough conceptual framework to analyze the effect of institutional quality on the relationship between FDI and economic development. The framework's central variable is institutional quality, which includes components like the size of government, legal system and property rights, sound money, freedom to trade internationally, and regulation. Institutional quality operates as a moderator in the relationship between FDI and economic development (Rodrik, 2000; North, 1990). Depending on its strength and efficacy, institutional quality can either magnify or diminish the positive effects of FDI on economic development.

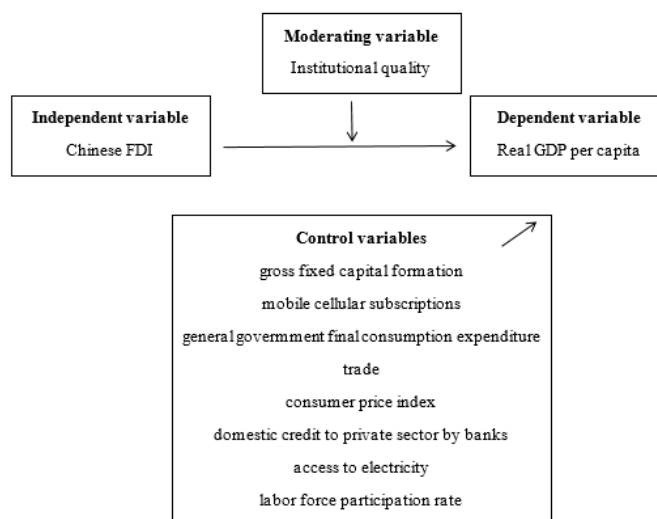


Figure 1: conceptual framework

Source: Author

According to this approach, institutional quality serves as the moderator variable, economic development serves as the dependent variable, and foreign direct investment serves as the independent variable. The efficacy of the institutions in a particular host country determines how strong the moderating impact will be. The theoretical foundations, literature review, methodology, data analysis, and conclusions that lead to a more thorough understanding of the impact of institutional quality on the FDI-economic development nexus in developing countries will be covered in greater detail in later chapters.

2. LITERATURE REVIEW

As Africa continues to emerge as a critical location for economic growth and development, understanding the dynamics of Chinese FDI in this setting is essential for stakeholders, academics, and politicians alike. In order to provide comprehensive knowledge of the complex aspects of Chinese foreign direct investment (FDI) in Africa, this review consults a wide range of literature, including academic research, policy analysis, and empirical studies, with a major focus on the Common Market for Eastern and Southern Africa (COMESA). Through the synthesis of current research, the purpose of this review is to contribute to a better-informed discussion about the consequences and potential futures of this emerging economic connection.

2.1. Economic theories related to FDI and economic growth

FDI definition

In 1996, the World Trade Organization defined FDI as the acquisition of managerial assets in another country. Alternatively, FDI occurs when an investor from another country (home country) has significant influence in a foreign enterprise (host country) by owning 10 percent or more ordinary shares or voting stock (IMF, 2000). From the definition, we can see that interest and influence are necessary conditions for FDI.

According to the United Nations Conference on Trade and Development (UNCTAD), FDI can be defined as "an investment involving a long-term relationship and reflecting a lasting interest and control by a resident entity in one economy (foreign direct investor or parent enterprise) in an enterprise resident in an economy other than that of the foreign direct investor" (UNCTAD, 2020). Multinational corporations or multinational enterprises are common terms used to describe companies that engage in foreign direct investment. A multinational corporation can invest directly by founding a new foreign company, also known as a "greenfield" investment, or by purchasing a foreign company, often known as a "brownfield" investment.

The main forms of flow of private capital are foreign direct investment (FDI), foreign portfolio investment (FPI), and other forms of investment such as global inter-banking flows and loans (UNCTAD, 2012). Over the past decades, the increase of cross-border capital flows has given rise to financial globalization, which has increased the financial interdependence of nations by integrating individual economies into international markets. As such, it is imperative to understand the theoretical foundation that explains the growth and movement of international capital flows.

FDI theories

The fact that there are many theories points to the insufficiency of one theory to explain the behavior and pattern of FDI. Most FDI theories are more complementary than they are different. The basis of most theories is rooted in firms' motivation for FDI. And this motivation can be divided into being firm-specific, home country-specific, and host country-specific. This study focuses on host country-specific motivations for FDI but will discuss other theories nevertheless. FDI is crucial to the economic development of countries; thus, understanding the motivations for FDI helps countries adopt policies favorable for attracting more FDI.

Many theoretical papers examine foreign direct investment (FDI) issues, and several notable economists have contributed significantly to the development of theories related to Foreign Direct Investment (FDI). While there are various perspectives on FDI, the main research on the motivations underlying FDI was developed by J. Dunning, S. Hymer, and R. Vernon, who are associated with influential theories.

(1) The Eclectic Paradigm (OLI)

The eclectic paradigm, also known as the OLI Paradigm, was developed by John Dunning. It attempts to create an overall framework to explain why multinational enterprises choose to engage in FDI rather than serve foreign markets through

alternative modes such as licensing, management contracts, joint ventures, or strategic alliances (Lipsey R.G & A.K Chrystal, 2011). "OLI" stands for Ownership, Location, and Internalization, three potential sources of advantage that may underlie a firm's decision to become a multinational.

Ownership advantage is concerned with the firm's possession of distinct and firm-specific advantages that allow it to compete on a global scale, such as the ownership of tangible or intangible assets, like the enterprise's size, patent, technology, and know-how (Dunning, 2000). Location-Specific Advantage is the superiority of the investment environment in the host country over that of the enterprise's mother country. This includes the infrastructure, labor force, market size, economic development level, infrastructure for investments, and resource endowment. (Rugman, 2004). Internalization advantage emphasizes that the competitiveness of multinational enterprises does not come from the traditional monopoly advantage and pure technology possession, but from the internalization of technological advantage. Through internalization, it avoids the loss caused by the incompleteness of the external market. At the same time, the transaction is more convenient and easier to control; resources and production can be allocated through unified management.

According to Dunning, "ownership-specific advantage" or "internalization advantage" is not a sufficient requirement, but rather a necessary one for a business to invest overseas. If a company has one of these, it can choose to boost local production to achieve scale impact before exporting, negating the need for foreign direct investment. Foreign investment becomes an enterprise's best option when it possesses ownership and internalization advantages in addition to "location advantage" in a particular region.

(2) Location Theory

According to Location theory, multinationals make location choices for their FDI based on location advantages of that particular location (Marandu and Ditshweu, 2018). These location advantages may either be proximity to markets or the supply of raw materials. Host countries might have location characteristics that are favorable for FDI, which are pull factors, while factors that might hinder FDI are push factors. There are location-specific factors, for instance, geographic position as being close to the sea or being landlocked countries, or proximity to raw materials supply or proximity to markets either regional or international markets. Other factors include macro-economic conditions, the labor market, the quality of financial systems, political stability, and the quality of infrastructure. All these factors combined play an important role in influencing firms' decision for location choice for FDI.

In addition, the concentration of similar or related economic activities gives rise to agglomeration economies (Marshall, 1898). New foreign investments are attracted by the presence of already existing foreign firms. Foreign investment poses many risks and uncertainties, so firms tend to imitate the behavior of other firms. Moreover, externalities advantages like knowledge spillovers, specialized labor markets, and supplier networks make locations with agglomeration economies more favorable for FDI. Locations with concentrated economic activities have interconnected transport networks, thus leading to cost reduction. Therefore, FDI tends to flow to areas with agglomeration economies. (Krugman, 1991).

(3) Monopolistic Advantage Theory

S. H. Hymer initially put up the monopolistic advantage theory, which aims to explain why multinational firms may successfully compete with small businesses and endure over an extended period. Hymer showed that foreign direct investment (FDI) is predominantly seen in oligopolistic industries, based on the concept of industrial organization and the notion of market incompleteness. To counterbalance the additional costs incurred by foreign investment and to generate excess profits, businesses in these industries have advantages not accessible to local businesses in the host nation, often in the form of technology, brand recognition, or specialized knowledge, that give them a monopoly in the market.

Firms may pursue FDI to exploit economies of scale that may not be achievable in their home country. By operating on a larger scale in foreign markets, companies can spread fixed costs over a larger production volume, leading to cost efficiencies (Helpman, 2006). In addition to that, investing in different countries allows firms to diversify their risks. Economic, political, or currency risks in one market may be mitigated by having operations in multiple countries. FDI allows companies to diversify their market presence and reduce reliance on a single market, thereby spreading risks and increasing resilience.

Firms may also engage in FDI to vertically integrate their production process. This involves controlling various stages of the production chain, from raw materials to the final product. Firms may invest in countries to gain access to critical resources, such as raw materials or skilled labor, that are not readily available or are more expensive in their home country (Markusen, 2002). Vertical integration can help reduce costs, ensure the quality of inputs, and provide more control over the production process (UNCTAD, 2019). Host countries may offer favorable policies and incentives to attract FDI, including tax breaks, subsidies, and regulatory support, providing MNEs with a competitive advantage (Blonigen, 2005).

(4) Product Life Cycle Theory

According to Vernon (1996), product life cycle theory suggests that, in the long run, a nation's position in the global economy changes. A nation that used to be an exporter of a certain manufactured product can end up being an importer as technology for manufacturing the product shifts to lower-cost nations. The premise of Vernon's argument is that a manufactured product undergoes four stages of production: innovation, growth, maturity, and decline. In the first stage of the cycle, the innovator of the product is the main producer, and the producing country attains a monopolistic advantage due to the existence of a technology gap. In this initial stage, production is mainly for local consumption, and the surplus is exported. In the second stage, the growing demand in importing nations necessitates increased production, and this production is split between the innovating country and other countries that might have a copy of the product. Thus, exports from the initial country, which was the innovator, decline. In the maturity stage of production, the product only needs the use of already existing technology and cheaper skilled labor. Thus, less developed countries with cheap labor costs become the optimal locations

The last stage of production is characterized by production being concentrated in emerging economies. Thus, the initial innovator becomes the importer. There is a shift in comparative advantage following product maturity, likewise FDI shifts following product maturity. However, it's worth noting that this theory was developed based on the manufacturing industry. It's hard to say it's applicable for other types of industries like the service industry. Besides, factors affecting FDI are not limited to the shift in comparative advantages between countries but also host-specific factors (Denisia, 2010).

Other theories

Exchange rate theory states there is an inverse relationship between FDI flows and the exchange rate (Denisia, 2010). Depreciation leads to an increase in demand in domestic and export markets, thus leading to an increase in FDI. But a rise in exchange rates increases the cost of imports and the cost of capital, thus leading to a consequent decrease in FDI.

According to the Oligopolistic theory, firms exhibit imitative behavior (Yu, Chwo-Ming & Kiyohiko, 1988). This means the presence of already existing FDI attracts potential FDI because its presence signals a good reputation for the location.

2.2. Benefits of FDI and traditional determinants of FDI

Economists believe that FDI could be the foundation for creating a direct link between economies worldwide. A sound local policy framework is crucial for FDI to promote local business development. It may also help improve the competitiveness of both the host countries and the home economy. Additionally, it promotes product diversification of the host economy, thus improving its position in international markets. FDI not only promotes the development of international trade but also capital accumulation for host and home economies (OECD, 2008). The benefits of FDI differ for countries at different levels of development. While FDI enables developed countries to access resources, developing countries can access technology that would otherwise be unattainable to them.

Some scholars have argued that the impact of FDI will depend on the type and motivation for the FDI and the economic environment of the host country. They argue that the FDI impact would be positive if the FDI is growth-oriented, the host country's economic environment is conducive to trade characterized by high institutional quality and a well-diversified economy. For instance, Nunnenkamp and Spatz (2003) argue that other types of FDI might have more positive impacts on host country growth than resource-seeking FDI. According to their results, host country factors and industry type both have a significant impact on the growth impact of FDI in developing countries.

Some studies argue that the benefits of trade and FDI are conditional and usually determined by the absorptive capacity of the host country. The so-called absorptive capacity refers to the host country's ability to benefit from opportunities resulting from FDI. The underlying assumption is that whether or not the host country will benefit from FDI will be determined by

the economy's ability to absorb the spillover opportunities from FDI. Absorptive capacity factors are then host country-specific factors that mediate FDI impact on the economy (Khordagui and Saleh, 2013).

Jyun-Yi and Chih-Chiang (2008) used threshold regression techniques to examine whether the absorptive capacities of Host countries determined the effect of FDI on economic growth. The variables used were initial GDP, human capital, and the volume of trade in a sample of 62 countries for the period from 1975 through 2000. They found that testing the independent effect of FDI on economic growth will yield ambiguous results. Initial GDP and human capital were found to be significant factors in explaining the FDI-economic growth nexus. Thus, they concluded that FDI will have a positive and significant impact on growth in host countries that have better levels of initial GDP and human capital.

In addition, Khordagui and Saleh (2013) examined the absorptive capacity of emerging countries with the inclusion of African countries. They tested the impact of human capital, trade openness, and institutional quality on the FDI of the host countries. They found out that while there exist spillover effects from FDI in Middle Eastern and North African countries, these effects become more obvious after controlling for education levels as an FDI determinant. Moreover, trade openness and institutional quality were found to be insignificant determining factors of FDI. From their results, they recommend that countries increase investment in education to benefit more from FDI spillovers.

2.3. Mechanisms through which institutional quality affects FDI

The significance of institutions in the advancement of economic growth is a fundamental subject covered by academics like Daron Acemoglu and James A. Robinson (2012) in their groundbreaking book "Why Nations Fail." Institutional theory states that nations with robust institutions are better able to draw in and make use of FDI for long-term, sustainable growth. Quality institutions furnish a steady and explicit administrative structure, safeguard intellectual property, ensure the execution of agreements, and foster trust among investors. They also improve the efficiency of resource allocation, reduce corruption, and enable effective government. On the other hand, ineffective institutions are linked to political instability, bureaucratic inefficiencies, and regulatory uncertainty, all of which might hinder economic growth and discourage foreign investment.

The relationship between Chinese FDI and GDP growth in Africa can be explained by several mechanisms.

Legal frameworks and property rights protection play a significant role. Robust legal systems safeguard investors' interests, ensure contract enforceability, and minimize the risk of expropriation. Consequently, countries with strong legal systems tend to attract more FDI as investors feel more confident in securing returns on their investments.

The regulatory environment also influences FDI. An effective and transparent regulatory framework fosters investment-friendly policies, reduces bureaucratic barriers, and instills confidence among businesses. Simplified regulations facilitate business establishment and operations, thereby stimulating economic growth.

Governance structures are crucial for promoting FDI. Public trust, corruption reduction, and the efficiency of public institutions hinge on effective governance characterized by accountability, openness, and responsiveness. Such governance fosters an environment conducive to investment, optimizes resource allocation, and encourages profitable investment, thereby supporting economic growth.

Furthermore, a stable political environment is vital. Political stability and institutional continuity create an atmosphere conducive to long-term investment planning and risk management. Countries with stable political systems are perceived as less risky for investment, attracting more FDI and promoting sustained economic growth.

2.4. Study of the role of institutional quality in FDI-economic growth nexus

Ali et al. (2010) conducted one of the earliest studies on how institutions affect FDI location. Using panel data for a large sample of countries from 1981 to 2005, they examined FDI attraction under the condition of host country institutional quality. Their findings suggested that good institutional quality, characterized by a strong legal system and adherence to property rights, is an important determinant of FDI. A complementary study by Zhang and Kim (2022) used a threshold model to test the role of institutional quality in determining FDI location. They also found evidence to support the idea that while labor costs are traditional determinants of FDI location, better-quality institutions tend to reduce country-related costs for FDI location, thus undermining the negative relationship between labor costs and FDI location.

There is no consensus on the role of institutional quality in the FDI-growth nexus. While some studies find that institutional quality is a favorable condition necessary for FDI to enhance economic growth, others have found that institutional quality plays no significant role in influencing FDI. A group of studies conducted to examine the interrelationship between institutional quality, FDI, and economic growth found institutional quality to be a necessary but not sufficient condition for FDI to enhance economic growth. For instance, Jude and Leveuge (2016) used a panel smooth regression model on a large sample of developing countries to test whether institutional quality is the mediating factor for the FDI-economic growth nexus. They found evidence to support that only after institutional quality has improved beyond a certain level does FDI flow have a significant positive effect on economic growth. Therefore, institutional reforms are imperative for countries intending to use FDI as an instrument for economic growth.

Additionally, Ketteni and Kottaridi (2019) used the institution-based approach to examine the FDI-growth nexus under different formal institutions, especially credit and labor market regulatory systems in both advanced and developing countries. They found strong evidence to support that institutions shape the macro environment where MNEs operate, thus influencing the economic growth of host countries.

Furthermore, Adegboye et al. (2020) analyzed how challenges faced by institutions in sub-Saharan Africa impact how FDI affects the economic development of the sampled countries. Their analysis of pooled data for 30 SSA countries for the period between 2000 and 2018 using a fixed and random effect regression model revealed that foreign capital inflow is important for economic development in sub-Saharan Africa. They also found that the inward flow of FDI is determined by quality institutions, whereas poor-quality institutions resulted in the underutilization of domestic resources and hence thwarted domestic investment development.

To test the impact of institutional quality relative to other determinants of FDI, other studies controlled for factors such as physical capital, human capital, trade openness, resources, and financial market quality. For instance, Asamoah et al. (2019) used the Structural Equation Modeling (SEM) technique with data from 34 SSA countries covering the period 1996–2016 to empirically examine the role of institutions as an interactive factor in the FDI, trade, and growth nexus in sub-Saharan Africa (SSA). They found a positive effect of institutions on trade openness and growth. Human capital development, financial development, and resource rent were also found to exhibit positive effects on economic growth in SSA.

Miao et al. (2020) conducted a study to analyze the role of institutional quality on China-FDI and China-Africa trade on the economic growth of African countries. They found that physical capital and institutional quality were significant and positively correlated with growth. They concluded that the accumulation of physical capital is crucial for economic growth in African countries. Furthermore, they found that Chinese FDI is significant and negatively correlated with GDP per capita, suggesting that FDI benefits are more evident when backed by host country factors conducive to trade and investment.

Finally, the study by Agbloyor E.K et al. (2016) on the interrelationship among FDI, institutions, and economic growth in sub-Saharan Africa found no evidence that FDI promotes growth. They also found that there is no significant relationship between institutions and economic growth. However, evidence was found suggesting that institutions can directly accelerate economic growth. Additionally, the quality of institutions seems to be a favorable condition for FDI to promote economic growth. Excluding countries with abundant natural resources from the sample yielded results showing a direct and positive relationship between FDI and economic growth, as well as a direct relationship between institutions and economic growth. Therefore, careful consideration of the economic realities of host countries is essential before implementing policies to benefit from FDI-growth-enhancing effects.

Asongu et al.'s (2018) study uses panel data econometric approaches to examine how governance and globalization affect economic growth in Africa. According to the findings, GDP growth is positively impacted by improved governance, as indicated by metrics like regulatory quality, rule of law, government effectiveness, and corruption control. Higher levels of FDI inflows are related to improved governance and these FDI inflows promote economic growth and development.

Conclusion

According to most academic research, FDI has positive benefits on the economic growth of host countries. However, these benefits depend on the quality of institutions in the host countries. This thesis examines the impact of Chinese Foreign Direct Investment (FDI) on GDP growth in COMESA countries, focusing on the mediating role of domestic institutional quality. Utilizing a random effects model and data from 2003 to 2021, the study investigates how Chinese FDI, institutional

quality, and other economic factors interact to influence economic growth. The findings provide insights into the complex dynamics between FDI, institutional quality, and economic development in the region. The following hypotheses will guide the empirical analysis, helping to uncover the direct and indirect effects of Chinese FDI on economic growth and the critical role of institutional quality in this process.

Hypothesis 1 (H1): Chinese FDI has a positive impact on GDP growth in COMESA countries.

Hypothesis 2 (H2): The positive impact of Chinese FDI on GDP growth is mediated by the domestic institutional quality of COMESA countries.

Hypothesis 3 (H3): The interaction between Chinese FDI and institutional quality has a positive impact on GDP growth in COMESA countries.

3. OVERVIEW OF CHINESE FDI IN COMESA

3.1. FDI trend

Foreign direct investment has grown rapidly as a primary means of transferring capital across borders due to its distinct benefits of increasing capital allocation and efficiency. It contributes significantly to economic growth, particularly in developing nations, rising markets, and nations undergoing change. The 2023 UNCTAD World Investment Report, which was released on July 5th, indicates that FDI flows to Africa fell from a record \$80 billion in 2021 to \$45 billion in 2022 which can be seen from the graph below and the majority of the FDI inflow was recorded in south Africa followed by west Africa in 2021 with major contributing sectors being the mining and industry. Numerous global crises and difficulties, including the conflict in Ukraine, the high cost of food and energy, the possibility of a recession, and the pressure from national debt, have led to this.

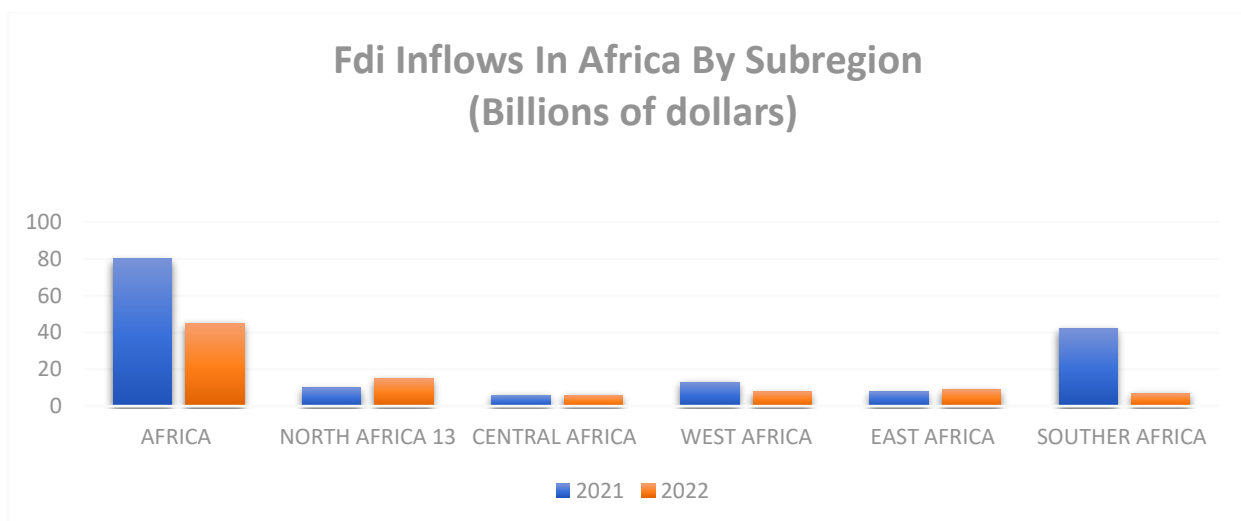


Figure 2: FDI inflows in Africa by subregion,

source : World investment report

Due to their vast population and generally underdeveloped economies, African nations desperately need to stabilize and boost their foreign direct investment (FDI) inflows to supplement their domestic resources and investment. Foreign Direct Investment (FDI) has the potential to not only bridge the gaps in foreign exchange and investment but also indirectly boost output by fostering the transfer of talents and contemporary technologies, ultimately promoting economic growth.

The development of China as a key actor in international commerce and investment has marked a substantial shift in the global economic landscape in recent decades. China's growing economic sway is exemplified by its growing Foreign Direct Investment (FDI) in Africa, Figure 3 shows a period of almost 2 decades from which FDI inflow has grown substantially year after year in between 2003 and 2018 from 1 billion to 40 billion and has been unbalanced by the global economic landscape from 2019 onward. This has sparked numerous discussions about the possible causes and impacts of China's actions in the host countries.

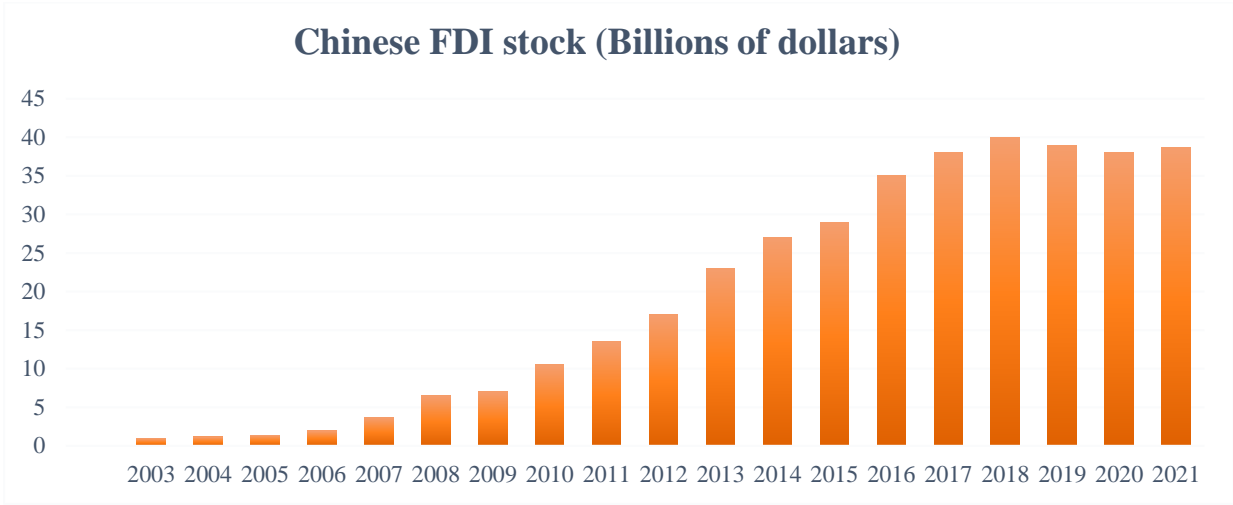


Figure 3: Chinese FDI stock (billions of dollars)

Source: china global south project

3.2. Impact of Chinese FDI on GDP Growth in COMESA

Chinese investments are becoming more widespread, which has sparked a range of responses and concerns about what that means for African countries. Chinese FDI has a wide-ranging, complex effect on Africa. . This section aims to explore the mechanisms through which Chinese FDI influences GDP growth in Africa, such as the building of infrastructure, the production of jobs, and economic development.

(1) Economic Growth and Infrastructure Development

The beneficiary countries of Chinese foreign direct investment (FDI) in Africa have experienced notable economic growth. Research like Brautigam (2009) and Li and Xu (2019) contend that Chinese investments have boosted productivity, created jobs, and developed infrastructure. Several African countries have experienced economic growth as a result of Chinese funding being used to finance the building of energy, roads, and railroads (Li X. &, 2019) (Li Q. &, 2007) (Brautigam D. , 2009).

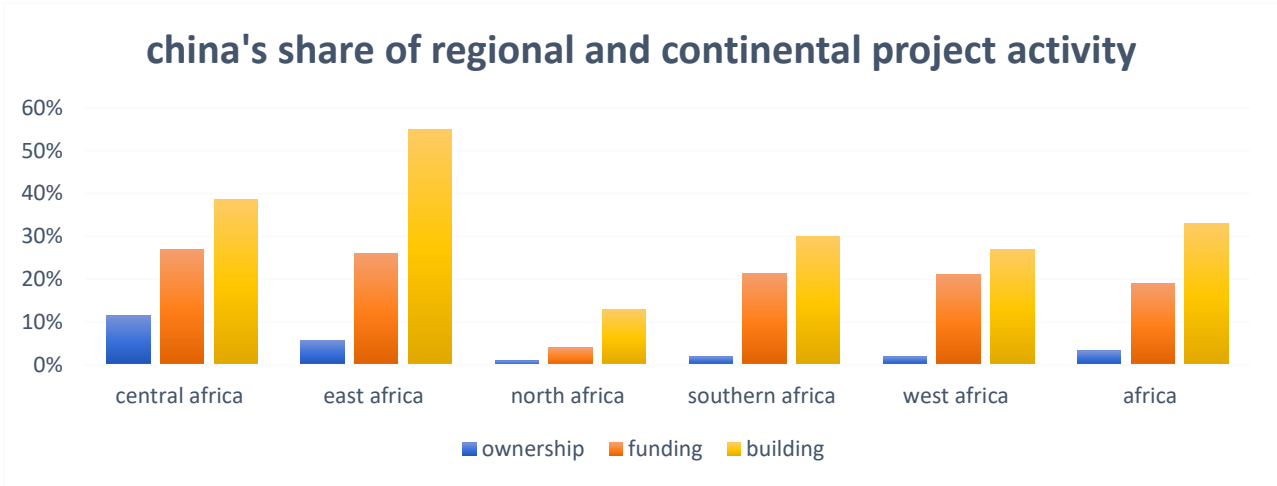


Figure 4: showing China’s share of regional and continental project activity

Source : Deloitte Africa Construction Trends, 2018

According to Deloitte Africa Construction Trends, 2018 there have been numerous economic activities in Africa due to FDI such as funding, building and ownership of companies and the graph in figure 4 above depicts that, East Africa and Southern Africa combined are the major beneficiaries of Chinese FDI which comprises of the COMESA trade block, followed by Central Africa due to increased mining activities in the region.

The World Economic Forum's recent Global Competitiveness Index indicates that, 17 out of the 20 poorest countries are in Africa. The story of Africa's rise is still far from being realized in terms of its economies, which makes Chinese FDI convenient to promote economic and infrastructure development. Africa's poor infrastructure, which includes dilapidated shipping ports, a lack of transportation options, and poor communication access, is a major barrier to economic growth and investment. Furthermore, electricity shortages and a massive cumulative infrastructure deficit estimated to be worth USD 900 billion plague most African nations (Kuo, 2015).

According to Deloitte Africa Construction Trends, 2018 there is increased growth of Chinese economic growth in Africa in financing and building activity by sector evidence from figure 5 below which shows various sectors of which a large investment is made into the transport industry taking up about 52% followed by real estate with about 15% and with health being the least with less than 1% ,in Chinese built projects .

china’s ICP financing and building activity in Africa by sector (Chinese built projects)

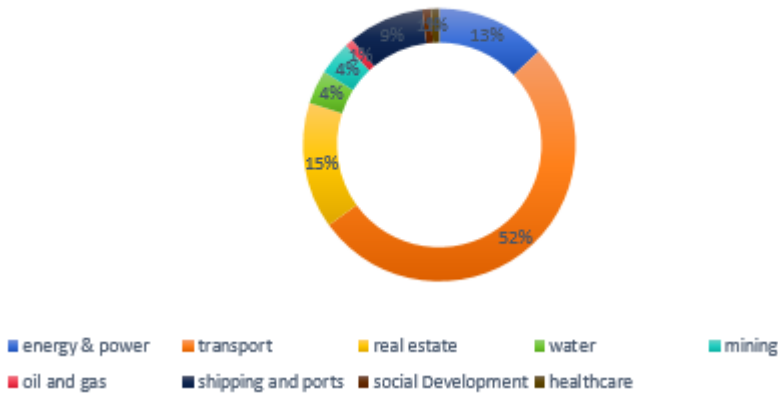


Figure 5: china’s ICP financing and building activity in Africa by sector (Chinese built projects)

Source: Deloitte Africa Construction Trends, 2018

The trends in Chinese built projects and Chinese funded projects are similar despite the varying figures which can be seen from figure 6 below, of which a large investment is also made in the transport industry taking up about 45% followed by energy and power sector with about 18% and with oil and gas being the least with about 1% ,in Chinese funded projects

china’s ICP financing and building activity in Africa by sector (chinese funded projects)



Figure 6: china’s ICP financing and building activity in Africa by sector (Chinese funded projects)

Source :Deloitte Africa Construction Trends, 2018

Infrastructure projects are characterized by protracted development times, large upfront costs, delayed output benefits, and other issues. Therefore, a lack of funding and technology prevents many African nations from building large-scale infrastructure. China has emerged as Africa's main source of finance for infrastructure projects in recent years.

Trade and Industrialization

Industrialization and trade are two more economic aspects. Chinese FDI has boosted industrial sectors in Africa, promoting diversification beyond conventional resource-dependent economies (Naudé, 2012). The creation of manufacturing facilities and industrial zones supported by China has aided in the transfer of technology and the development of skills.

Employment and Skills Transfer

China's contributions have contributed to the reduction of unemployment in Africa. Research indicates that Chinese businesses doing business in Africa have produced jobs, especially in manufacturing and infrastructure development (Folashade, 2018) (Mohan, 2008). Taking into account statistics from IBM database, 2017 on FDI Markets in figure 7 below it can be seen that China is on the leading edge of job creation per project with more than 300 jobs per project followed by France with above 200 and with south Africa being the least with about 50 jobs per project .

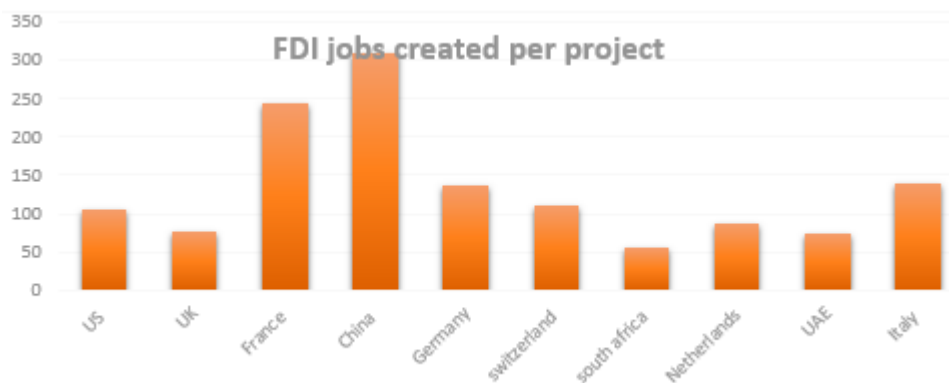


Figure 7: FDI projects by source country, Source: IBM database, 2017; FDI Markets

The technological gap between rich countries and COMESA member states could potentially weaken the technology spillover effect. COMESA nations may find greater use for technology brought by foreign direct investment (FDI) from developing than from industrialized nations. China is a developing nation on a different level; COMESA member states may get a lot of insight into how science and technology can advance development from China's thriving economy.

In addition to possessing cutting-edge technologies, sophisticated management ideas, and sophisticated systems, many Chinese businesses also prioritize employee training over that of domestic businesses, according to graphical data in Figure 8 from McKinsey field survey of Chinese firms in 8 African countries, in several African nations, Chinese companies train their local labor force primarily through official programs, on-the-job training, and mentoring.

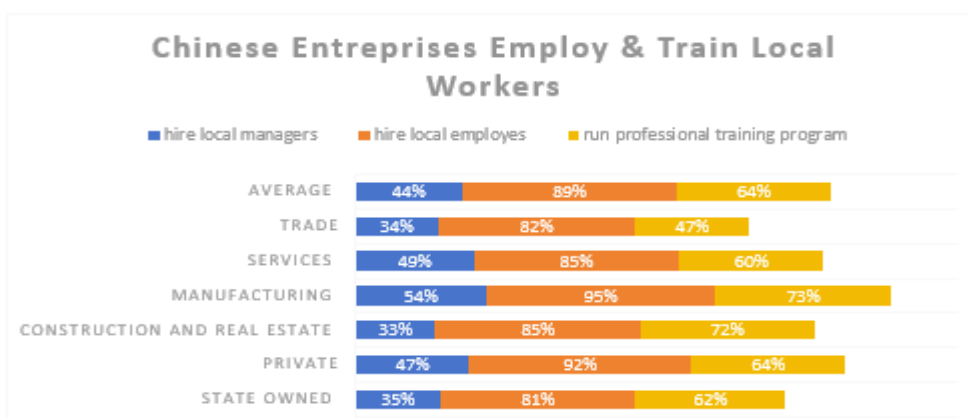


Figure 8: Chinese enterprise employment & training

Source: McKinsey field survey of Chinese firms in 8 African countries

4. METHODOLOGY

This chapter outlines the methodology employed to examine the impact of domestic institutional quality and Chinese Foreign Direct Investment (FDI) on the GDP growth of COMESA countries. The analysis focuses on the intricate relationships between FDI, institutional quality, and various economic indicators to provide a comprehensive understanding of their collective influence on economic performance. The methodology includes the selection of relevant variables, data collection procedures, and the analytical techniques used to test the hypotheses and derive meaningful insights. By adopting a rigorous and systematic approach, this chapter aims to ensure the reliability and validity of the findings, thereby contributing to the broader discourse on economic development in the COMESA region.

4.1. Definition of variables and data source

The dependent variable will be real gross domestic product per capita growth, while the independent variable will be the Chinese FDI stock in COMESA. The control variables include gross fixed capital formation, mobile cellular subscriptions, general government final consumption expenditure, trade, consumer price index, domestic credit to private sector by banks, access to electricity, and labor force participation rate. Institutional quality is the moderator term. Economic freedom was used as a proxy for institutional quality. Economic freedom, as defined by the five distinct areas namely: Size of government, legal system and property rights, sound money, freedom to trade internationally and regulation.

Table 1: Definition of variables and data source

Table 1 Definition of variables and data source			
	Variable	definition	data source
dependent Variable	GDP	GDP per capita growth (annual %)	World development indicators
independent Variable	FDIchina	Chinese FDI Stock in African Countries(COMESA)	China Africa Research Initiative
	GFCF	Gross fixed capital formation (% of GDP)	World development indicators
	INFRA1	Mobile cellular subscriptions (per 100 people)	World development indicators
	GOVexp	General government final consumption expenditure (% of GDP)	World development indicators
	Trade	Trade (% of GDP)	World development indicators
control Variable	INFL	Consumer price index (2010 = 100)	World development indicators
	DOC	Domestic credit to private sector by banks (% of GDP)	World development indicators
	INFRA2	Access to electricity (% of population)	World development indicators
	LAB	Labor force participation rate, total (% of total population ages 15-64) (modeled ILO estimate)	World development indicators
moderator Variable	IST	Institution quality measure by degree of economic freedom of five areas	Fraser institute
degree of economic freedom of five areas (IST)			
	Variable	definition	data source
	GOVsize	Size of Government	Fraser institute
	Leg	Legal System and Property Rights	Fraser institute
	Mon	Sound Money	Fraser institute
	Fred	Freedom to Trade Internationally	Fraser institute
	Reg	Regulation	Fraser institute

Source: Author

4.2. Method of analysis

The study aims to analyze the mediating effect of institutional factors on the relationship between FDI and the economic growth of COMESA. To this end, annual time series data of the period 2003-2021 . The dependent variable will be real gross domestic product per capita growth, while the independent variable will be the Inward flow of FDI. The control variables include (Gross fixed capital formation (% ofGDP), Mobile cellular subscriptions (per 100 people), General government final consumption expenditure(% of GDP), Trade(% ofGDP), Consumer price index(2010=100), Domestic credit to private sector by banks (% ofGDP), Access to electricity (% of population), Labor force participation rate, total (% of total population ages 15-64) (modeled IO estimate)) . This paper brings in the institutional quality as the moderator to discuss its effect for GDP and FDIchina.

This article constructs the following model to study the impact of FDI on GDP :

Among them, *i* represents the country, and *t* represents the year. control represents the control variable; year represents the control year effect; ϵ represents the random disturbance term, and α represents the coefficient.

To further understand the impact of ISI on GDP and FDIchina, this article constructs a moderating effect model as follows :

The cross term α_3 represents the moderating effect.

(1) Sample Data Description

This article selects annual data from 11 countries from 2003 to 2021, and the GDP and FDI data of these 11 countries are shown in Figure 1. For some missing data, this article uses the mean of each country to complete. In order to eliminate the influence of extreme values, this article applies a 1% truncation to all data. Figure 9 shows the The GDP and FDI from 11 countries

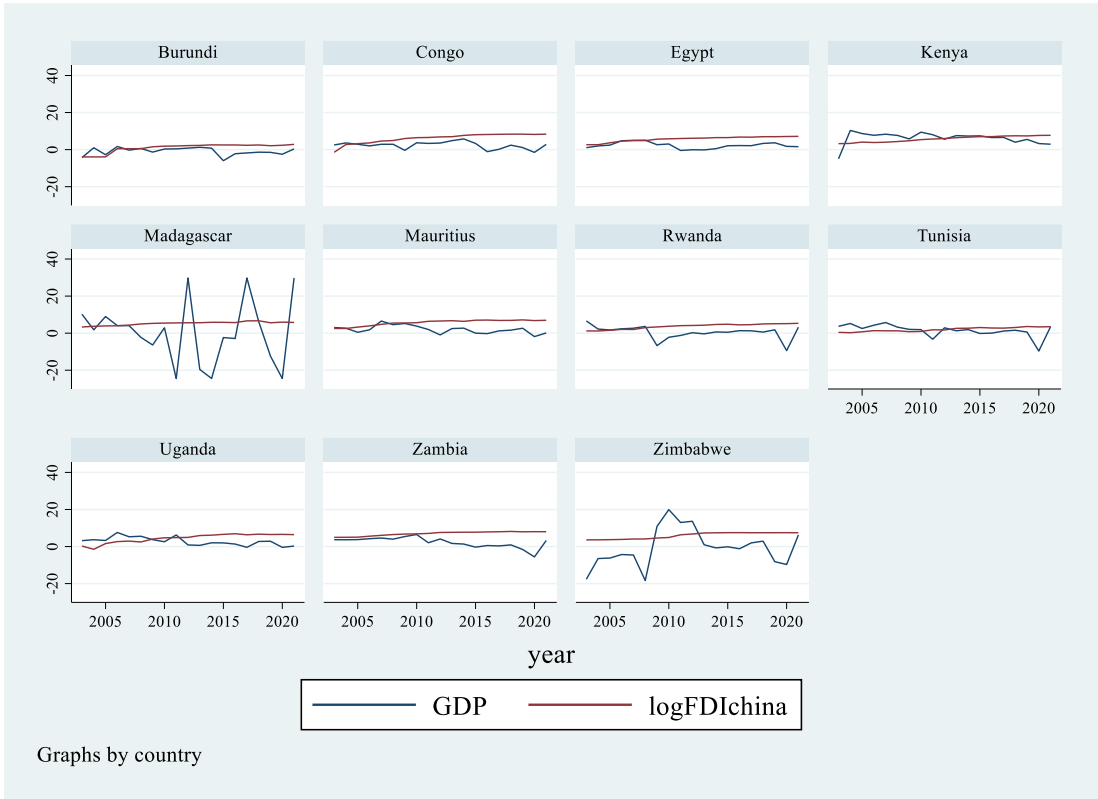


Figure 9: The GDP and FDI from 11 countries

Source: Author

(2) Descriptive Statistics

The descriptive statistical results of each variable are shown in Table 2. According to Table 2, there are a total of 209 observations. The average GDP is 1.727, with a standard deviation of 6.584, indicating significant differences in GDP growth rates among countries. The mean of FDIChina is 630.536, and the mean of the control variables is also relatively large. Therefore, in order to reduce heteroscedasticity and narrow the range of variables, this article takes the logarithm of FDIChina and the control variables.

Table 2: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
GDP	209	1.727	6.584	-24.463	29.786
FDIChina	209	630.536	942.331	0.02	4259.36
GFCF	209	19.916	6.647	3.286	37.791
INFRA1	209	56.176	39.442	1.526	147.392
GOVexp	209	14.009	4.639	4.946	27.245
Trade	209	61.811	24.73	23.044	120.876
INFL	209	144.177	130.578	46.422	739.215
DOC	209	26.581	23.999	1.201	98.954
INFRA2	209	45.007	35.887	3.401	100
LAB	209	66.538	11.082	45.556	87.807
logFDIChina	209	4.784	2.448	-3.912	8.357
logGFCF	209	2.924	0.402	1.19	3.632
logINFRA1	209	3.577	1.188	0.422	4.993
logGOVexp	209	2.58	0.359	1.599	3.305
logTrade	209	4.045	0.402	3.137	4.795
logINFL	209	4.774	0.554	3.838	6.606
logDOC	209	2.91	0.885	0.183	4.595
logINFRA2	209	3.424	0.941	1.224	4.605
logLAB	209	4.184	0.17	3.819	4.475

Source: Author

(3) Correlation analysis

This article conducts correlation analysis on various variables, which can pre determine the relationship between the research variables and provide a basis for subsequent empirical research. This article uses Stata16.0 to analyze the relationship between various variables, and the specific results are shown in Table 3.

The correlation coefficient between logFDI China and GDP in Table 3 is 0.0490, indicating a positive correlation between the variables GDP and FDI China, but not significant. The correlation coefficient between logINFRA2 and logDOC is 0.686, indicating that the correlation coefficient of the variables is relatively high and there may be serious multicollinearity issues. Therefore, we need to conduct collinearity tests.

Table 3: Correlation Analysis

	GDP	logFDIChina	logGFCF	logINFRA1	logGOVexp	logTrade	logINFL
GDP	1						
logFDIChina	0.0490	1					
logGFCF	0.199***	0.227***	1				
logINFRA1	0.0130	0.578***	0.259***	1			
logGOVexp	-0.0100	-0.368***	0.00600	0.0240	1		
logTrade	0.0250	0.149**	0.190***	0.268***	-0.0340	1	
logINFL	-0.297***	0.389***	-0.351***	0.404***	-0.118*	-0.0160	1
logDOC	-0.00300	-0.0750	0.0640	0.490***	0.446***	0.347***	0.0840
logINFRA2	0.0570	0.362***	0.113	0.655***	-0.0300	0.522***	0.261***

logLAB	-0.0320	-0.0430	-0.104	-0.332***	0.129*	-0.314***	-0.0430
	logDOC	logINFRA2	logLAB				
logDOC	1						
logINFRA2	0.686***	1					
logLAB	-0.404***	-0.649***	1				

Source: Author

(4) Collinearity test

This article uses the variance inflation factor VIF to test for collinearity. Generally, if VIF is less than 10, it indicates that there is no collinearity between variables, indicating that the regression results of the future model are relatively reliable.

From the results of the variance inflation factor VIF, it can be seen that the VIF values of all variables are less than 6, with an average VIF value of 2.728. According to the principle of universal standards requiring VIF to be less than 10, the results indicate that there is no serious multicollinearity problem, and the subsequent regression results are reliable.

Table 4: Variance inflation factor

	VIF	1/VIF
logINFRA2	5.749	0.174
logDOC	3.995	0.25
logINFRA1	3.162	0.316
logFDIchina	2.821	0.354
logLAB	2.113	0.473
logINFL	1.818	0.55
logGOVexp	1.815	0.551
logGFCF	1.609	0.622
logTrade	1.466	0.682
Mean VIF	2.728	.

Source: Author

(5) Verification of Model Selection

The Hausman Test is a statistical test used for model selection, which tests whether the difference between fixed effects and random effects models is significant in panel data models. If the P-value of the Hausman test is greater than the significance level (such as 0.05), the null hypothesis cannot be rejected, and an individual random effects regression model cannot be established. If the P-value is less than the significance level, reject the null hypothesis and choose a fixed effects model.

Based on the results of the Hausman test, it can be concluded that the p-value is 0.3697, which is greater than 0.05, indicating acceptance of the null hypothesis and suitability of using a random effects model.

Table 5: Hausman test results

Hausman test results	conclusion
chi2(9)= 9.77	random effects models
Prob>chi2 = 0.3697	

Source: Author

(6) The impacts of Chinese FDI Stock in African Countries on economic growth

According to Model 1, this article uses a random effects model for regression, while controlling for year effects for regression. The results are shown in Table 6.

The first column shows the regression results without the addition of control variables, and the second column shows the regression results with the addition of control variables. In order to reduce heteroscedasticity, this article uses robust standard error for regression.

Table 6: The impacts of Chinese FDI Stock in African Countries on economic growth

	(1) GDP	(2) GDP
logFDIchina	0.457** (2.309)	0.358** (2.184)
logGFCF		0.479 (0.577)
logINFRA1		0.491 (0.575)
logGOVexp		1.203 (1.048)
logTrade		-2.516* (-1.865)
logINFL		-4.311*** (-4.655)
logDOC		-1.053 (-1.029)
logINFRA2		2.087** (1.969)
logLAB		2.723 (0.619)
_cons	-0.051 (-0.022)	8.064 (0.390)
year	Yes	Yes
N	209	209
adj. R2	0.1540	0.2490

Source: Author

From the results, it can be seen that the coefficients of logFDI China are all positive and have passed the significance test at the 5% level, indicating that the impact of China's FDI on African Counties can significantly increase their economic growth.

The coefficients of logTrade, logINFL, and logDOC are all negatively significant, indicating that these variables will have a negative impact on the country's economy. The logINFRA2 coefficient is positively significant, indicating that logINFRA2 has a positive impact on the country's economy

(7) Institutional quality effect for GDP and FDIchina

According to Model 2, this study uses ISI as a moderating variable to construct a cross term between ISI and logFDI to analyze the impact of institutional quality on the relationship between FDI and GDP.

ISI is a moderating variable composed of 5 variables which are shown in Table 1. Due to the fact that 5 variables are positive indicators, it is only necessary to standardize the data. In order to prevent result errors caused by inconsistent data magnitudes of indicators, we use Stata16 to standardize the data results, transforming indicator data of different magnitudes into data with a mean of 0 and a standard deviation of 1 for principal component analysis. The data processed through standardization is denoted as $s(X_i)$, where X_i represents the specific variable.

Among them, X_i represents the indicator i that needs to be converted, X_{mean} represents the mean of the indicator, and X_{std} represents the standard deviation of the indicator.

(8) Principal Component Analysis of ISI

The KMO experiment and Bartlett sphere test can determine whether the collected data meets the conditions of factor analysis. The KMO value is an important indicator to measure whether a variable is suitable for conducting factor analysis. The KMO test results range from 0 to 1. The closer the KMO value is to 1, the better the factor analysis results are. Conversely, the worse the KMO value is, the worse the factor analysis results are. Generally speaking, a KMO value higher than 0.8 indicates a high feasibility of factor analysis; The KMO value ranges from 0.7 to 0.8, indicating a high feasibility

of factor research; A KMO value between 0.5 and 0.7 indicates that factor analysis can be performed, while a KMO value below 0.5 indicates that factor analysis is not suitable.

The KMO value in Table 7 is 0.762, indicating a high feasibility of factor studies. Table 7 shows the total variance interpretation table, where the total variance decomposition rate refers to the total amount of data information obtained from all extracted common factors. According to the results in Table 7, a total of 2 components were extracted, and the total variance decomposition rate of the extracted components can reach 79.19%, which can better explain the institutional quality of various countries.

Table 7: Principal Component Analysis of ISI

Component	Eigenvalue	Difference	Proportion	Cumulative
Comp1	2.99427	2.02926	0.5989	0.5989
Comp2	0.965008	0.492541	0.193	0.7919
Comp3	0.472467	0.150684	0.0945	0.8863
Comp4	0.321783	0.0753063	0.0644	0.9507
Comp5	0.246476	.	0.0493	1
Chi-square= 456.842			Degrees of freedom = 10	
p-value=0.000			KMO=0.762	

Source: Author

The calculation formula for ISI is :

$$ISI=(0.5989/0.7919)*f1+(0.193/0.7919)*f2$$

Among them, f1 and f2 are two principal components extracted through principal component analysis.

(9) Institutional quality effect for GDP and FDIchina

According to Model 2, this article uses a random effects model for regression, while controlling for year effects for regression. The results are shown in Table 8.

The first column shows the regression results without the addition of control variables, and the second column shows the regression results with the addition of control variables. In order to reduce heteroscedasticity, this article uses robust standard error for regression.

Table 8: Institutional quality effect for GDP and FDIchina

	(1)	(2)
	GDP	GDP
logFDIchina	13.047*** (3.298)	12.740*** (3.564)
ISI	13.891* (1.942)	7.484* (1.672)
logFDIchina*ISI	-18.761* (-1.759)	-11.625* (-1.814)
GFCF		-0.057 (-0.819)
INFRA1		0.021 (0.883)
GOVexp		0.071 (1.128)
Trade		-0.014 (-0.454)
INFL		-0.016*** (-6.693)

International Journal of Novel Research in Marketing Management and Economics

 Vol. 11, Issue 2, pp: (57-79), Month: May - August 2024, Available at: www.noveltyjournals.com

DOC		-0.038 (-0.831)
INFRA2		0.022 (0.796)
LAB		0.016 (0.194)
_cons	-6.437 (-1.366)	-2.886 (-0.395)
year	Yes	Yes
N	209	209
adj. R2	0.1668	0.2507

Source: Author

The results of Table 8 show that the coefficient of the cross term (logFDI China * ISI) is negative and significant at the 10% significance level, indicating that as the ISI value increases, the quality of the country's institutions improves, which weakens the positive impact of FDI China on the country's GDP.

(10) Robustness check

Robustness testing can be conducted by changing the sample range, replacing variables, etc. Below, we will use changing the sample range for robustness testing

We conducted a re regression using samples from 2010 to 2021, with a sample size of 132. The robustness test results are shown in Table 9.

Table 9: robustness check

	(1) GDP	(2) GDP
logFDIchina	0.608*** (3.613)	1.043* (1.842)
logGFCF		3.099 (1.223)
logINFRA1		-5.376 (-1.355)
logGOVexp		3.924 (1.151)
logTrade		-1.444 (-0.763)
logINFL		0.141 (0.091)
logDOC		1.455 (0.706)
logINFRA2		2.376 (1.378)
logLAB		-2.055 (-0.289)
_cons	1.079 (0.390)	-7.580 (-0.250)
year	Yes	Yes
N	132	132
adj. R2	0.1752	0.2192

t statistics in parentheses

* p < 0.1, ** p < 0.05, *** p < 0.01

Source: Author

The regression results in Table 9 show that the regression coefficients of logFDIchina are still positive, significant at the 1% and 10% significance levels, respectively. The coefficients of other control variables also do not show significant changes. The overall conclusion is consistent with the regression results in the previous section, which verifies the empirical conclusion and passes the robustness test.

5. DISCUSSION

5.1. Relationship between Chinese FDI and GDP growth in COMESA

The empirical results from model 1 indicate that FDI and access to electricity positively influence GDP growth in COMESA countries, while trade and inflation have a negative impact. Other factors like mobile cellular subscriptions, gross fixed capital formation, domestic credit to the private sector by banks, and government final consumption expenditure were found to be insignificant.

Foreign Direct Investment (FDI) impacts GDP growth mainly through three channels: Firstly, FDI tend to bring new technologies and management practices, enhancing productivity. FDI may also be the crucial source of capital for investment, especially in infrastructure and industrial sectors, stimulating economic activities. In addition, FDI can create job opportunities, henceforth increasing income and consumption, which drives economic growth.

Access to Electricity is a necessary condition for a variety of economic activities. Reliable electricity is crucial for industrialization, as it enables production processes, reduces operational costs, and improves efficiency. Furthermore, improved access to electricity enhances living standards, by supporting economic activities like education and small businesses, which contribute to GDP growth.

In certain conditions trade may have a negative impact on economic growth. For instance, the prevalence of trade Barriers and other Policies that inhibit trade may result to negative impacts of trade on economic growth. This is so because protectionist policies or trade barriers tend to limit market access and competitiveness. Trade in most African countries is characterized by high few exports Dependency. Heavy reliance on a few export commodities can make economies vulnerable to global market fluctuations, leading to instability in GDP growth.

Inflation leads to Economic Uncertainty. High and volatile inflation undermines economic stability, eroding purchasing power and discouraging investment. High inflation also often leads to higher interest rates, which can suppress domestic investment and consumption, negatively impacting GDP growth.

In country where mobile penetration is already be high, additional subscriptions might have a marginal impact on economic activities. In addition, the economic benefits of mobile technology might be reflected in other sectors and not directly attributed to GDP growth.

The impact of Gross Fixed Capital Formation on economic growth might be insignificant because of capital market Inefficiency. If capital investments are not efficiently utilized or directed towards low-impact projects, their contribution to GDP growth can be minimal. It is also worth noting that, the benefits of capital formation may be long-term and not immediately visible in short-term GDP growth figures.

For Domestic Credit to Private Sector by Banks to have significant impact on GDP growth might depend on Accessibility. The effectiveness of credit might be limited by access issues, where not all sectors or businesses can benefit equally. In addition, high levels of credit might lead to debt issues, reducing its positive impact on economic growth.

For the country economic growth to benefit from general Government Final Consumption Expenditure that will depend on the government's spending Efficiency. Government spending might not be effectively translated into productive investments, thus having a limited impact on GDP growth. Furthermore, high government expenditure could crowd out private investment, reducing overall economic growth potential.

5.2. Role of institutional quality in moderating this relationship

Model 2, economic freedom was used as a proxy for institutional quality. Economic freedom, as defined by the five distinct areas namely: Size of government, legal system and property rights, sound money, freedom to trade internationally and regulation. The KMO of 0.762 from Principal Component Analysis of institutional quality indicates a good measure of sampling adequacy, meaning the economic freedom components effectively captured institutional quality. By combining

these factors into an index, the analysis provides a comprehensive view of how economic freedom or the lack thereof affects the relationship between FDI and economic growth. The results show that the interaction of Foreign Direct Investment (FDI) with institutional quality have a significant negative impact on the GDP growth of COMESA countries. Economic freedom, as defined by the five distinct areas mentioned, encompasses crucial aspects of a country's economic environment that directly affect how FDI influences economic growth.

The first area of economic freedom is size of government which refers to the degree of control the government has over economic activities of both businesses and individuals. Increase of government spending, taxation, and the size of government-controlled enterprises, government decision-making tend to take the place of individual choice and economic freedom is reduced. Large government spending and the prevalence of state-controlled enterprises can crowd out private sector activity. In economies where government intervention is excessive, resources may be allocated inefficiently, and private enterprises may struggle to compete or innovate. In such environments, FDI may be directed towards sectors favored by the government rather than those that could drive sustainable economic growth. This misallocation can lead to suboptimal growth outcomes and reduce the overall impact of FDI on GDP.

The other measure for economic freedom is legal system and property Rights. One of the primary functions of the government is to ensure that the protection of persons and their rightfully acquired property to enhance economic freedom and civil society.

A robust legal system and secure property rights are essential for attracting and maintaining FDI. If property rights are insecure, or the legal system is biased or inefficient, investors may face high risks of expropriation or legal disputes, leading to reduced investment. Weak legal institutions can result in FDI being used in ways that do not benefit the broader economy, such as through corrupt practices or favoritism. This undermines economic growth by reducing trust and stability in the business environment.

Sound money measures how stable and reliable the money market is. High and volatile inflation erodes purchasing power and savings, making it difficult for businesses and individuals to plan long-term investments. This uncertainty can deter FDI and limit its positive impact on economic growth. When the money is not sound, it signals broader macroeconomic instability, which can reduce investor confidence and result in capital flight, further harming GDP growth.

Freedom to trade internationally comprise of freedom to exchange that is freedom to buy, sell and make contracts. Restrictions on trade reduce economic freedom and limit the benefits of FDI. If businesses cannot easily trade internationally, they may not achieve economies of scale or access global markets, which diminishes the growth potential of FDI.

Regulation by the governments put in place to limit the right economic activities domestically as well as on international level. As these limits multiply, economic freedom decreases. FDI is often attracted to regions with open trade policies. If COMESA countries impose significant trade limits, they may receive less FDI or attract investment that is less integrated into the global economy, thus limiting growth.

In summary, the negative impact of the interaction between Chinese FDI and institutional quality on GDP growth in COMESA countries highlights the importance of strengthening institutional frameworks to better manage foreign investments. Countries with robust institutions are better positioned to negotiate favorable terms, ensure compliance with local regulations, and maximize the developmental benefits of FDI. Conversely, weak institutions can lead to scenarios where the potential benefits of FDI are undermined by inefficiencies, corruption, and poor project outcomes, ultimately hindering long-term economic growth.

6. RECOMMENDATIONS AND CONCLUSION

6.1. Policy Recommendations

Based on these results, the study proposes the following policy recommendations that could help enhance GDP growth in COMESA countries.

To Enhance Institutional Quality there is need to strengthen legal and regulatory Frameworks. Improvement of the legal system, property rights, and regulatory frameworks will attract and effectively utilize FDI. Every economy operates on scarce resources and funds, thus its imperative to Implement anti-corruption measures to ensure that FDI and government expenditures are used efficiently.

Infrastructure and Access to Utilities are necessary conditions for an economy to thrive. Thus, the government should invest in energy, expand and improve the electricity grid to ensure reliable and widespread access, which is critical for industrialization and economic activities. In addition, the government should also invest in transport, telecommunications, and other critical infrastructure to support economic activities and enhance productivity.

The government should also implement policies aiming at promotion of Stable Macroeconomic environment, such as control of inflation. Adoption of monetary and fiscal policies that aim to control inflation, will ensure economic stability and predictability for investors. While maintenance of sound money will ensure that monetary policies promote a stable currency and protect the value of savings and investments.

The government should also encourage trade liberalization by reducing Trade Barriers. Lowering tariffs and non-tariff can enhance trade openness and competitiveness. Development of policies to diversify export products and markets might reduce dependence and vulnerability to global market fluctuations.

The following policies can be implemented to enhance financial sector development. To improve access to credit, governments need to develop financial products and services that increase access to credit for small and medium-sized enterprises (SMEs) and other underserved sectors. In addition, promotion of financial literacy to enhance both businesses and individual capabilities to effectively use available credit for growth.

Optimize government spending by focusing on productive Investments. Prioritize government spending on education, health, and infrastructure projects that have a high multiplier effect on the economy. Furthermore, Implement measures to improve the efficiency and transparency of public spending to ensure it contributes positively to economic growth.

By addressing these areas, COMESA countries can better harness the benefits of FDI, ensure stable and conducive economic environments, and ultimately drive sustainable GDP growth.

6.2. Conclusion

The impact of domestic institutional quality and Chinese Foreign Direct Investment (FDI) on GDP growth in COMESA countries is multifaceted and underscores the critical interplay between governance, infrastructure, and economic policies. Empirical evidence reveals that while FDI and access to electricity positively influence GDP growth, poor institutional quality can significantly undermine these benefits. Specifically, weak legal systems, inadequate property rights protection, high inflation, and trade barriers hinder the positive effects of FDI by creating environments of uncertainty, inefficiency, and corruption.

Chinese FDI, characterized by large-scale infrastructure and resource extraction projects, provides essential capital and technology transfers, boosting immediate economic activities. These investments have the potential to significantly contribute to economic development and modernization in COMESA countries. However, their long-term growth contributions are maximized only when supported by robust institutional frameworks. Strong institutions ensure effective resource allocation, reduce corruption, and enhance transparency, thereby fostering an environment conducive to sustainable economic growth.

Conversely, the negative impact of trade and inflation on GDP growth highlights the need for stable macroeconomic policies and an open trade environment. High inflation erodes purchasing power and investment incentives, while trade barriers limit market access and competitiveness, further hindering economic performance.

Factors such as mobile cellular subscriptions, gross fixed capital formation, domestic credit to the private sector, and government final consumption expenditure were found to be insignificant in driving GDP growth, suggesting that these elements either already play a saturated role in the economy or are inefficiently utilized.

To enhance GDP growth in COMESA, policy recommendations focus on strengthening institutional quality, improving infrastructure, maintaining macroeconomic stability, liberalizing trade, developing the financial sector, and optimizing government spending. By addressing these areas, COMESA countries can better leverage FDI, particularly from China, to drive sustainable economic growth and improve the overall economic landscape. Strengthening institutional frameworks is paramount to ensuring that the benefits of FDI are fully realized, contributing to a more resilient and dynamic economic future for the region.

REFERENCES

- [1] Agbloyor, E. K., & et al. (2016). Foreign direct investment and economic growth in sub-Saharan Africa: Does financial development and political institutions matter?. *Journal of African Business*, 17(3), 319-347.
- [2] Ali, F., Fiess, N., & MacDonald, R. (2010). Do Institutions Matter for Foreign Direct Investment? *Open Economies Review*, 21(2), 201-219.
- [3] Asamoah, M. E. O., & et al. (2019). The role of institutions in the FDI-growth nexus in sub-Saharan Africa: a SEM approach. *African Development Review*, 31(3), 338-353.
- [4] Brautigam, D. (2009). *The Dragon's Gift: The Real Story of China in Africa*. Oxford University Press.
- [5] Deloitte Africa Construction Trends. (2018).
- [6] Folashade, A. (2018). *Impact of Foreign Direct Investment on Economic Growth in Nigeria*. Unpublished doctoral dissertation, Covenant University, Nigeria.
- [7] Jude, C., & Leveuge, G. (2016). Growth effect of FDI in developing economies: the role of institutional quality. *International Economics*, 148, 1-14.
- [8] Ketteni, E., & Kottaridi, C. (2019). Institutions, foreign direct investment, and economic growth. *Economic Modelling*, 76, 279-288.
- [9] McKinsey & Company. (2017). *Chinese engagement in Africa: An unexpected beneficiary?* Retrieved from [link]
- [10] Miao, K., & et al. (2020). The impact of institutional quality on China-FDI and China-Africa trade on the economic growth of African countries. *Journal of African Business*, 21(3), 322-342.
- [11] Naudé, W. (2012). *Industrialization in Sub-Saharan Africa: Advancing the Debate on the Trade, Investment, and Development Nexus*. UNU-WIDER Working Paper, 2012(25).
- [12] OECD. (2008). *Foreign Direct Investment for Development: Maximising Benefits, Minimising Costs*. OECD Publishing.
- [13] UNCTAD World Investment Report 2023.