



**NEAR EAST UNIVERSITY  
INSTITUTE OF GRADUATE STUDIES  
DEPARTMENT OF ECONOMICS**

**IMPACT OF FOREIGN DIRECT INVESTMENT ON ECONOMIC GROWTH  
CASE STUDY: GHANA**

**MSc. THESIS**

**FATHI HASSAN ALI**

**Nicosia  
January, 2023**

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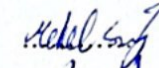



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### Approval

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## Declaration

I hereby declare that all information, documents, analysis and results in this thesis have been collected and presented according to the academic rules and ethical guidelines of Institute of Graduate Studies, Near East University. I also declare that as required by these rules and conduct, I have fully cited and referenced information and data that are not original to this study.

Fathi Hassan Ali

...../...../2023

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**Fathi Hassan Ali**

**Abstract****IMPACT OF FOREIGN DIRECT INVESTMENT ON ECONOMIC GROWTH  
CASE STUDY: GHANA****Fathi Hassan Ali****MA, Department of Economics****January, 2023 Page, 101**

This study examines Ghana's economic growth from 1990 to 2020 utilizing the FDI as the benchmark and GDP growth as a stand-in for actual economic growth. GMM and the Pairwise Granger Causality Test were deployed as econometric tools to measure FDI's association with Ghana's EG. To determine the stationarity of the variables utilized in this research—a requirement for the majority of studies—a stationarity test was first conducted. Since stationarity could not be obtained at the levels of the variables incorporated, the unit root implementation results reveal that every variable is incorporated with the order of first difference or (I). The significance level was calculated using the 1%, 5%, and 10 levels of significance as measurements. GMM's results pinpoint a positive association between Ghanaian economic growth and FDI, which is supported by the adoption of the co-integration test (Johansen system), which demonstrates the relationship as long-term. Ghanaian economic growth will increase proportionately with an increase in FDI. The outcome of the Granger causality test revealed a one-way relationship between Ghana's economic growth and FDI. Keywords: Economic Growth, Inflation, Export, Import, Foreign Direct Investment.

**Keywords:** Economic Growth, Inflation, Export, Import, Foreign Direct Investment.

## Özet

### DOĞRUDAN YABANCI YATIRIMIN EKONOMİK BÜYÜME ÜZERİNDEKİ ETKİSİ ÖRNEK İNCELEMESİ: GANA

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Ocak, 2023 Sayfa, 101

Bu çalışma, Gana'nın 1990'dan 2020'ye kadar olan ekonomik büyümesini, ölçüt olarak doğrudan yabancı yatırımı ve fiili ekonomik büyümenin bir vekili olarak GSYİH büyümesini kullanarak incelemektedir. GMM ve Pairwise Granger Nedensellik Testi, DYY'nin Gana'nın EG'si ile ilişkisini ölçmek için ekonometrik araçlar olarak konuşlandırıldı. Bu araştırmada kullanılan değişkenlerin durağanlığını belirlemek için - çoğu araştırma için bir gerekliliktir - önce bir durağanlık testi yapılmıştır. Dahil edilen değişkenlerin düzeylerinde durağanlık sağlanamadığı için birim kök uygulama sonuçları, her değişkenin birinci fark mertebesine veya (I) sırasına göre birleştirildiğini ortaya koymaktadır. Anlamlılık düzeyi, ölçüm olarak %1, %5 ve 10 anlamlılık düzeyi kullanılarak hesaplandı. GMM'nin sonuçları, Gana'nın ekonomik büyümesi ile DYY arasında, ilişkinin uzun vadeli olduğunu gösteren eş bütünleşme testinin (Johansen sistemi) benimsenmesiyle desteklenen pozitif bir ilişkiyi kesin olarak işaret ediyor. Gana'nın ekonomik büyümesi, DYY'deki artışla orantılı olarak artacaktır. Granger nedensellik testinin sonucu, Gana'nın ekonomik büyümesi ile DYY arasında tek yönlü bir ilişki olduğunu ortaya koydu.

**Anahtar Kelimeler:** Ekonomik Büyüme, Enflasyon, İhracat, İthalat, Doğrudan Yabancı Yatırım.

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## Abbreviation

**GMM:** Generalized Method of Moment

**ADF:** Augmented Dickey-Fuller

**PP:** Philip perron

**WDI:** World Development Indicators

**GDP:** Growth Domestic Products

**FDI:** Foreign Direct Investment

**EXP:** Exports

**IMP:** Imports

**INF:** Inflation

## CHAPTER I

### Introduction

Many African economies have benefitted from foreign direct investment (FDI), especially Ghana. The general consensus among policymakers is that FDI fosters development and increases the productivity of the host countries. The recent increase in economic convergence among nations has been facilitated by the current globalization of world economies, especially in trade and financial flows, which have had a substantial impact on a number of economic factors (Michael et al. 2022). FDI attracts investors who want to grow and enhance the country's economy and the standard of human resources (Simionescu and Naros, 2019).

Numerous studies have looked at the nexus between FDI and economic growth over the last few decades. Growth models, both neoclassical and endogenous, have found a correlation between these two macroeconomic indicators. Findlay (1978) argues that the introduction of more sophisticated technology and managerial methods through FDI results in a "contagion" impact that accelerates the pace of technological improvement in host economies. The diffusion of new technology has also been demonstrated to accelerate economic development when foreign direct investment is present. By introducing innovative inputs and technologies, the capital stock of the host nation is increased by foreign direct investment (FDI), as examined by (Blomstrom et al., 1992; Borensztein et al., 1998). Foreign direct investment (FDI) has the ability to boost domestic firm productivity by using the "spillover effect" of new technologies (Chanegriha et al., 2020). One of the various ways through which foreign direct investment (FDI) is routed is via multinational companies (MNCs), whose training activities have been proven to increase human capital in recipient countries (Anwar & Nguyen, 2010).

The connection between EG and FDI has received significant attention from academics and the governments of developing countries. Because one of these countries' primary objectives is economic growth, FDI attraction-related policies have received priority during periods of economic growth and progress (Vo et al. 2019a). Buckley et al. (2002) state that FDI improves the balance of the saving-investment gap and supplies the production technology needed. Moreover, the investment of FDI increases human capital and tax revenue. From a different perspective, it may be stated that FDI deepens ties and

creates long-term advantages across diverse nations, making it one of the crucial components of the process of economic integration.

Several scholars have highlighted FDI's range of advantageous effects on an economy. "In addition to providing positive externalities like technology and knowledge transmission, FDI also diversifies the recipient's capital structure (Blomström and Kokko 2002; Markusen and Venables 1999; Caves 1974; Blomström et al. 1994; Mansfield and Romeo 1980). For instance, FDI boosts investment, which thus narrows the difference between saving and investment (Erhieyovwe & Jimoh 2016). On the other hand, it is the contention of earlier studies that while FDI has a negative short-term impact on economic growth, it has a beneficial long-term impact (Schoors & Van Der Tol, 2002)."

Due to the positive effects of FDI in this era of globalization, where barriers in the "economy, trade, and technology" are disappearing, emerging countries prioritize it (Demirsel et al. 2014). Even if each country can draw on particular strengths and advantages to advance its economy, FDI remains one of the key factors directly affecting growth. Global "financial stability, economic progress, and social welfare" can all be attained with FDI (Borensztein et al. 1998; Nguyen et al. 2019).

### **Foreign Domestic Investment inflow in Ghana**

Following the financial and political transition, the involvement of FDI in developing economies has increased quickly. Most nations have loosened FDI restrictions, "improved macroeconomic stability, privatized state-owned businesses, implemented domestic financial reforms, liberalized the capital account, and provided tax breaks and subsidies in order to enhance their share of FDI inflows." The US Department of State states that "By enacting the Free Zones Act of 1995 and the Ghana Investment Promotion Act of 1994, respectively, Ghana has made particular tax incentives and investor protection legislation available to tempt foreign investors and foster an environment that is conducive to their business operations. With the support of this initiative and policy, Ghana has seen a rise in foreign direct investments and economic growth."

## **Statement of the Problem**

Natural resources abound in the majority of African nations, including Ghana. Due to a lack of funding and the necessary skills to harness them, the majority of these resources remain untapped. Ghana has received its fair share of foreign direct investment (FDI) in recent years, mostly in the mining, banking, and telecommunications sectors as well as the road construction, broadcasting, automotive, and manufacturing industries. Despite the apparent economic benefits to the country and its residents, there has been a great deal of opposition and public outrage against these foreign investments.

Mining and oil exploration are the two primary industries in Ghana that draw foreign direct investment. According to the World Investment Report, (2020), FDI flows to Ghana decreased from 3 million to 2.3 million dollars between 2018 and 2019. There were a few issues that hampered investment. They consist of bureaucratic red tape, low productivity, unskilled labor, and corruption. Other significant problems include the insufficient power and water supplies as well as the scant protection offered to investors. If institutions are made to function, the stated problems will be effectively handled.

Improved FDI inflows and an acceleration of its perceived beneficial impact on growth are made possible by institutions that are closely or distantly related to investment operating effectively. Property rights, political stability, and high-quality bureaucracy are among the institutions recognized for their responsibilities in promoting investments and socioeconomic prosperity (Knack & Keefer, 1995).

Foreign direct investment has various advantages for developing nations, including the introduction of fresh investment resources, support for the host nation's BOP, expansion of its capital stock, and potential for future economic growth (Appiah et al. 2019). Because of this, this study has been created to look at how foreign direct investment affects the economy of a nation using Ghana as the case study.

## **Purpose of the Study**

This research evaluates how FDI has affected Ghana's economic development. The research investigates the relationship and measures economic growth. This will be accomplished by conducting an empirical examination of FDI and investigating scholarly opinions and suggestions. To do this, a statistical and historical analysis of FDI influx and

its impact on a few macroeconomic indicators, such as export, import, inflation rate, and GDP will be conducted.

### **Research Question**

Scholars from all around the world have identified and treated FDI's impact on the hosting nation's growth economically with a lot of attention (Vo et al. 2019a). It is commonly known that this association has been thoroughly used to explore information from one country or a selection of several countries. Sadly, academics have not yet come to an agreement on empirical findings.

The study is guided to answer the following research question:

- What kind of impact does FDI has on the economic growth of the Ghanaian economy?

From the research question, the following research hypothesis is designed to validate the research question:

H0: The Ghanaian economy is not impacted by the presence of FDI.

H1: The Ghanaian economy is impacted by the presence of FDI.

### **Significance of the Study**

In a previous study, Forte (2013) examined how FDI and EG are related in some developed and developing nations. To obtain additional samples, data from many nations are gathered into one database. FDI's influence, however, is dependent on the domestic situation of the locale country, according to the findings. Another study on the same topic was conducted by Kastrati (2013), and the findings showed that while overall, FDI had a beneficial impact on EG, it wasn't completely good or bad because it may also have a negative impact. In addition, Iqbal et al. (2014) demonstrated that FDI has an impact on Pakistan's EG by carrying out the same research there. In the final section of their research, they also noted that effects could vary depending on cultural variations, suggesting that each country's economic growth should be studied separately. This study fills a research void by concentrating on Ghana as a single country over a time period spanning from 1990 to 2020. Furthermore, the protracted integration of the relationships



between EG, FDI, imports, exports, and inflation will be established using the GMM model.

### **Limitations**

The main shortcoming of this research project is that it only addresses the economy of Ghana. In this way, data related to the Ghanaian economy and FDI's influence on EG were obtained and taken into consideration. This study's time frame is 30 years (1990 - 2020). The time required to complete this study and the problems with reliable and precise data is two main obstacles to this research.

Furthermore, there has been much debate regarding the role that FDI plays in the growth process over the years. Despite the fact that this discussion has shed light on the connection between FDI and growth, relatively little empirical research has been done on the subject, in part because there isn't a conceptual framework or a clear testable hypothesis.

### **Definition of the Keywords**

#### ***Economic Growth (EG)***

When a current societal production of economic goods and services increases in both volume and quality, it is said to be experiencing EG. (Max Roser, 2021).

#### ***Foreign Direct Investment***

In accordance with the World Bank, foreign direct investment (FDI) is defined as "the net inflow of investment to acquire a lasting management stake (10% or more of the voting shares) in a company operating in an economy other than the investor" (2022). The payment balance's equity capital, reinvested earnings, other long-term capital, and short-term capital components are added together to form this amount.

#### ***Exports***

“The value of all goods and other market services offered globally is represented by exports of goods and services (The World Bank, 2022).

***Imports***

The term "imports" refers to commodities or the products and services that are carried into a nation from another one for commercial purposes. Goods imports frequently fall under import quotas, tariffs, and agreements and typically include the intervention of the country's customs authority (Dilawar et al. 2012).

***Inflation***

The annual percent variation in the value of a collection of products and services for the typical consumer, as determined by the consumer price index. At predetermined intervals, such as annually, it can be established or changed.

**Study Plan**

This study is divided into six sections with each section addressing a particular goal.

Chapter One highlights the introduction section of the study.

Chapter Two reviews the literature of the study in detail.

Chapter Three is concerned with the methodology of the research.

Chapter Four is centered on findings and discussion.

Chapter Five is purely a discussion section.

Chapter Six sums up the study with a conclusion and recommendations.

## **CHAPTER II**

### **Literature Review**

#### **Introduction**

The goal was to investigate FDI's impact on the Ghanaian economy with regard to EG. In this section, the connection or association between the context of involvement and the impact on growth is established. The literature review's primary subject is the theoretical literature. The chapter provides conceptual explanations, descriptions, and details regarding the study topics that are specifically handled in this chapter.

#### **Theoretical Review**

Many nations have been fervently advertising their economic state to benefit from FDI since two decades ago (FDI, hereafter). Particularly in a developing country like Ghana, it is a crucial source of foreign cash and technical transfer. Since then, economists nowadays have understood the importance of foreign investment to a nation's existence, particularly in less developed nations.

Numerous researchers both theorized and analytically have investigated FDI's influence on the host countries' EG. Zhang (2001) asserts that FDI may have a direct spillover effect on the hosting nation's EG. He posits that they are both mutually beneficial. FDI's rapid expansion has a favorable effect on EG, which typically results in higher productivity because of the additional facilities provided by acquiring managerial expertise and superior technologies from other nations. Most notably, FDI implies increased productivity through acquisitions supported and labor training supported by multinational firms, and it is anticipated to be a growth enhancement through human capital and technical development (Buckley et al., 2002).

Similarly, Althukorala (2003) discovers that FDI provides non-OECD nations with a wealth of necessary resources such as innovative technologies, capital, and management skills, which in turn creates new jobs, and reduces poverty. However, the economic and social environment in the host countries determines how much FDI influences growth. This characteristic of the economic and social environment is related to an increase in innovative technologies, and trade openness of the hosting nation. When the hosting nation has made significant technology advancements, increased saving raet,

and has trade liberalization, it will benefit from increased FDI in its economy (Akinlo, 2004). As a result, as FDI is a source of capital, (Zhao & Du, 2007) contend that rapid economic expansion frequently causes an excessive level of the capital gap in host nations; as a result, these countries may need to entice additional FDI by offering favorable terms. Importantly, strong economic growth will boost confidence and entice foreign investors to make investments in emerging nations.

However, FDI through wealth generation in recipient economies may have an effect on the growth in host nations because it is similar to the host incentive to invest and is most likely to generate non-convex growth by enhancing the combination of oversea technologies and innovative inputs in the receiver nation's economic manufacturing sector.

Similar to how FDI increases capital accumulation in developing nations, the efficiency of the hosting nation enterprises is improved via the correlation of impacts and contracts as well as their experience with fierce competition. Analyzing the economic output effect is necessary due to FDI's rapid increase in developing nations. FDI's increase in inflows has a significant impact on the host's growth economically and production because of the additional utilities they bring with them and the better management and technology they employ. As a result, FDI has a significant impact on economic production (Hossain & Hossain, 2012). In a nutshell, the majority of authors included in the previous section convey the idea that FDI boosts productivity and efficiency, which in turn boosts economic growth. Therefore, there is a positive interdependent correlation between them which may result in a two-way causality. Therefore, a faster pace of EG in the host countries would offer better conditions for international investors.

### ***International Trade and Growth***

International trade success has caused the world has seen a significant transformation nowadays. In many countries, there has been an unheard-of increase in international trade from a historical perspective. The 19th century brought important developments, such as technological advancements, which led to a period of expansion in global trade at a time when it was low (the first wave of globalization). Growth had halted

and had reverted to the Interwar period before the Second World War. However, following World War II, global trade started to pick up speed and expanded much more quickly in the past ten years.

Nowadays, communication and transportation costs have decreased globally, and special trade agreements—particularly those between poor countries—have increased in frequency. The truth is that trade between developing countries—often referred to as "south-south trade"—has increased by a factor of three between 1980 and 2011.

Given that it enables states to specialize in order to manufacture things that are often efficient to produce while importing various items, free international trade is sometimes considered enticing. The argument in favor of comparative advantage in trade is supported by the fact that trade helps countries to specialize in the things they do best while importing the rest.

### ***Overview of the Theory of Economic Growth***

The *Wealth of Nations*, a fundamental work by Adam Smith published in 1776, served as the conceptual framework for EG, this is basically a rise in the country's output or income over time. Smith was able to identify three key origins of development in his model, namely: “expansion in the labor force and capital”, “advances in production efficiency”, and “encouragement of international commerce”, despite the book's primary focus. He, therefore, believes that the generation of wealth is the primary driver of EG (Harris, 1978).

According to Smith's production function, the only factors that boost productivity are capital, labor, and land were refined by David Ricardo (1817) by including technology. This improved understanding of economic growth (wealth accumulation) went beyond what was previously understood. More significantly, he contends that when nations manufacture and export items, economic growth also results from international commerce. On the other hand, While Ricardo expects declining growth with time, Smith's strategy implies increasing growth. This is where the two disagree in their perspectives on the rate of productivity increase. Smith (1798), along with Thomas Malthus and Ricardo, is credited with founding the “traditional economic growth theory” (Ibid, pp.25-27).

Karl Marx (1872), posits that EG results from reinvesting the surplus value of the societal economy thereby generating additional surplus value. Labor, physical capital, and technology output make up the three basic components of this reproduction (Sardadvar, 2011:10).

John Maynard Keynes (1936) suggested that boosting the money supply and increasing government spending may spur economic growth during the 1930s Great Depression when the global economy was experiencing a severe slump. Therefore, increasing the economy's total demand results in both EG and full-time employment (Ibid, pp.11-12).

However, Roy Harrod, who passed away in 1949, is acknowledged for inspiring economic experts of the 20th century to insist on treating EG substantially. Roy is frequently cited as the "creator" of contemporary economic expansion. Below is a discussion of his model.

### ***Fundamental Theories of EG and Related Relation to International Trade***

**The Harrod-Domar Growth Model.** To create what is now referred to as the Harrod-Domar growth model, Roy Harrod and Evsey Domar independently combined components of both classical and Keynesian economic growth (revenue derivation) theories, such as entrepreneurship, capital, and unbalanced markets (Baldwin, 1972:21). Accordingly, country's capacity to lower its present consumption levels and its saving rates are both crucial elements in economic growth. In this case, a nation's ability to boost savings and the capital-to-output proportion, or GDP, directly affect EG (Ray, 2003:34). The equation is given below and serves as an example of this, where Y stands for national production (GDP), DY is GDP's changes, s is for the rate of savings, while k depicts capital-output proportion.

$$DY/Y = s / k$$

The essential tenet of this model is straightforward: a nation's growth is inversely correlated with how much of its GDP it saves and invests, and vice versa. Due to the practice of many developing countries, notably Malawi, the viability of this growth model has gained enormous credibility. Ghattak (1978:23) states that most LDCs' GDP growth rates have decreased due to low rates of conserving and elevated amounts of current

spending, forcing them to turn to other countries for loans and assistance in a bid to compensate for their acute resource constraints. But because of the widespread economic mismanagement rife in many nations, external debt has risen to unmanageable levels, impeding growth and resulting in insolvency and poverty loops that never cease.

Responding to this, academics like Khatkate (1967) and Afxentiou (1993), state that overseas commerce has the tendency to significantly contribute by raising its foreign exchange earnings from exports, thus solving this dilemma. The competence of a nation to service its indebtedness is closely correlated to its output levels and rate of interest on borrowed funds, therefore export-led growth can assist in closing the disparity between the interest rates on foreign loans and foreign exchange revenues, enhancing a nation's capacity to pay off debt. This could expedite long-term GDP growth in LDCs, where loan repayments are one of the major obstacles to economic development. If a country imports capital goods and technologies to increase its capital base, which consequently improves GDP, imports can also spur economic growth in the Harrod-Domar model. These assets could take the form of equipment and plants that are productive (Ghatak, 1978:23).

The growth model discussed above makes it obvious that international commerce can boost economic growth by bringing in export money to supplement development-financing savings. The model also accounts for economic growth brought on by imports of capital goods from other countries, which boosts GDP and productivity.

**Two-Gap Economic Growth Model.** The “Two-Gap Economic Growth Model” includes the Harrod-Domar model as a subset. It argues that economic expansion will result from bridging two financial gaps—the savings gap and the forex imbalance. To put it another way, for an economy to thrive, It must generate sufficient savings for investments in addition to generating foreign currency from global commerce (Ghatak, 1978:74). The quantity of exports and foreign money that enters and exits the economy, according to the theory's creators The ability of a nation as a whole to close the forex gap or buy products and services from overseas is determined by Chenery and Strout (1966:684). The equation that follows summarizes this theory:

$$g = s/k + f/k$$

The letters  $g$ ,  $s$ ,  $f$ , and  $k$  in the formula given stand for GDP growth, savings ratio, required foreign exchange, and expected level of capital stock, respectively. Essentially, the hypothesis claims that increases in the degrees of  $f$  and  $s$  are what lead to the growth of  $g$ . Economic growth is highly challenging for many LDCs, including Ghana, because there is a sizable deficit in either reserves or forex. Consequently, the recommendation is for the foreign exchange imbalance to be filled through international trade (including imports and exports). In essence, export-oriented growth generates the necessary revenues to support a country's development, settle off its foreign debt, reduce its trade deficit, and increase its foreign exchange reserves—all necessary elements for economic progress. However, imports can also assist acquire foreign capital and functional capital equipment to reduce the reserves gap, increasing the nation's overall capital stock while simultaneously increasing productivity, a key component of growth. However, according to Krueger (1985:21), the importation has to be productive capital goods rather than consumable commodities for them to be beneficial, which could potentially worsen the difference.

**Neoclassical (Traditional) Growth Theory.** This model contends that improvements in a nation's labor force, technological advancements, and entire capital stock fueled the economic expansion. A rise in either of the following factors, brought on by higher returns on the ratio of outputs to inputs causes the GDP to increase gradually (Todaro & Smith, 2009:74). In addition to the preceding components, the theory also predicts that other factors, such as external markets (buying and selling) may have a significant impact on growth. According to the model, trade-induced GDP growth is the consequence of international capital and investment transfers from nations with better rates of profit and reduced unit costs versus those with reduced interest prices and higher production costs. These capital transfers have the potential to affect growth for both parties. For illustration, capital exportation results in investment return for the exporting country, although, *ceteris paribus*, overseas investment importation may enhance the country's capital stock and efficiency. Therefore, as compared to closed or autocratic economies with no external trading activity, World trade is much more likely to spur the growth of open economies (Ghatak, 1978:17).



**Solow Neoclassical Growth Theory.** The conventional neoclassical growth theory has various variations, including this idea. By considering economic growth (Y) as taking place through a production system where components like manpower (L), money (K), and the technical level (A) are assumed to be supplied, Solow's approach typically adheres to the neoclassical economic tradition, claims Dasgupta (1998:51). More crucially, Dasgupta emphasizes that the model's implied decreasing marginal returns of the inputs to output are shown by the “elasticity of labor ( $\beta$ )” and “capital ( $1 - \beta$ )” with respect to output. The formulation below shows how the function works.

$$Y = K^\beta (AL)^{1-\beta}$$

A gain in productivity which represents EG is thought to result from changes in the production variables while the elasticity is constant. However, other exogenous (external) factors including governmental regulations, technological advancements, market concentration, and human capital also have an impact on productivity (Ray, 2003:64).

**Endogenous Growth Theory.** The model also referred to as the new growth theory, was created as a consequence of the limitation of neoclassical growth theories' inability to explain the causative factors of the extreme differences between OECD and non-OECD nations' income levels, which were made evident in the debt crisis of the early 1980s. According to Dasgupta, the new growth model is very different from neoclassical growth theory which places a strong emphasis on the notion of marginal returns that diminish as input sizes increase in relation to output levels. It argues that consistent marginal returns can be seen in the production's components' performance and capitalization.

This growth model endogenizes growth, which is the idea that a rise in GDP results from internal production processes. Additionally, Lal (1992:44) contends that endogenous models contend that worldwide transfers of funds between wealthy nations and transition economies are what determines the amount of technology present as opposed to neoclassical EG theories, which take technology for granted (Todaro and Smith, 2009:147). As a result, the importance of global commerce (buy and sell) is enhanced by these global capital movements. In actuality, LDCs trade their export goods—mostly basic commodities—for capital infusions like FDIs and innovative technologies from developed nations. Technologies have a major role in the barter transmission mechanism for imports. Grossman and Helpman (1991:147) indisputably show that imports aid

economic development by acting as a route for professional spillovers and knowledge transfers from established to underdeveloped nations, which improve the productivity level in the former.

### ***Economic Growth and Free Trade***

Free trade is meant to eliminate trade restrictions. Trade restrictions are a result of decisions made by nations and groups to erect barriers to defend their own economies. Free trade implies much more cross-border trade, which some people fear would not benefit them or will cause them to lose their employment or incomes while others may see it differently. Free trade's goal is to grant more people access to opportunities for mutually beneficial exchange, the world's resources will be used more effectively, more people will be wealthy, and nations can trade for goods they cannot produce as effectively while specializing in what they do best (comparative advantage).

It was argued that developing economies, where a sizable share of valuable resources remained underutilized, and the pressing problem of unemployment limit the applicability of free trade. Free trade will exacerbate the problem by hurting local sectors, especially those that require strong opposition. Adam Smith asserted in Singh (1985) that increased specialization and the division of labor brought about by commerce will promote a nation's EG. Trade liberalization on EG has been a careful and in-depth study. Trade openness and EG have been extensively studied. However, it has been asserted that, in accordance with the growth hypothesis, the availability of human capital can spur economic growth after trade openness takes place. Despite this, there aren't many studies looking at the connection between growth following trade and variations in human capital. Chang et al., Grossman and Helpman (1991), and (2009).

There has long been a view that by engaging in trade, developing nations will have the chance to completely expand their economies and benefit from global trade, which will correct free trade flaws. Trade intervention supported by Harry G. Johnson (1965) and Ellsworth and Leith (1969) favored this claim. The argument previously addressed in no way contests the crucial role that trade plays in any country's effort to achieve economic progress. The conclusion that a trade intervention strategy is desirable for a developing economy may be inferred from both schools of thought. Any economy's full

potential could be reached before considering and implementing trade choices. Although trade intervention is still a technique that is widely employed globally, with varying degrees of interference between nations is worth acknowledging because the free trade notion is one of its kind in the ever-changing globe.

It is crucial that resources are allocated wisely among various industrial sections to achieve planned objectives, and trade policies are utilized as tools to achieve the goals that have been set. For developing nations to adopt a national development plan as their development strategy, this is a requirement. Given that Singh and Chaudhary (1985) found that this collection of nations has a high level of income elasticity of trade flows, it is critical to emphasize those trade agreements are crucial for ensuring the optimum sharing of dwindling resources.

### ***Foreign Direct Investment***

According to The World Bank (2022), FDI is the cumulative inflow of capital used to buy a long-term management stake (i.e., 10% or above of the board seats) in a business that operates in a different market than the buyer. It is the payment balance's total of the equity capital, other long and short-term capital, and reinvested earnings.

In essence, FDI increases a nation's stock of capital, introduces fresh sources of financing, aids in the balance of payments, and can assist long-term economic growth (Appiah et al. 2019). FDI attracts investors who want to grow, standardize labor resources and, strengthen the nation's economy (Simionescu and Naros, 2019). Cicea et al., (2019) posit that FDI can also have a big impact on EG at the macro and micro-economic dimensions in some regions. An increase in GDP can be used as the base to measure FDI, in addition to the level of lifestyle and life satisfaction (Botha et al., 2020).

Gunter, Taylor, and Yeldan (2005) defined FDI as importing foreign technologies and transferring skills also makes local labor and capital more effective and efficient, enabling a nation to optimize its upper hand and, in turn, its trade profits, which ultimately raises GDP.

### ***Types of FDI***

The different FDI types are discussed using Ball & McCulloch (1999) as a reference point.

**Greenfield Investment.** Companies that want to fully control and operate foreign subsidiaries can employ this type by constructing new infrastructure or growing operating ones (Ball & McCulloch, 1999). Greenfield investments in Bangladesh include the construction of Infrastructure and businesses in export processing zones (EPZs).

**Merger or Acquisition.** Ball and McCulloch (1999) state that when a multinational entity buys a native company's current assets, it is referred to as an acquisition or merger. For instance, in 2004 a significant international telecommunications company by the name of Orascom acquired 100% of Bangladesh's Sheba Telecom (Pvt.) Ltd. With the help of this acquisition, Orascom launched a wholly-owned subsidiary company called "BanglaLink."

**Joint Venture (JV).** There are various ways to form a joint venture. A joint venture may be formed when a multinational collaborates with a native business (or with another multinational corporation) to form a major corporation. Put another way, the MNEs could establish a global corporation by collaborating with the native nation's government (Ball & McCulloch, 1999). For instance, Grameen Telecom (Bangladesh) and Telenor (Norway) founded a joint venture known as Grameen Phone (GP) in Bangladesh.

**Horizontal FDI.** Whenever a company makes investments abroad in the same sector as those it makes natively, this is referred to as horizontal FDI (Foreign Direct Investment, 2009). The previous example depicts Telenor as a significant rival in the Norwegian telecoms sector before entering the telecommunications business in Bangladesh by creating a local JV company, Grameen Telecom.

**Vertical FDI.** Two vertical FDI classes exist (1) Backward and (2) Forward.

Backward FDI entails operating in a sector that provides inputs for the investing firm's local production. Participating in a sector that sells goods made domestically by the investment firm is known as forward vertical FDI

### ***Ghana's Policies Towards FDI***

The Ghanaian legislation understands how important it is to encourage business and innovation and has prioritized FDI expansion. Authorities are putting into place a

number of legislative changes and other changes to facilitate doing business and strengthen the allure of operating in Ghana. The Ghana Investment Promotion Center (GIPC) Act of 2013 mandates that the GIPC register, oversee, and maintain records for each and every company operating in Ghana. Industry rules also apply to operations in the mining, petroleum, and gas businesses, enterprises situated in free zones, financial, and non-bank banking institutions, insurance, aquaculture, securities, telecoms, electricity, and estate development. Some industry-specific legislation, such as those in the electricity and oil and gas sectors, contain local content criteria that can deter foreign investment. Overseas firms are required to adhere to the GIPC Act's standards in addition to any business regulations. Although the GIPC leadership has pledged to collaborate with the private market more closely in order to ease trade tensions, little has changed in terms of the regulations.

### ***Foreign Direct Investment and Economic Growth***

Li et. al., (2010) state that global business is frequently mistaken for "foreign trade." It deals with the movement of products and services within a certain geographic area. A significant portion of each country's GDP is made up of imports and exports, demonstrating the close connection between commerce and economic growth.

According to Solow's (1956) neoclassical EG theory, FDI's boost would momentarily result positively for GDP and capital per person without having any impact on long-term growth rates. Only technical advancements or labor force expansion— external variables in the neoclassical model—can affect EG's long-term rate (Belloumi 2014). FDI can indeed enhance EG according to the neoclassical theory of growth if it results in long-term technical advancement, claim Tanaya and Suyanto (2022). According to the new growth theory (Barro 1990; Romer 1986, 1993; Lucas 1988), knowledge transfer and spillover is possible because of FDI's presence (Yao 2006).

There are numerous articles investigating FDI and EG's correlation impact. Some of them have discovered proof of FDI's beneficial effects while others have contrasted.

### ***Positive Effects of Foreign Direct Investment on Economic Growth***

FDI can promote emerging nations' EG based on the modernization theory. It distributes ideas, technology, management abilities, and expertise that can aid in the receiving country's economic development (Mengistu & Adams, 2007).

By promoting innovation and expertise to emerging nations, overseas investment, according to Borensztién et al. (1998), enhances EG. Additionally, there is evidence that domestic investment is encouraged by foreign investment. In an investigation of 66 emerging economies, Makki and Somwaru (2004) discovered that FDI enhanced the direct economy, which accelerated economic growth. In a different study, Agosin and Mayer (2000) claimed that overseas investment in Asian countries positively affects native investment.

According to Balamoune-Lutz (2004), increased exports as a result of foreign investment contributed to EG. Kabir (2007) expresses a similar viewpoint when he claims that FDI boosts exports, which raises foreign currency revenues that are traded off to loan repayments. Zhang (2006) posits that by increasing China's export volume, foreign investment has accelerated the country's economic expansion.

Additionally, it has been demonstrated that FDI raises the gross national product, purchasing power parity, and GDP of a nation (Kabir, 2007; Islam, 2003; Khan, 2007; Ahmed, 2005; Gupta, 1999; Haque, 2007). Additionally, FDI lowers the jobless rate, annual inflation, and average income while assisting in bridging the native savings and forex gaps together with the BOP imbalance. Additionally, CSR's introduction, additional markets, and the expansion of financial firms have all been linked to FDI.

### ***FDI's Negative Effects on Economic Growth***

The Dependency Theory contends that overseas investment constricts the economic expansion of recipient countries (Dutt, 1997). This view is supported by Brecher and Diaz-Alejandro (1977), who assert that exorbitant profits repatriated to the home country by FDI-financed enterprises may have a detrimental effect on the EG of the host nation.

According to experts, FDI hinders economic growth since it replaces the domestic economy. For instance, a study by Eller et. al., (2005) that included eleven countries in

Central and Eastern Europe discovered that FDI replaced native capital. Bornschieer and Chase-Dunn (1985) in a different interpretation elaborated that FDI's contribution is responsible for both stifling homegrown investment and establishing a monopolistic. Furthermore, due to capital flight or local capital, Quazi (2004) emphasizes the negative effects of FDI on the hosting nation's current account and currency exchange account. FDI-financed businesses in the hosting nation frequently require high-tech capital equipment and intermediate products but are frequently unavailable, and FDI increases imports into the country (Rahman, 2008). Fry (1999) states that raising imports could impede economic growth due to the resulting trade imbalance. Biersteker (1978) and Helleiner (1989) questioned FDI's contribution to the economic expansion of developing countries. They claim that FDI is a tactic employed by rich western nations to enslave and subjugate developing nations.

### ***The Increased Capacity of the Home Nation Determines the Impact of FDI***

According to the third point of view, the recipient country's ability to absorb foreign direct investment determines how it will affect economic growth. Buckley et. al., (2002) state that if the legislative, social, and industrial environments of the host nation were favorable, FDI would contribute to economic progress. Nonetheless, if a nation lacks the ideal market conditions to profit from the international externalities, the prospect of a negative FDI effect arises (i.e., the right business environment to promote innovation and managerial abilities) (Toulaboe, Terry, & Johansen, 2009). For example, given that since Asian nations are more developed compared to those in sub-Saharan Africa, their effects on EG would be more significant (Toulaboe, Terry, & Johansen, 2009).

Makki & Somwaru (2004) and Borensztein et al., (1998) posit that overseas investment does not always reap benefits. The benefits are dependent on labor capital with technical expertise, established infrastructure, macroeconomic and organizational transformations, enhanced technology, an open industrial policy, and FDI-friendly legislation. Balasubramanyam et al., (1996) found that FDI has an enormous influence on EG in the host nations that had a more highly educated labor force in a survey of 46 countries. In a different study, Sun (1998) discovered that by promoting capital creation, raising export volume, and reducing the unemployment rate, an open trade policy enhanced the influence

of foreign investment on China's economic growth. In contrast hand, transnational investment is typically discouraged by fraud and an absence of transparency (Kaufmann & Wei, 1999).

### ***Foreign Direct Investment inflow in Ghana***

Following the financial and political change, FDI has increased quickly in developing economies. Most nations have loosened FDI restrictions, enhanced market stability deregulated the domestic banking system, liberalized the capital account, privatized government enterprises, and offered tax benefits and supports in order to enhance their share of FDI inflows. For illustration, in order to attract international investors and foster an environment that is conducive to their activities, Ghana has made certain tax advantages and international investment legislation available under the Ghana Investment Promotion Act of 1994 and the Free Zones Act of 1995. With the support of this initiative and policy, Ghana has seen a rise in foreign direct investments and economic growth.

Ghana's neoliberal policies and open-door policies are aimed at attracting FDI. According to the World Bank's Doing Business team, Ghana has established a number of statutes to enhance the business climate and the investment climate in order to draw FDI, earning Ghana its second-highest ranking in succession among the top 10 reformers globally. Ghana's participation in FDI increased from 2005 to 2006, reaching \$636 million, and represents 19.4% of the total amount of gross fixed capital creation, as reported in the 2008 World Investment Report (WIR). Ghana attracted 2008 saw increased interest from the international community because of this, holding the WAIPA (World Association of Investments Promotion Agencies) conferences, UNCTAD XII, and the 2008 Africa Cup. This attention emerges as a result of the nation's rapid expansion in its GDP and FDI inflows (World Bank, 2008). Modern technology is a major source of funding made available by FDI. Several limitations exist to raising this cash from reserves, and even if there weren't, it would be tough to import the necessary tools from external sources because transferring technology to companies that have never utilized it before is complicated, risky, and pricey.



Ghana's economy had been growing at an average rate of 7% each year from 2017 until the COVID-19 pandemic decreased growth to 0.9 percent in 2020. As oil output rose between 2017 and 2019, the fiscal deficit decreased, inflation declined, and GDP growth picked up. The market continues to be dependent on exporting essential goods like oil, gold, and cocoa, making it vulnerable to worldwide financial downtimes and changes in product prices (U.S. Department of State, 2021). The IMF predicts that after the shocks of COVID-19, growth will recover to 4.6 percent in 2021 as a response to growth in building, construction, industrial, trade, and credit to the private market. As Ghana tries to modernize and broaden its economy via agro-processing, quarrying, and production, the nation's business chances remain largely favorable. It has made attracting FDI a top priority in order to support its industrialization goals and bridge an annual funding gap for projects.

Among the obstacles that hinder Ghana from attracting FDI include costly and cumbersome financial products, a shortage of government disclosure, malfeasance, a complicated real estate market, pricey and unpredictable energy and water supply, the exorbitant prices of cross-border trade, a burdensome bureaucratic system, and an informal labor force. Even in cases when there are sound rules in place, the execution of laws and regulations is sometimes lax. Payment delays are a common problem, and public procurements can be opaque at times. Putting limitations on native production in the petroleum, mining, and electricity sectors during the past six years is another worrying trend in investment policy that could deter future investments that are urgently required. Nonetheless, Ghana shines out as one of the greatest locations in sub-Saharan Africa for investments because of its enormous natural riches (gold, cocoa, and oil/gas), comparatively low crime rate, and stable political system. African Continental Free Trade Area Secretariat (AfCFTA) was housed. Companies with overseas investments are not treated differently. Despite the fact that foreign businesses have reported dealing with significant degrees of fraud when working with Ghana's government businesses, investment rules guarantee that gains can be transferred by investors outside the nation and safeguard them from expropriation and nationalization. Among the most turn leading include those in agriculture and food preparation, clothing and textiles offshore oil, gas, and petroleum refining, infrastructure, and mineral processing activities subzones.

The administration is acting to update the legislative regime, improve business accessibility, and reestablish budgetary discipline as a result of its recognition that its enabling environment needs to be strengthened to draw FDI.

Over time, FDI generates a large number of perks that are accessible to the whole market but that the majority of firms lack the means to use as a share of their own earnings. Transitions of basic information, specific distribution and manufacturing innovations, modernization, labor training, and the deployment of cutting-edge management and revenue recognition are a few examples. Additionally, networks relating to commerce and finance could develop, and networks could get better. FDI in services affects the hosting country's competitiveness since it raises capital efficiency and makes it simpler for the nation to draw in extra funds on generous conditions (Lipsey et al, 2010). Additionally, it creates services that could be utilized as strategic inputs in the traditional export industry to improve the market volume and raise productivity via innovation in goods and processes (Lipsey et al, 2007). Outside the investment's direct economic push, FDI will affect growth by enhancing overall factor productivity and, in a broader sense, the efficiency of resources used in the recipient firm or nation. This works across three separate streams: the relationships between FDI and world trade, indirect effects on the hosting economy's building structures, and other factors that have an impact on the government's corporate world. By encouraging and enhancing international trade flows, inward FDI helps countries that are developing and, on the path, to becoming industrialized nations to further integrate into the global economy. It seems like several elements are engaged. They include the development and growth of worldwide networks of interconnected companies as well as the expanding role of foreign affiliates in MNEs' sales, market, and delivery operations (Caudwell et al., 2002).

### ***International Investment and Fiscal Policies of Ghana***

The Ghanaian economy lacks a particular international investment strategy. To promote and defend international investment on an equal footing, it has signed bilateral agreements with a number of nations. Some Ghanaian businesses have opened branches in neighboring West African nations.

For instance, the “Trade and Investment Framework Agreement” (TIFA), “OPIC Investment Incentive Agreement”, and “Open Skies Agreement” were all signed by the United States and Ghana. Ghana continues to be eligible to receive benefits under the “Generalized System of Preferences (GSP)” and the “African Growth and Opportunity Act (AGOA)”, as well as being independently eligible for the AGOA's clothing advantages (U.S. Department of State, 2021).

According to the United States Department of State (2021), "Ghana has finished the BIT trade negotiations with 27 countries. Serbia, Malaysia, Denmark, Switzerland, Burkina Faso, Germany, Netherlands, China, and the United Kingdom are the nations with finalized BITs that were ratified by both sides. Zimbabwe, Benin, Botswana, Bulgaria, Mauritius, Turkey, Cuba, Egypt, Barbados, France, Guinea, Italy, Mauritania, Romania, Spain, Yugoslavia, Cote d'Ivoire, and Zambia, are among the nations whose completed BITs are still not approved by both parties.

U.S. Department of State (2021) states that these nations including the United Kingdom have tax treaties with Ghana that have been signed and ratified: Denmark, Italy, Belgium, South Africa, Switzerland, the Netherlands, France, Germany, Mauritius, and the United Kingdom. Parliament has not yet approved the dual taxation agreements Ghana has negotiated with Ireland, Malta, Singapore, Qatar, Seychelles, Czech Republic, Barbados, and Morocco.

U.S. Department of State (2021) states that even though Ghana hasn't ratified the FATCA intergovernmental agreement (IGA), banks and other foreign financial institutions (FFIs) in Ghana are now able to send data immediately to the US Internal Revenue Service.

### **Empirical Review**

Adeleke Kunle M. & Olowe S.O. (2014) examined how FDI affected Nigeria's economic expansion between the years 1999 and 2013. using secondary data obtained from the statistics Bulletin, “Annual Report, and Statement of Account” as well as several publications of the Nigerian Central Bank. The outcome highlighted FDI, which is large at 5%, impacts Nigeria's EG. They came to the conclusion that FDI drives economic expansion.

Regression analysis and FDI's impact on the African economy were studied by Adewumi (2006). The empirical analysis employed data from eleven countries on the continent as well as data from the entire continent. The information spanned the years 1970 through 2003. The outcome demonstrated that while beneficial, FDI's contribution to EG is not significant.

The effect of FDI on EG in Ghana, particularly the influence of FDI on the success of commercial banks in Ghana," was investigated by Alhassan Musah et al. in 2018. The World Bank's statistics on FDI and economic metrics, which were gathered over a ten-year period, were used as auxiliary information for the research. The analysis discovered a clinically important positive relationship between EG and FDI.

For the years 1960–2005, Arsoy (2012) examined the effect of FDI on Turkey's national economy and overall factor productivity. The empirical findings show that, through technical spillovers and capital accumulations, FDI contributes favorably to capital formation productivity and the pace of industrial growth.

Using the Engle and Granger error correction approach, Balamurali and Bogahawatte (2004) examine the causality and the relationship type between Sri Lanka's EG and FDI from 1977 to 2003. This case study discovers that a considerable impact exists between EG and FDI. Additionally, it demonstrates that there is a relatively poor investment in Sri Lanka due to a number of factors, including poor political climate, a decrease in growing infrastructure, expensive bond yields, travel, and little spending on human assets.

Odhiambo, N. M. (2022) used the ARDL limits testing technique to cointegration to analyze the link between foreign direct investment (FDI) and economic growth in Kenya from 1980 to 2018. The findings suggest that there is a unidirectional causal flow from economic growth to FDI in Kenya. Based on these findings, it is possible to infer that Kenya's present booming FDI inflows are mostly driven by the country's robust economic development and sound macroeconomic policies implemented in recent decades.

Marcel D.T.A (2019) looked into the factors influencing Benin's economic expansion. Using yearly data from the World Bank indices, the study spanned the years 1970 through 2017. To determine the factors affecting Benin's economic growth, a model equation utilizing the OLS approach should be used. For the review period, FDI has had a positive and significant impact on Benin's EG, according to the results of OLS

methodologies. In order to draw in more international investors, the author urged the administration to increase infrastructure investment.

Lasbrey, A., Enyoghasim, M., Tobechei, A., Uwajumogu, N., Chukwu, B., and Kennedy, O. (2018) examine the relationship between FDI and EG using time series instruments from 1980 to 2018. The result is inconsistent, but heavily skewed toward a significantly positive effect; nonetheless, in certain cases, the impact of FDI on EG is negative or even nonexistent. Additionally, we find that key factors that affect FDI placement and its capacity to have a beneficial influence on EG generally include market size, economic freedom, and internet accessibility.

The analysis of connection between FDI and Nigeria's EG was examined by Umoh et al. in 2012 between 1970 and 2008. They make use of single equations and simultaneous systems to analyze this relationship. According to their conclusions, FDI and recent advances are causally related in a positive way. The collected results also demonstrate a relationship between FDI inflow and Nigeria's pace of economic expansion. This analysis identifies the key elements that can accelerate economic growth rates and increase investment from abroad in Nigeria are growing private contributions and superior openness.

Table 1

***Summary Table of Theoretical and Empirical Review***

<b>Theoretical Review</b>		
<b>Researcher(s)</b>	<b>Focus</b>	<b>Findings</b>
Buckley et al., (2002)	The Effect of Inward Investment on Chinese Manufacturing Earnings Quality	FDI provides non-productivity spillovers. FDI offers different types of ownership advantages to multi-national enterprises (MNEs).
Hossain and Hossain (2012)	Empirical Relationship between Foreign Direct Investment and EG. A study of Pakistan,	FDI has a significant impact on economic output but the results may vary across countries.

	Bangladesh, and India's production in South Asian nations.	
Wasantha Athukorala (2003)	The Impact of Foreign Direct Investment for EG: Sri Lanka.	FDI provides developing countries with a wealth of necessary resources, such as innovative technologies, and funding.
Zhang (2001)	Is FDI a Growth Engine for the Economy? Evidence from LTAs and Eastern Europe.	FDI boosts a host nation's EG when specific nation-specific characteristics are available.
Zhao and Du (2007)	Causality Between FDI and EG in China.	FDI impact on EG but is positive yet not significant.
<b>Empirical Review</b>		
<b>Researcher(s)</b>	<b>Focus</b>	<b>Findings</b>
Adeleke Kunle M. & Olowe S.O. (2014)	FDI's impact on Nigeria's EG.	Nigeria's economic system is directly benefited from FDI.
Adewumi Sarumi (2006)	African Encounter with FDI and Growth in Emerging Markets.	FDI has a positive contribution to most countries but is not significant.
Alhassan et. al., (2018)	Ghana's economic success, FDI, and financial leverage	The earnings of Ghana's banking sector is significantly impacted by FDI inflows in a favorable manner.  The long-term and short-term effects of FDI on

		economic growth are both favorable and considerable.
Marcel D.T.A (2019)	Foreign Direct Investment effect on EG in Benin Republic.	In the short term, FDI has an impact on the economy of the nation both immediately and over time. Additionally, FDI has long-term, considerable, and unfavorable consequences for the economy of the Benin nation.
Umoh et. al., (2012)	EG and FDI in Nigeria: An analysis of the endogenous effects	In Nigeria, FDI and EG are mutually driven, and there is a positive interaction between them.

## CHAPTER III

### FDI's Role in an Economy

FDI and EG are closely related from an economic standpoint. The social and EG of a nation can be aided through investments. The quality and quantity of FDI have an impact on a nation's EG, particularly during periods of economic collapse and instability. The structure and number of investments in a country's economy are both impacted by the financial downturn.

FDI, which also acts as a considerable development stimulant, is necessary for a free and effective world economy. The benefits of FDI are not, however, evenly and automatically spread throughout countries, sectors, and native inhabitants. National policy and the framework of foreign investment are crucial if poor nations are to fully benefit from FDI for development. The host countries are primarily affected by the difficulties because they must develop the institutional and human resources necessary to implement investments as well as an environment of openness, justice, and favorable policy. Developed countries may aid in the advancement of this goal because OECD countries account for the majority of FDI flows. They can guarantee policy consistency for progress more broadly and facilitate developing countries access to global markets and innovations. Participants may also employ ODA to sustain the "OECD Guidelines for MNEs" and other parts of the "OECD Declaration on International Investment," encourage non-OECD countries to further implement global investment accords into their legislation, and profit from public-private new investments.

### FDI and Growth

Outside the initial fiscal stimulus from the real investment, according to the OECD's 2022 report, FDI promotes growth through increasing productivity of all factors and, broadly speaking, the recipient country's economic effectiveness in using resources. This works through three separate channels: the interactions between FDI and global trade flows, indirect effects on the economy of the recipient nation, and direct impacts on the structural components of the financial system.

The bulk of scientific studies concludes that FDI, in conjunction with domestic investments, promotes factor productivity and growing incomes in host countries. It is



more difficult to determine the extent of this impact, not less because large foreign support to developing countries usually coexists with extraordinarily high growth rates spurred on by nefarious motives. It is uncertain whether, as is frequently asserted, domestic investment "crowds out" some of the advantages of FDI. While some researchers have found proof of overcrowding, others have concluded that FDI may possibly help to increase capital formation. The overall result is typically advantageous even when there is crowding out, not only because the swap seeks to release finite local resources for investible uses.

FDI tends to have a lesser impact on growth in the least emerging nations because of the presence of "threshold externalities." It seems that developing countries must reach a certain degree of improvement in terms of architecture, technologies, knowledge, and welfare to be eligible for the advantages of having a foreign competitor in their market. A nation may not be able to fully benefit from FDI if its stock markets are inadequate and unstable. Domestic businesses are significantly more negatively impacted by limited economic intermediation than are ones that operate internationally (MNEs). In other instances, it could result in a financial shortage that prevents them from taking advantage of the commercial opportunities brought on by the foreign presence. It may be advantageous for foreign investors to participate in the banking and physical key industries, provided that the necessary policy conditions are met.

### **Trade and Investment**

Even if the empirical evidence of these effects on host-country international trade varies greatly among countries and economic sectors, the FDI-trade link must be understood in a larger context than the significant effect of investment on exports and imports, according to OECD (2022). The main benefit of FDI for developing nations in terms of trade is that it continues to assist the domestic market's economic integration with the global economy, a process that is likely to boost both imports and exports. The two cross-border activity channels of trade and investment are frequently considered as complementary. In spite of this, law enforcement organizations in the receiving country must also consider how FDI may impact international trade in the short and medium periods, particularly in light of pressures on the current account. In rare circumstances,

they must also determine whether specific transactions between foreign-owned businesses and their parent corporations will cause the currency reserves to decrease.

As countries progress toward sophisticated nation status, incoming FDI aids in their increased economic integration by fostering and strengthening global trade flows (the relationship between "openness to trade and investment"). It seems like several elements are involved. Examples include the development and growth of international networks of connected firms as well as the expanding role of overseas affiliates in production, distribution, and marketing strategies used by MNEs. Across both cases, this leads to a crucial policy finding, which is that the entry's continued access to engaging in international trade and transferring operations has a significant impact on an emerging country's ability to attract overseas investment. This then means that potential host countries should prioritize their ambitions to benefit from FDI, they mention "openness to world trade" and that the home country effectively limits the ability to emerge nations to draw in FDI by imposing import restrictions on these nations. By adopting policies of regional economic reform and integration, host governments may choose to pursue an approach to attracting FDI that involves growing the size of the relevant market.

Depending on the circumstance, host nations may be able to use FDI to increase exports both temporarily and permanently. The clearest signs that FDI boosts exports are when overseas money permits host countries to utilize either their renewable environment (for example, capital inflows for mining extraction) or their geographical region (e.g., investment in some transition economies). Targeted efforts to take use of FDI's benefits for incorporating host nations more closely into global trade flows have garnered a lot of attention, notably by establishing export-processing zones (EPZs). Businesses have frequently contributed to rising imports and exports from developing nations. However, it is not obvious whether the benefits to the nation's market outweigh the costs to the public coffers of maintaining EPZs or the risks of creating an unfavorable business environment and fostering international competitiveness.

### **Technology Transfers**

Technological breakthroughs are likely the most significant mechanism via which foreign company presence may provide benefits to society in the local emerging market,

according to OECD (2022). MNEs have the potential to produce substantial technological spillovers because they are the primary source of business research and development (R&D) in the developed world and because they frequently have access to more cutting-edge technology than underdeveloped countries. MNEs may or may not support such spillovers, though, depending on the environment and sectors.

Technology transfer and dissemination occur through four interrelated channels: transfer of skilled workers, horizontal connections with competitors or complementary enterprises in the same sector, vertical connections with suppliers or customers in the host countries, and globalization of R&D. Vertical linkages, especially "backward" links with local vendors in underdeveloped countries, give the clearest and most reliable proof of positive spillovers.. MNEs frequently provide technical assistance, training, and other resources to help suppliers produce goods of higher quality. Many MNEs assist regional vendors with the purchase of raw materials and intermediate goods as well as the refurbishment or enhancement of manufacturing plants.

It is difficult to obtain reliable actual findings on horizontal spillovers since the entry of an MNE into a less developed nation changes the local competitive scene in ways that cannot easily control. Contradictory findings have been found in the comparatively few studies on the horizontal element of spillovers. This could be explained by steps taken by foreign companies to stop the information transfer to their direct competitors. The assumption that horizontal spillovers between companies operating in different industries are more significant appears to be supported by recent statistics.

There is a restriction on how the acquired technologies can be used. In order for open innovation to produce externalities, the host country's business community must use the innovations in addition to the company that first acquires them. The economy of the host country must have a highly developed business community. Evidence suggests that for FDI to outperform domestic investment in terms of efficiency, the "technology gap" between domestic enterprises and foreign investors must be fairly narrow. If there are large gaps or the host's perceived relative technological level is low, local enterprises are unlikely to be able to assimilate external resources supplied by MNEs.

## **Human Capital Enhancement**

According to OECD (2022), "the predominant influence of FDI on human capital in emerging regions appears to be informal, occurring mostly through government policies attempting to attract FDI via better human capital, rather than through MNEs' efforts. Once employed by MNE firms, individuals may continue to develop their human capital through formal education and on-the-job training. The growth of human capital in other companies that these subsidiaries have links with, such suppliers, may also profit from them. Improvements like these might have additional advantages as the work is transferred to other companies and some employees launch their own enterprises. As a result, issues with other, more general development issues are intimately related to the problem of creating human capital.

For the purpose of fostering an environment that investments in general human capital, such as education, are essential to creating an atmosphere that is conducive to foreign direct investment. In order to optimize the human capital spillovers from the presence of foreign companies and to encourage investment, a nation must achieve a standard level of educational attainment. The minimum need varies by sector and is dependent on other factors in the host country's innovation ecosystem; literacy alone is unlikely to make a country attractive to foreign direct investments. Nevertheless, if a significant "knowledge gap" between foreign competitors and the rest of the home sector is allowed to persist, no significant spillovers are likely.

Another essential element of the institutional framework is the labor market standards of the host country. By taking action against discrimination and wrongdoing, the regulators give employees chances to develop their human capital and raise their incentives for doing so. Moreover, a labor force whose workers have privy to a certain amount of stability and social acceptance is more likely to have the flexibility required for the achievement of a trade strategy based on human capital. It establishes an environment that makes it easier for MNEs based in OECD countries to operate, applying the standards of their home countries and fostering the development of human capital. One strategy to help achieve this goal is to increase adherence to the "OECD Declaration on International Investment and MNEs" which would encourage the acceptance of the "Guidelines for MNEs".

Even though the benefits of MNE presence for enhancing human capital are widely acknowledged, it is also clear that their scale is far smaller than that of generalized (public) education. The benefits of the training provided by FDI can supplement skill level improvement, but they cannot replace it. However, the requirement for skilled manpower by MNEs may have a beneficial demonstrative benefit, providing host-country authorities with a head start on learning about the desired abilities. The challenge facing the government is how to fast fulfill this obligation while providing education that is so generally useful that it does not overtly benefit any specific industry.

Despite the fact that there are still large industry and country disparities, scientific and anecdotal evidence suggests that MNEs tend to invest more in human capital improvement than domestic companies. There is far less evidence, though, that the human capital created in this manner has an impact on the rest of the home market. Regulations that encourage entrepreneurship and more fluid labor markets could help prevent these spillovers, among several other things.

The amount of human capital and technical advances are closely tied. Contrarily, countries with a large human investment portfolio are more receptive to technology spillovers. Human capital effects are particularly common in technologically advanced host nations and host sectors. The relevance of this is that efforts to gain from creativity and human capital effects may become more successful when innovative and educational reform activities are pursued concurrently.

### **Competition**

FDI and the existence of MNEs "may exert a considerable influence on competitiveness in existing markets," according to OECD (2022). However, few definite conclusions can be made from empirical information because there is no acknowledged method of gauging the level of rivalry in a certain industry. The existence of multinational companies may considerably contribute to industrial prosperity by promoting local rivalry and ultimately leading to higher productivity, lower pricing, and more efficient resource allocation. On the other hand, the arrival of MNEs also tends to increase market structure in the home nation, which can be detrimental to competition. Any of the following can increase the risk: if the host nation is a geographically different market; if entrance hurdles

are high; if the region is small; if the enterprising firm holds a significant position on the global market; or if the blueprint for the host nation's competition policy is lax or poorly enforced.

Due to a surge of M&As that altered the character of the global corporate landscape, the market system has been sharply increasing since the early 1990s. An increase in collaborative connections at this time has changed how officially autonomous company entities interact with one another. There isn't enough evidence to prove that agreements minimize rivalry among competitors while enhancing productivity. Furthermore, there has been a boom in privatizations that have attracted a lot of foreign direct investment (mainly in developing and growing nations), which could have a big impact on competitiveness.

Research has demonstrated that host-country concentration is more influenced by FDI in poor countries than in economies with more established economies if anything. This may increase concerns that MNE expansion into developing countries may be anti-competitive. Furthermore, while there is a lot of evidence from rich countries showing that the entry of MNEs boosts output among individuals in the host nation, there is less evidence from emerging economies. The degree of rivalry that is clearly active is positively correlated with the strength and scope of such spillovers where they take place. Nonetheless, the direct effect of increased focus on competitiveness, if any, seems to depend on the industry and the host nation. Few industries, especially those with globally oriented significant markets, have levels of global dominance that are truly concerning for competition. In addition, if obstacles to both entry and departure are low or consumers are well-positioned to defend themselves against rising prices, high concentration rates in strictly defined markets might not lead to lower competition.

Despite the fact that it is economically advantageous for extremely effective multinationals to replace less effective domestic enterprises, restrictions must be in place to safeguard a healthy level of competition. I think the best way to do this is to increase the "relevant market" by opening up the hosting sector to broader international trade. The adoption of effective national legislative measures and enforcement agencies is also encouraged in order to lessen the anti-competitive effects of weaker businesses exiting the market. When merging companies and, where necessary, evaluating abuses of

dominance cases, the emphasis should be on maintaining competition rather than protecting rivals. Any other approach could lead to the restriction of the patent system to an industrial one, which could not benefit consumers in the long run. Efficiency and protection are given a lot of weight in the new competition policy.

### **Enterprise Development**

FDI "has the ability to greatly promote firm development in host nations," according to OECD (2022). Examples of the true impact on the intended enterprise include the creation of synergies inside the adopting MNE, measures to increase efficiency and reduce costs in the targeted organization, and the introduction of new activities. Additionally, efficiency gains in unrelated enterprises could be the consequence of demonstration effects and other spillovers comparable to those that result in technology and human capital spillovers. Even though the quantities vary by country and industry, the information currently available suggests a significant improvement in economic efficiency in enterprises acquired by MNEs. In sectors with scale economies, progress is most clearly visible. Here, there are typically significant efficiency improvements brought about by the integration of a smaller business into a larger corporate structure.

Invasions conducted by foreign entities result in modifications to company management and administration. The takeover is frequently accompanied by a range of foreign management, and MNEs frequently require acquired companies to adhere to their corporate rules, internal performance reporting, and information disclosure criteria (although instances of benefiting from subsidiaries have also been seen). According to empirical research, when foreign business techniques are more effective than those used in the domestic market, this may boost business productivity. MNEs should strive for the optimal mix of local and global management, nevertheless, as managers at subsidiaries benefit from having a national perspective.

A notable unique situation occurs when foreigners participate in the restructuring of state-owned enterprises. Most of the cases—many of which originate in East and Central European emerging markets been positive. The performance of the acquired enterprises has constantly grown as a result of MNE involvement in privatizations. Regrettably, the common correlation between efficiency gains and significant short-term

labor losses has led to a number of political issues. Likewise, the dearth of indigenous professional investors with access to sufficient funding may contribute to the significance of FDI in connection to privatization in emerging economies. Occasionally, firms that had been kept by the government in the past attracted indigenous private investors.

The privatizing of utilities is frequently very delicate because these companies frequently have monopoly market strength, at least within certain local economic sectors. It is arguable that coupling privatization with the openness of markets to more competition is the ideal privatization strategy. However, in cases when the privatized firm has not yet undergone significant reconstruction, local governments frequently turn to lure international investors in by offering them security from rivalry for a predetermined amount of time. In this situation, the necessity for robust, independent domestic regulatory monitoring is greater.

As a whole, the image of how FDI affects enterprise transformation that we can draw from anecdotal knowledge may be overly optimistic because funders will have chosen their target companies among those that have the ability to increase efficiency. Therefore, from a policy standpoint, it doesn't really matter as long as overseas investors are not as able or as motivated as domestic investors to increase productivity or seize new business possibilities. Governments are enticed to promote FDI as a means of promoting corporate change because they want to boost the financial efficiency of their domestic industries.

### **FDI and Environmental and Social Concerns**

"FDI has the ability to offer social and environmental advantages to host economies through the diffusion of good techniques and innovations within MNEs, and through their ensuing spillovers to domestic firms," according to OECD (2022). Conversely, FDI may be used by foreign-owned companies to "export" production that is no longer legal in their home countries. There is a chance that regulatory standards will be decreased or frozen in this circumstance, and this danger is especially present when network authorities are anxious to attract FDI. In truth, empirical evidence does not provide strong support for the threat scenario.



When the climate rules of the host country are adequate, FDI typically has a positive effect on the environment. However, there are situations where this is not the case, particularly in particular fields and regions. Most importantly, in order to fully benefit from inbound FDI's environmental advantages, host-country businesses must have significant capabilities in terms of ecological practices and broader technological skills.

FDI often transfers to developing countries ideas that are more cutting-edge and environmentally "cleaner" than what is readily available. Furthermore, there are documented cases of net advantages when local replication, supply-chain needs, and job churn led to larger environmental gains in the host economy. However, on occasion, MNEs have sent equipment to their subsidiaries in developing countries that was deemed to be environmentally unsuitable in the home country. Because a firm is often not interested in employing such substandard technology, this exemplifies the essence of the environmental risk associated with FDI.

Practical studies offer little support for the argument that attempts by politicians to promote FDI may lead to "pollution havens" or a "race to the bottom." It is more challenging to discount the notion of a "regulatory chill" given the lack of a convincing alternative. The cost of pollution prevention is so cheap (and the penalty to a firm's reputation of being seen to try to bypass them is so high), it seems that most MNEs apportion business to underdeveloped nations based on those countries' environmental regulations. This claim's support depends on how affluent and ecologically sensitive the other countries where MNEs operate, it seems.

There is a dearth of empirical data regarding how FDI affects society. Overall, nevertheless, it is in favor of the idea that foreign investment might aid in lowering poverty and enhancing social conditions. It is crucial to consider how FDI generally affects growth. According to studies, the weakest sections of the population in developing nations typically benefit proportionately from increasing incomes. The FDI benefits in eradicating poverty may be greater when utilized as a vehicle to boost labor-intensive enterprises and if it is based on MNE compliance with home labor law and internationally recognized trade unions.

There is scant proof that having foreign corporations in emerging nations causes a broad decline in fundamental societal values like core labor standards. Contrarily,

empirical research has revealed a beneficial connection between FDI and workers' rights. Given investors' worries about their prestige in other regions of the worries about instability in the native nation, low labor regulations may, in some situations, even function as a disincentive to FDI. Nonetheless, there are a few situations where issues might develop. Some have stated that the significant role that EPZs perform in many developing nations may raise questions about respect for fundamental societal principles. Regardless of the environment and the host nation, the scope of net benefits from FDI varies. They do not always accumulate. Some of the factors that prevent some emerging markets from wholly prospering from FDI include the level of general well-being and education the technological prowess of presenter industries, the not enough trade liberalization, the absence of healthy competition, and unsatisfactory legal frameworks. However, if a developing country has made a certain level of investment in its facilities, knowledge, and technology, it will be better able to benefit from a foreign presence in its marketplaces.

### **Major Economic Sectors Affected By FDI**

OECD (2022) states that the major economic sectors affected by FDI are:

- Construction.
- Electricity, gas, etc.
- Mining and quarrying.
- Manufacturing.
- Water supply and waste management.
- Services.
- Agriculture, forestry, fishing.
- Finance and insurance.

These sectors are the most affected because they present a viable source of investment resulting to profit for the investors. These sectors' economic reporting signals are the climax of a country's economy during a specific period and These studies aid analysts and investors in evaluating potential investment opportunities or global economies. Numerous data metrics, such as the gross domestic product (GDP) and consumer price

indices (CPIs), can aid international investors in predicting changes in a nation's economy and tactically adjusting their holdings.

For instance, GDP measures the total market value of all finished products and services produced in a country during a specific period of time. Normal presentation of the figure includes both nominal and real equivalents, with real GDP taking into account changes in the cost of products and services. Due to its wide range, this index is one of the ones that the capital markets follow the closest.

A nation's GDP increase indicates economic expansion, while a GDP fall indicates economic slowdown. However, it is possible to determine the appropriate level of sovereign bonds or determine if locally based enterprises are most likely to expand by looking at the predicted GDP growth rate of a country.

Table2

***Using Germany and Ghana as Case Study: Differences Between DCs and LDCs***

<b>Category</b>	<b>Germany (DC)</b>	<b>Ghana (LDC)</b>
Labor	Highly skilled	Skilled
Technology	Advanced	Obsolete
Corruption	Controlled	Uncontrolled
Regulatory Control	Effective legal framework	Ineffective legal framework
Infrastructure	Reliable	Unreliable
Diversification	High	Low
Population	Youthful	Aging
Taxation	Competitive	Non-Competitive
Cross-border Value Chain	Positive	Negative

**Table 2: *Effects of FDI between DC and LDC.***

**Source:** Author computation.

Table 2 presents parameters that can cause differences in the effects of FDI between DCs and LDCs using Germany and Ghana as case studies respectively. The extent of the differences in the effects of FDI may exist as a result of the strength(s) and weaknesses of the reviewed categories.

### **The Effects of FDI on the Balance of Payment**

The imports and exports of products, money, and activities, as well as government subsidies like remittances and foreign aid, are all included in the balance of payments (BOP) operations (Will Kenton, 2022).

The BOP divides transactions into two accounts: “capital account” and “current account.” The initial outflow of FDI is recorded as a debit outflow in the capital account while the transactions are recorded as credit inflow in the current account.

There are three possible effects of FDI on the BOP (Tamar & Luca, 2020). Initially, the very first capital influx benefits the hosting country's capital account when an MNE creates a foreign subsidiary. Nevertheless, this effect only lasts once.

Furthermore, FDI can improve the host deficit in the BOP's current account if it replaces imports of commodities or services. It is possible to view a major share of the foreign direct investment (FDI) made by Japanese automakers in the USA and UK to supplant products from Japan.

There is a third possible benefit to the hosting country's BOPs when the MNE uses a business presence to offer merchandise and services to other countries. There is a disparity between developed and emerging countries when it comes to investment in the industrial sectors, according to empirical studies of FDI's influence on BOP.

### **Need for FDI in Nations**

Nations need FDI, it increases a nation's stock of capital, introduces fresh sources of financing, aids in the balance of payments, and can assist long-term economic growth (Appiah et al. 2019). FDI attracts investors who want to grow and bolster the market and the quality of the workforce (Simionescu and Naros, 2019). FDI can also have a big impact on EG at the macro and micro-economic dimensions in some regions (Cicea et al., 2019).

However, even nations at stages of economic growth when favorable spillover from the foreign force is difficult to achieve may still profit from inward FDI through constrained access to capital formation. By reducing the financial barrier, FDI enables host nations to experience stronger economic growth rates, which are often brought on by a faster rate of gross fixed capital creation. The protracted economic effects of FDI on

economies with restricting exposure to other forms of capital are significantly influenced by the regulations taken by host-country officials. The sectoral structure of an economy can have an impact on results. Overseas companies can assist extractive industries in countries with a plethora of natural resources to produce competitively, but many developing nations' service sectors may be underdeveloped and unable to draw significant FDI inflows.

## CHAPTER IV

### Theories of Economic Development

This section's main goal is to summarize the key ideas from the four basic theories of development: world systems, dependency, globalization, and modernization. The basic theoretical explanations for understanding development endeavors, particularly in developing nations, center on the arguments listed above. These theoretical positions help us define ideas for social policies as well as define concepts and put them in an economic and social framework.

#### Economic Development (ED)

Economic growth (EG) or development is one of the main objectives of underdeveloped nations. The two words are not interchangeable. Although it might be required, growth alone won't ensure development. Economic growth is the rise in a nation's output or income per person. GNP or GNI, which are sometimes used interchangeably to assess production, are both indicators of an economy's entire produced goods and services.

ED describes EG coupled with adjustments to the architecture and dispersion of output. An advancement in the substance well-being of the relatively poor section of the population, a reduction in agriculture's percentage of the GNP, and a subsequent increase in the GNP share of manufacturing and services sectors, significant technological advancements made in the nation are a few examples of these changes (D.S. Massey, 2019).

#### Theories of Economic Development

Many people think of a theory as an unfounded or unworkable assertion. Free immigration to the USA may be acceptable in theory, but it is not feasible in fact, according to the person who makes that claim. About this, it shows an unproven hypothesis to say that the notion behind reduced wealth taxes in India spurring economic growth is simply that—a theory.

However, for an economist, it is a procedural interpretation of the interconnections between economic indicators, and its goal is to define the causal connections between

these variables (E. W. Nafziger) (2016). A theory is typically used to inform policy decisions as well as to better comprehend the universe. In any case, no single theory can account for all the variables affecting economic growth. But because reality is so complex, a simple model could leave out important factors (Kindleberger and Herrick 1977:40). A vast variety of factors can be handled by complex mathematical models, yet ineffective at interpreting economic development, particularly in developing nations.

### **Modernization Theory of Economy Development**

Alvin So asserts that the introduction of the modernization theory of development after WW II was aided by three major historical factors.

- a) The emergence of the U. S. as a superpower came first. The U.S. returned from World War II a global powerhouse whereas other developed countries, such as France, Germany, and Great Britain, were crippled by the conflict (So, 1991).
- b) The second development was the growth of the communist movement over the world. Along with China, ex-Soviet Union, Korea also had a presence in Eastern Europe.
- c) The collapse of European colonial territories resulted in the emergence of numerous new nation-states in developing countries. The goal of these newly formed nation-states' search for a development strategy was to increase their sovereignty and independence while also advancing their economy. 1993's Chirot.

According to the modernization theory, modern nations are more hardworking, have children who are more educated, and take better care of the underprivileged. According to Smelser's thesis, nations possess the unique quality of social institutional forms, which means that state institutions have clearly defined responsibilities in terms of both function and politics. The challenge of bringing together and coordinating the actions of the numerous new institutions has been brought on, according to Smelser, despite structural differentiation increasing the functional capability of today's enterprises. (1964 Smelser). It is the pathway to Europeanization or Americanization; the writing on modernization has a complacent attitude toward both the United States and Europe. These countries are thought to have unparalleled economic success and political peace (Tipps: 1976, 14). Modernization is also an unstoppable process; once it has begun, it is impossible to

interrupt. Simply put, the demand to modernize will be too great for third-world countries to handle if they contact with the West.

The economics of determining new legislation has emerged as one of modernization theory's main applications. From this vantage point, it is well recognized that Rostow's model's five stages of development serve as the foundation for the theoretical framework of modernization. These different phases are a precondition for takeoff, high mass consumption society, takeoff process, drive to maturity, and traditional society. According to this justification, Rostow has discovered a feasible plan for furthering the modernization of poor nations. If the lack of successful initiatives in Third World countries is the basis of the problem, then the solution lies in assisting these countries with resources like money, creativity, and knowledge. The Marshall Plan and the Alliance for Progress in Latin America are two initiatives that drew inspiration from Rostow's political beliefs. McClelland (1964).

### **Dependency Theory of Economic Development**

The ECLAC's studies in the 1950s laid the groundwork for the dependency theory. Raul Prebisch became one of the most renowned writers. The Prebisch model's main arguments are that to foster development inside a nation, the following steps must be taken:

- a) Controlling the currency exchange rate while emphasizing fiscal rather than financial regulation;
- b) Promoting a more efficient government responsibility in terms of nation-building,
- c) Building an investment scheme while giving national capital preference.
- d) Advance a better management demand in terms of the home market;
- e) Permit the entry of external capital by preferences already founded in a country's development plans;
- f) Create a better capacity demand by raising worker wages and benefits, which will, in turn, have a positive influence on economic growth in internal markets;
- h) To implement new strategies based on the import-substituting model, protecting local industry by instituting quotas and taxation on external markets.



g) To establish more efficient access to social programs and services, and even more so to impoverished parts of the economy to create opportunities for those sectors to become more competitive (Bodenheimer, 1970).

Keynes' theory of dependency combines elements from a neo-Marxist perspective with the liberal theories and models that emerged in the USA and Europe in response to the crisis years of the 1920s. Four significant concepts from Keynes' economic thought are incorporated into the concept of dependency:

- a) To create a significant internal effective value of native trade platforms;
- b) To acknowledge the importance of the industrial sector in achieving higher levels of national development;
- c) To raise worker income to generate more aggregate demand in nationwide trading conditions;
- d) To encourage a more active government role to restore economic stability; (1971, Dos Santos).

### **Theory of World Systems**

The series of characters that capitalism was assuming over the world, especially during the 1960s, was a key factor from which the notion of world systems originated. Beginning in this era, Third World nations have fresh opportunities to try to raise their living standards and enhance their social situations. The global financial and commercial systems started to become more dynamic, and central government acts had a decreasing amount of effect in these new circumstances. A radical group of scholars led by Immanuel Wallerstein was able to conclude there were fresh operations in the capitalist world economy that was impossible to address within the constraints of the dependence perspective thanks to these new global economic conditions. The following characteristics best described these novel features:

- a) The economies of East Asia (Hong Kong, Japan, South Korea, Taiwan, and Singapore) continued to rise at an impressive rate. It became increasingly difficult to characterize this as "manufacturing imperialism";
- b) There was a widespread crisis among the socialist states, this crisis foreshadowed the demise of Marxism in revolution;

c) The Watergate scandal, the Vietnam War, the oil embargo of 1975, and the merging of stasis and rising prices in the late 1970s, were all signs of the troubles in North American capitalism that brought about the termination of American hegemony in the capitalist global economy. (So, 1991).

With this theory, the social system serves as the primary analytical unit. It can be analyzed from both the internal perspective of a region and its exterior environment. In the latter instance, the social structure has an impact on multiple countries and frequently an entire area.

This theory is concerned with the development, use, and distribution of basic and useful technology, along with the effect of the value and global trade transactions, which are those that are most frequently researched from this philosophical standpoint. This development viewpoint distinguishes between productive and speculative ventures in terms of funding. Productive investments are sources of finance that support a country's manufacturing industry, whereas speculative investments typically provide quick stock market gains but do not give a nation a stable foundation for protracted growth in the economy, making them more uncertain.

This theory examines trade frameworks, it makes a distinction between direct transactions, which are those that have a significantly larger, more substantial, and instantaneous influence on a country, and those processes which are informal exchange transactions, such as future trade agreements, and the wild guesses on travel expenses, the price of combustion products, and crop projections when crops rely solely on weather circumstances to assess their productivity and yield.

### **Globalization Theory of Economic Development**

The worldwide mechanisms for increasing integration, with a focus on the realm of monetary activities, give rise to the theory of globalization. This viewpoint is comparable to the world-systems approach in this way. The attention and priority on transnational interaction and cultural dimensions, however, is one of the most vital components of the globalization stance. Globalization researchers contend that the major contemporary components for development interpretation—rather than industrial, monetary, and political relations—are the cultural ties between states. One of the most

crucial aspects of this cross-cultural communication is the increased ability of technology to link individuals everywhere. (1993; Kaplan).

Following is a list of the key components of the theory of globalization:

- a) Nations should acknowledge that global communications technologies are becoming more and more important every day and that as a result, interactions between nations are becoming much more regular and simpler, both at the political level and among citizens;
- b) Although the main media systems are in use in more developed nations, their use is also growing in less developed nations. This fact will improve the likelihood that the well-to-do populace in LDCs can use modern technologies to interact globally;
- c) The economic, social, and cultural patterns of nations are structurally and significantly altered by the modern communication link. Local and small enterprises are increasingly able to maximize the latest technology advancements in communications for commercial purposes;
- d) The concept of minorities in specific countries is impacted by these new platforms. Even if these minorities are not completely incorporated into the growing media platforms, the important business and political elites in each country take part in this global link. In the end, all choices are still made by the ruling elite in developing nations.
- e) The types of economic and social structures in any nation will be determined by cultural factors. The main cultural elements within the parameters of each nation have an impact on these economic circumstances.

Three key principles serve as a concise summary of the basic presumptions that may be drawn from the theory of globalization.

- a) To start, every society is determined by cultural variables.
- b) Secondly, using the region as the unit of inquiry is not crucial in the modern world, as international linkages and communications technology are making this classless relevant.
- c) Third, many social sectors will be capable of connecting with other groups globally as technological advancements become more standardized. Both the dominant and underrepresented groups in each country will be involved in this predicament. (Giovanni, 2001).

About the "comprehensive social school" of Max Weber's theories, globalization theory posits cultural aspects as the primary variables that determine the economic, social, and

political conditions of nations. According to this viewpoint, it is prudent to describe relevance in terms of economics and society are the frameworks of values and beliefs, as well as the sequence of the identity of the dominant (or hegemonic) and alternate solution (or subordinate) societies (Weber, 1988). The assertion from Weberian theory from the 1920s applies to present world situations, particularly in the context of the dispersion and transmission of cultural values across communication networks, which are increasingly influencing many social relations in all countries, according to the globalization stance.

## **CHAPTER V**

### **Methodology**

#### **Introduction**

This chapter explains the approach that was used to look at how FDI affects Ghana's EG. Information about the research design, participants/sample, data collecting, and analytic methods, as well as how the findings are analyzed, is included in this chapter.

#### **Research Design**

When examining FDI and EG, different models have been developed. Umoh et al. (2012) investigated EG and FDI in Nigeria: An analysis of the endogenous effects. They make use of single equations and simultaneous systems to analyze this relationship. Their findings suggest a beneficial causal connection between growth rate and FDI, as well as FDI and the growth rate. The collected results also demonstrate a relationship between FDI inflow and Nigeria's pace of economic expansion. This evaluation suggests that increasing private participation and superior transparency are the key elements that can boost economic development rates and encourage more foreign direct investments in Nigeria.

In their article, "Impact of Foreign Direct Investment on Economic Growth in Africa," Olawumi D. Awolusi and Olufemi P. Adeyeye adapted Agrawal and Khan's growth model (2011). This model is comprised of Gross Domestic Product, labor force, international technology transfer, human capital, GCF, and FDI.

A model including the GDP, GDP growth rate, GNI, production value added, outside loan stock, rising prices, commerce, industry improved products, and FDI net remittances as a percent of GDP (FDI ratio) was used in another study by Samuel et al. (2013) titled "FDI's influence on EG: Case Study Ghana.

In her work titled "Foreign Trade and Economic Growth in Nigeria," Atoyebi Kehinde used GDP as a variable of importation, FDI, real exchange, export, rate of inflation, and accessibility. In his essay titled "Impact of International Trade on EG in Nigeria," Adeleye J.O. used GDP as a product of the BOP, export, trade balance and import. Ayinde Adelewo utilized net export, degree of openness, and terms of trade as parameters for GDP in her article "External Trade and Internal Development." In his study "Export and

Economic Growth," Bela Balasa analyzed trade liberalization, exchange, and net export as the GDP equation. In the research described above, GDP serves as the dependent variable, with the other independent variables following.

Modeling for this study was done using an econometric model's general structure. A simplified form of a method used to describe complicated occurrences in the actual world is an econometric model. By employing historical data, econometric models can be used to evaluate various ideas, create new ones, or predict various future variables. The model serves as a baseline for econometric theories, mathematical structure, and the investigation of the model using statistical tools. This type of model comprises of:

- Equations developed from statistical methods like regression and the economic theory and mathematical model.
- Information about variables and disturbances that have been observed.
- A statement regarding the inaccuracies of variables' value.
- Details on the distribution of disturbance probabilities.

Beginning with a problem statement taken from economic theory, econometrics problems are then written down using mathematical notation and intuitions. This mathematical paradigm is inherently deterministic. We obtain the necessary coefficients from a stochastic model when statistical methods are applied.

By applying mathematical inference techniques, econometric models are constructed using economic data. It comprises economic theories that assume that economic actors act in the best interests of the economy. The economic growth of the economic actors is the dependent variable, and the predictors are imports, FDI exports, and inflation.

The primary sources of data used to create econometric models are measurements of prices and/or volumes. This information can take the form of time series, cross-sections, or some combination of the two (panel data).

For the purpose of this study, the econometric model is:

$$\mathbf{GDP}_t = \mathbf{f}(\mathbf{FDI}, \mathbf{Exp}, \mathbf{Imp}, \mathbf{INF}) \quad (1)$$

The model employed in the study includes the following:

$$\begin{aligned} L_n \mathbf{GDP}_t = & \beta_0 + \beta_1 L_n \mathbf{FDI}_t + \beta_2 L_n \mathbf{Exp}_t + \beta_3 L_n \mathbf{Imp}_t + \beta_4 L_n (1 + \mathbf{Inf}_t) \\ & + \epsilon_t \end{aligned} \quad (2)$$

The equation is a LOG LOG equation.

Inflation was percentage so that we used  $\text{Ln}(1+\text{inflation})$

Where;

$t$  = 1990-to-2020-time span,

$\epsilon$ = Error term,

$\beta_0, \beta_1, \beta_2, \beta_3, \beta_4$  are equation parameters.

**GDP:** Growth domestic products

**FDI:** Foreign Direct Investment

**Exp:** Export

**Imp:** import

**INF:** Inflation rate

The data's validity and reliability are ensured by how the econometric model is built. In this context, "data gathering techniques or analysis procedures" are considered reliable to the extent that they "will provide consistent findings" (Saunders et al., 2009, p. 156). As a result, the research is considered reliable when it is possible for other observers to make identical findings and when the process of extracting meaning from the raw data is transparent.

On the other side, the validity asks "if the findings are indeed about what they appear to be about" (Saunders et al., 2009, p. 157). In other words, validity is the dependability and causal connection between the variables under investigation. A valid study is one in which the researcher actually measures the variable they set out to.

## **GMM**

A general pathway to calculating parameters in mathematical analyses is the GMM. The GMM predictions are reported to be the most effective, reliable, and arithmetically normal in the family of all forecasting techniques that only employ the information provided in the estimated model. Lars Peter Hansen advocated GMM in 1982 as an elaboration of Karl Pearson's 1894 invention of the method for calculating moments. Nevertheless, these estimators are analytically comparable to those based on "unbiased estimating equations" or "orthogonality criteria" (Sargan, 1958, 1959). (Huber, 1967;

Wang et al., 1997). Today's standard approach for working with heteroskedasticity of unclear form is the GMM, created by L. Hansen (1982). The GMM uses the orthogonality requirements in situations when there is heteroskedasticity of uncertain form to permit accurate estimation.

The results from GMM analyses show how EG, FDI, imports, exports, and inflation have an impact on Ghana's GDP.

### **Participants/Population and Sample**

For the purpose of this research, Ghana would be used as the target participant and the sample would be econometric agents based on the World Development Indicators of Ghana namely GDP, FDI, EXP, INF, and IMP for the time series between 1990 – 2020.

### **Data Collection Tools/Materials**

In order to examine the connection between FDI and economic growth, this study uses time-series data for Ghana, a third-world nation, for the 30-year period 1990-2020, which includes the global financial crisis. The WDI report served as a source of secondary data (2020).

### **Data Analysis Procedures**

FDI encourages EG by fostering the development of capital, technology, and know-how in the host nation. By educating its workforce and importing new management and organizational abilities from the industrialized regions, this capacity building through capital outflows and imports further widens the pool of information that is available in the nation. Through capital formation and intermediate products, imports tend to strengthen the relationship between export growth and domestic output. By providing financial incentives to foreign investors, FDI is drawn to the advanced finance market of the host country, and foreign direct investment helps local businesses to adopt cutting-edge technologies through capital creation to boost productivity growth and economic growth. Parallel to shipments, imports may act as an important conduit for the diffusion of new technologies and may contribute to increased productivity among local firms.



The absence of predefined guidelines between the phenomena and its real-life context makes it nearly hard to research FDI's influence on EG in a laboratory setting. It is impossible to fully regulate and control the behavior of the econometric agents when studying the subject. This shows an inherent connection between the FDI and EG phenomena. It's crucial to emphasize a few ideas in order to make the most of the used econometric model and guarantee that the anticipated results will materialize.

### ***The Significance Test Criterion***

Making a mathematical and statistical structure for the evaluation of the estimation comes immediately after determining the economic performance of any model.

### ***Akaike Information Criterion (AIC)***

The AIC standard is used to calculate estimation error and, as a result, the perceived merits of statistical models for a given set of data. A set of models for the data, AIC determines how well each model compares to the others. AIC provides a model selection procedure as a consequence.

The cornerstone of AIC is information theory. When a modeling approach is used to depict the process that generated the data, certain information will always be lost because the portrayal is almost never accurate. The AIC determines how much information a particular model loses relative to other models; the lesser the loss, the better the model's efficiency.

On assessing the extent of data, a model wastes, AIC takes into account the barter of both a model's depth of fitness and its simplicity. In other regards, AIC handles both the threat of under fitting and the concern of over fitting.

### ***T – Statistics***

This measures the reliant variable's statistically significant results  $y$  in understanding the independent variable  $b$ . In the context of standard errors, it also measures how distant the coefficient seems to be from zero. T- can have any value within +2 and -2. The greater the t-value, the more assured one can be of the coefficient's

propensity to forecast. The coefficient's predictive capacity is not particularly robust if the t-value is weak.

### *F – Statistics*

a t-test was conducted that gauge statistics using the F-distribution of the null hypothesis. In order to figure out which quantitative model best captures the populace that the observations were sampled from, it is widely used to contrast predictive methods that have been fitted to data points. A correct F-test typically occurs when the measurements and the facts have been least - square aligned.

### *Descriptive Statistics*

Descriptive statistics are statistics that can be used to describe or summarize aspects of a sample or data collection. Some examples of descriptive statistics include the mean, standard deviation, and frequency of a variable. If we want to learn about the qualities shared by the individual parts of a data sample when it is considered as a whole, we might find it helpful to make use of inferential statistics. As a result, the first step of this research included examining the correlation between the independent and dependent variables, such as GDP growth, which serves as a stand-in for economic growth. Using statistics from the World Development Indicator of the World Bank, this article examines FDI, trade, the real exchange rate, inflation, and broad money from 1970 through 2021. When beginning a quantitative research investigation, it is essential to make use of descriptive statistics right away. These statistics not only help us to logically simplify vast amounts of data, but they also provide us with a comprehensive overview in a format that is easy to work with. Stationarity and other characteristics of time-series data When conducting empirical research, it is important to keep in mind that the non-stationarity of time series data can at times present a challenge. Working with non-stationary variables results in erroneous results or regression findings, both of which, if used further, can lead to incorrect inferences. Working with non-stationary variables generates erroneous results or regression findings. During the entirety of the observation period, a stationary process will always maintain the same structure in terms of its mean, variance, and auto correlation. The concept of stationarity in mathematics refers to a series that appears to be

unchanging and does not follow any discernible trend. It also has a variance that is unchanging over time, an auto-correlation structure that does not change significantly over time, and does not exhibit periodic oscillations. "Stationary series are those in which the mean and auto-correlation of the series are not altered by changes in the length of time that has elapsed since the series' beginning," write Gujarati and Porter (2009). What this means is that the length of time since the series' inception has no effect on the series' mean or auto-correlation. To phrase it another way, the passage of more time does not affect the stationary series in any way. Before beginning any kind of regression analysis, it is of the utmost importance to first conduct a test to determine whether or not the data is stationary. This can be accomplished by employing either the Augmented Dickey-Fuller (ADF) test or the Phillip-Peron test. Both of these are diagnostic procedures.

### ***Unit Root Test***

Because this investigation made use of data from a time series, it was deemed necessary to investigate whether or not the variable in question or the data were stationary. This investigation was carried out because it was thought to be necessary. In addition, before running the cointegration test in time series or any other kind of test analysis, it is necessary to make sure that the variables in question are stationary. This is true whether or not the test is being run on time series data or on data from other kinds of analyses. For this purpose, many diagnostic procedures like the Phillip-Perron test, the Kwiatkowski-Phillips-Schmidt-Shin (KPSS) test, and the standard Augmented Dickey-Fuller (ADF) test are used. The augmented Dickey-Fuller test and the Phillip-Perron test are going to be the ones that are utilized in this study because they are the ones that are the most reliable and are able to best serve the purposes of this research. The application or utilization of these tests led to the determination of the order in which all variables should be integrated. This led to the determination of the order that should be followed. The null hypothesis  $H_0$ , which is indicated by  $H_0=0$  and states that "there is a unit root if the p-value is above the 5 percent significance threshold," is the alternative hypothesis, whereas the alternative hypothesis ( $H_1$ ) states that  $H_1: 0$ . The alternative hypothesis ( $H_1$ ) states that "there is a unit root if the p-value is above the 5 percent significance threshold." (If the p-value is less than the 5% significance level, there is no unit root in the data.) Throughout the

entirety of each and every one of these evaluations, the E-views 12 Student Edition Lite was utilized.

The Augmented Dickey-Fuller (ADF). In order for Dickey and Fuller (1979) to test their hypothesis using a computer program, they designed and built the program themselves. The computer program is able to determine whether or not a variable possesses a unit root, as well as whether or not the variable is subjected to an a priori random walk. The program also has the capability of determining whether or not the variable in question possesses both a unit root and an a priori random walk. You can use this information to assess whether or not a variable is subjected to an a priori random walk, enabling you to establish whether or not a variable is exposed to an a priori random walk. In order to illustrate the applicability and usefulness of the larger Dickey–Fuller test, Hamilton (1994) suggests four distinct testing situations. These scenarios are presented in order to demonstrate the test's applicability. The expanded Dickey–Fuller test manual contains the scenarios that are being discussed here. The assumption that the variable in question has only a single unit root at each and every point in the distribution is the basis for the null hypothesis. This assumption lies at the foundation of the null hypothesis. The fact that the circumstances are different does not change the fact that this is true. When comparing the two strategies, one of the most significant differences is whether or not a drift term is included in the null hypothesis. The second approach differs significantly from the first in that it may or may not incorporate a constant term and a temporal trend into the regression used to construct the test statistic. These two considerations are important when deciding whether or not to include a drift term in the null hypothesis. The most salient differences between the two approaches are these. When deciding whether or not to include a drift term in the null hypothesis, these two aspects are very important considerations to take into account and take into account when making the decision. The primary difference between this test and the Dickey–Fuller test is that this one is performed on the model rather than the other way around, as was the case with the test that came before it. This is the case because the Dickey–Fuller test was developed after this one. This is because the Dickey–Fuller test came before this one, and this one was developed after it.  $y_t = \alpha + \beta y_{t-1} + \gamma_1 y_{t-2} + \dots + \gamma_p y_{t-p} + \epsilon_t$ .<sup>1.2</sup> Since it incorporates delays of the order  $p$ , the ADF formulation allows for the possibility of higher-order autoregressive

processes to take place because of the space it provides for this possibility. As a result of this, it is extremely important to determine the length of the lag  $p$  that existed before the test could be successfully applied to the data. This is a necessary precondition for reaching this conclusion. The Phillips-Peron Testing Model (3.10.2).

### ***Granger Causality Test***

It is possible, through the use of the tried-and-true Granger causality test, to determine which variable came first in the sequence of occurrences that resulted in the other variables (Granger, 1969). The Johansen system co-integration test, will serve as the basis for this investigation. Johansen system co-integration test contends that even though the past might be able to cause or forecast the future, the future is not capable of causing or forecasting the past. In the examination, this is considered to be one of the grounds that it is based on. According to Granger (1969),  $X$  is thought to be the cause of  $Y$  if earlier values of  $X$  can be used to make a more accurate prediction of  $Y$  to a greater degree of accuracy than earlier values of  $Y$  can. When determining whether or not  $X$  is the cause of  $Y$ , this is one of the criteria that must be satisfied. This is a list of regressions that were used for the test, and it goes as follows:

$$Y_t = \alpha + \beta X_t + \epsilon_t$$

$$X_t = \gamma + \delta Y_t + \eta_t$$

While  $U_t$  and  $V_t$  are the terms that denote the white noise disturbance,  $X_t$  and  $Y_t$  are the variables that need investigation. The letters stand for  $X_t$  and  $Y_t$ , respectively. The variables  $X_t$  and  $Y_t$  are denoted by the superscripts  $t$  and  $t$ , respectively. The null hypothesis argues that  $\beta = \delta = 0$  for every  $I$  in contrast to the alternative hypothesis, which states that  $\beta \neq \delta = 0$ .  $\beta = \delta = 0$  for all  $I$  according to the null hypothesis. The premise underlying both theories is that there is no change in the relationship between  $I X$  and  $I Y$ . In the event that the  $I X$  coefficient is statistically significant but the  $I Y$  coefficient is not, then  $X$  is the cause of  $Y$  but not  $Y$  in the event that the  $I Y$  coefficient is statistically significant, and vice versa, if  $Y$  is the cause of  $X$  rather than  $X$  in the event that the  $I Y$  coefficient is statistically significant. If the hypothesis is false, then  $Y$  must be the factor that caused  $X$ , not  $X$  itself. This is so because there is no other explanation but  $Y$ . On the other hand, there is proof of a bidirectional causal link if the  $I X$  coefficient and the  $I Y$  coefficient are both significant on their own. A set of variables is said to be co-

integrated of order (d, b) by Engle and Granger (1987), with the notation  $Y_t = CI(d, b)$ , if all of its components are integrated of order d or b (and  $d > 0$ ), and there is a vector  $(= (1, 2... n))$  such that a linear combination  $YY_t I = (Y1_t + 2Y2_t + (Y2_t + (d,b)$ .

### *Variables and Usage*

**Economic Growth (GDP Constant)** -The annual percentage growth rate of the Output at market prices in local currency remains steady is used to calculate this. The aggregates are based on 2015 prices at constant values, and it is expressed in US dollars.

**Foreign direct investment, net inflows (BoP, current US\$).**FDI in the reporting economy refers to equity flows as a result of direct investment. It's the sum of your equity, profits, as well as other assets. Investing directly is a sort of an international investment in which a resident of one economy has significant control or influence over the operations of a business in a different economy.

**Imports of goods and services (BoP, current US\$).**Transactions in general involving tenants of a country the movement of possession of general commercial activity, nonfinancial gold, and activities from non citizens to residents in the United States and the remaining nations, are considered imports of commodities and providing goods. The figures are in U.S. dollars at the time of publication.

**Exports of goods and services (BoP, current US\$).**Transactions in general among citizens of a country and the remainder of the globe are included in commodity and service exports, including the transfer of ownership of general items, net exports of products under goods entering, nonmonetary gold, and services provided by residents to nonresidents are All instances of services rendered by inhabitants to non-residents. The figures are in U.S. dollars at the time of publication.

**Inflation, consumer prices (annual %).**To the extent indicated by the consumer price index, inflation is The annual percentage change in the price paid by the average customer for a set of goods and services. It can be set or altered at preset periods, such as annually. The laspeyres formula is implemented. in general.

### **Study Plan**

Several pertinent approaches are used in this study to analyze how our function variable—FDI—affects EG. The protracted connection is estimated using the relevant

predicting methodologies, and the stationary or cointegration problem is investigated. The ADF (1979) test, the PP test (1988), and the GMM (Pesaran et al. 2001) model are used for the unit root testing and cointegration test, respectively. Johansen system co-integration test was used to estimate the long-run association between FDI and EG.

For this research, data would be analyzed in the following format:

- Use the ADF and PP tests, to determine stationarity.
- Next, utilizing the Johansen system co-integration test, to determine long term relationship between GDP and FDI.
- Then, analyze the impact of the relationship between GDP and FDI using the GMM.
- To assess the model's resilience and validate the outcomes, diagnostics, and stability tests are performed on it.

## CHAPTER VI

### Findings and Discussion

#### Introduction

This section showcases data that has been gathered through the presentation, analysis, and interpretation. This research examines the effect of FDI's influence on the expansion of the Ghanaian economy. It is universally believed that research is a study that is conducted to uncover new truths, confirm knowledge already known, and also to learn more about specific views for fixing underlying issues or strengthening its positive traits. The outcome of the empirical investigation will be discussed in this chapter in relation to this. The findings raise a number of intriguing questions about FDI's influence and other factors, such as import, export, and inflation on EG. The used time series data spans 30 years (1990 – 2020).

#### Data Analyzed

##### *Descriptive Statistics*

Several explanatory statistical methods were used over the period of the research. The evaluation of the supplied data produced several intriguing findings on statistical ideas like mean, maximum, and standard deviation.

Table 3

##### *Descriptive Statistics*

	<b>LGDP</b>	<b>LFDI</b>	<b>LIMP</b>	<b>LEXP</b>	<b>LINF</b>
Mean	23.53032	19.93721	22.65374	22.31444	2.797472
Median	23.09768	19.31145	22.61342	22.08647	2.740170
Maximum	24.95057	22.07906	24.01570	23.96556	4.085330
Minimum	22.32930	16.51014	21.13239	20.70632	1.582148
Std. Dev	0.998462	1.831756	0.995505	1.086279	0.602438
Skewness	0.225953	-0.225644	-0.023373	0.102641	0.324804
Kurtosis	1.333213	1.651418	1.441525	1.545175	2.486907
Jarque-Bera	3.852262	2.612183	3.140078	2.788263	0.885121
Probability	0.145711	0.270877	0.208037	0.248048	0.642389
Sum	729.4398	618.0534	702.2658	691.7477	86.72164



Sum Sq. Dev	29.90777	100.6599	29.73088	35.40004	10.88793
Observations	31	31	31	31	31

**Table 3:** *Descriptive Statistics*, Source: E-View

Table 3 above provides descriptive information about the Ghanaian economy, foreign direct investment, imports, exports, and inflation for the years 1990 to 2020. The years 1990 through 2020 in Ghana are covered by these statistics. This study used a sum of thirty observations for each variable under investigation, as presented above. The average values for GDP growth, FDI, imports, exports, and inflation in Ghana are, respectively, 23.53032, 19.93721, 22.65374, 22.31444, and 2.797472. Two measurements are made: one of the histogram's skewness and one of the kurtosis of the histogram's tail shape. Kurtosis is described as mesokurtic when the value is three, platykurtic when the value is less than three, and leptokurtic when the value is larger than three. A variable's skewness is determined by how close it is to being equal to zero. The standard for symmetrical distribution is this. In contrast, hand, how close the variable is to have a value of three determines the threshold for kurtosis.

### ***Stationarity Test***

The aim of this test is to verify whether data remains stationary. The PP and ADF tests are hired to assess to data's stationarity. These are used to solve the autocorrelation problem.

Table 4

### ***ADF and PP Unit Test***

VARIABLE	ADF				PP			
	Level		1st DIFFERENCE		Level		1st DIFFERENCE	
	C	T&C	C	T0&C	C	T&C	C	T&C
LGDP	0.9504	0.6526	0.0013	0.0067	0.9431	0.6203	0.0013	0.0067
LFDI	0.3801	0.7147	0.0022	0.0082	0.3838	0.7147	0.0027	0.0098
LIMP	0.7833	0.8237	0.0016	0.0083	0.7843	0.8237	0.0020	0.0107

LEXP	0.8685	0.6362	0.0009	0.0063	0.8699	0.5736	0.0013	0.0085
LINF	0.0062	0.0018	0.0002	0.0015	0.0062	0.0002	0.0001	0.0000

**Table 4:** *ADF and PP Unit Test ,Source: E-View 12*

Analyses from the PP and ADF tests are shown in Table 5.2. These tests show that, with the exception of INF, all the variables have unit roots at level with constants, trends, and intercepts that show the variables are not stationary because the p-values are more than 5%. Additionally, all critical t-statistics have absolute values that are higher than the test statistics, ruling out the possibility of rejecting H0: The model is undesirable at a level because all variables have unit roots, while INF is stationary at a level because it is both trending and constant. The variables do not have any unit roots when they are transformed into the first difference, and the p-value is less than 5%.

### Cointegration Test

The Johansen test is used to check for cointegrating correlations among several non-stationary data sets. Assumption: At the first difference or I (1), all variables—dependent and independent—are stationary. Trace tests and Maximum Eigenvalue tests are the two basic variations of Johansen's test. The H0 Johansen test hypothesis states that there is no cointegration. Anytime the trace value exceeds the crucial value, reject H0, which indicates cointegration.

Table 5

#### *Test of Unrestrained Cointegration (Trace)*

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.906190	130.3211	69.81889	0.0000
At most 1 *	0.597698	64.05959	47.85613	0.0008
At most 2 *	0.539923	38.56413	29.79707	0.0038
At most 3 *	0.323423	16.82604	15.49471	0.0313
At most 4 *	0.189595	5.886203	3.841465	0.0153

**Table 5:** *Test of Unrestrained Cointegration (Trace)*

Despite the series' non-stationarity at the level, the Johansen system co-integration test is used to determine whether there is a long-term relationship between them. When examined at the 5% level of significance, Table 2.1 demonstrates that there is a statistically significant long-run link between growth, FDI, export, import, and inflation in Ghana.

### **GMM (Generalized Method of Moments)**

A general pathway to calculating parameters in mathematical analyses is the GMM. The GMM predictions are reported to be the most effective, reliable, and arithmetically normal in the family of all forecasting techniques that only employ the information provided in the estimated model. Lars Peter Hansen advocated GMM in 1982 as an elaboration of Karl Pearson's 1894 invention of the method for calculating moments. Nevertheless, these estimators are analytically comparable to those based on "unbiased estimating equations" or "orthogonality criteria" (Sargan, 1958, 1959). (Huber, 1967; Wang et al., 1997). Today's standard approach for working with heteroskedasticity of unclear form is the GMM, created by L. Hansen (1982). The GMM uses the orthogonality requirements in situations when there is heteroskedasticity of uncertain form to permit accurate estimation.

Table 6

#### ***GMM***

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.951773	1.050909	1.857223	0.0746
LFD	0.077300	0.020766	3.720639	0.0527
LEXP	0.665140	0.230927	2.880307	0.0079
LINF	-0.008728	0.002932	-2.976807	0.0328
LIMP	-0.119905	0.027937	-4.291978	0.0176

**Table 6:** *GMM, Source: E-View 12*

The results shown in Table 6 shows how EG, FDI, imports, exports, and inflation have an impact on Ghana's GDP. FDI has a 10% significance level. FDI's 1% increase will increase the economy's growth progress by 0.077300. This finding for Pakistan is supported by Shahbaz and Rahman (2012) and Ahmad et al. (2003). Both investigations

used different data ranges, which could explain why the coefficients varied. Exports positively and statistically significantly affect economic growth at a 1% significance level. If Export growth will increase by 1%, we expect the economy's growth rate to increase by 0.665140 %. Reza et al. (2016) and Tafirenyika (2017) both came to the same conclusion (2018). They claimed that exports had a favorable effect on economic growth. The coefficient for LIMP is -0.119905, which indicated that every 1% increase in LIMP, would negatively be impacted LGDP. LINF also has a significant impact on LGDP. Since, the calculated prob value is 0.0328, which is a 5% significance level. With regard to LINF, for every 1% increase in LINF, it could negatively affect LGDP by -0.008728. LINF has a prob value of 0.0328 which indicated a significant impact of LINF on LGDP. All diagnostic tests for error term normality, vector autoregressive, heteroscedasticity, and model specification are satisfied by the extended run mode.

Table 7

***Causality Test (Granger)***

H0:	Observations	F-Statistic	Prob.
LFDI does not Granger Cause LGDP	29	0.76414	0.4767
LGDP does not Granger Cause LFDI		4.51501	0.0217
LEXP does not Granger Cause LGDP	29	2.76308	0.0832
LGDP does not Granger Cause LEXP		0.37680	0.6900
LINF does not Granger Cause LGDP	29	0.74205	0.4867
LGDP does not Granger Cause LINF		4.27040	0.0259
LIMP does not Granger Cause LGDP	29	2.59739	0.0953
LGDP does not Granger Cause LIMP		0.29461	0.7475

**Table 7:** *Causality Test (Granger), Source: E-View 12,*

The results of the causality test (Granger) are presented in Table 7 above using regression techniques. It could be interpreted in three different ways, and those three ways are as follows: A result is referred to as unidirectional when one variable has an impact on another but does not have an impact on the other variable. Findings are referred to as bidirectional when two factors have an impact on one another. The outcome is said to have no direction and should be taken into consideration if there is no effect passing from

one variable to the other. Given that this is the case, the general rule or yardstick for making a decision in the causality test (Granger) is that we concur with the null hypothesis when the likelihood value exceeds 5%, but reject it when the beta value is less than 5% and state that the null hypothesis is true.

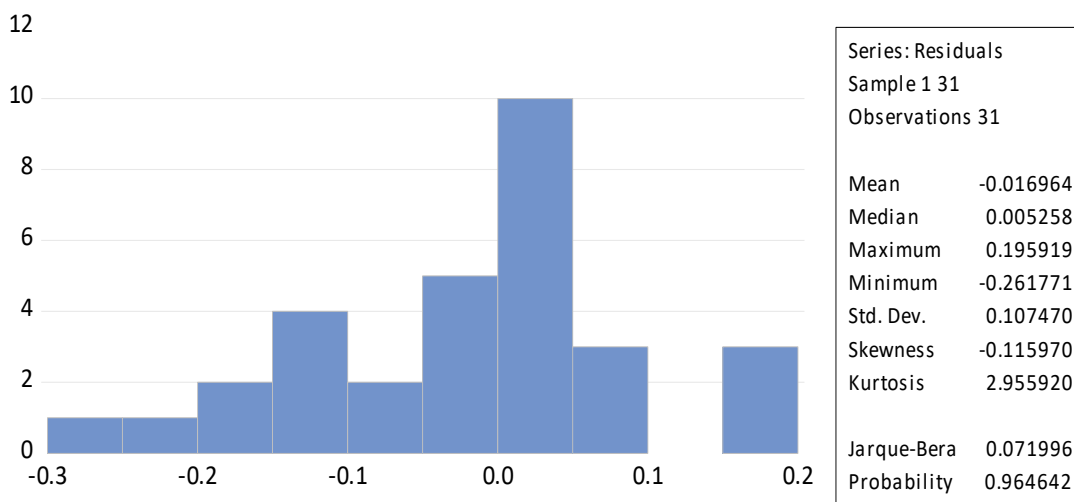
The table above indicates that for the preceding variable, LGDP, serves as a measure of EG, alongside LFDI and LINF, there are two possible outcomes that all pan out to be unidirectional. The initial finding shows that There is a single line of causality connecting LGDP and LFDI as well as from LGDP to LINF.

### ***Test of Normality***

The normality test is run by using the Jarque-Bera method to evaluate whether the error terms are standard.

Figure 1

### ***Test of Normality***



**Figure 1:** *Test of Normality*, Source: E-View 12

Figure 1 displays the outcomes of the Jarque-Bera Normality test, which was carried out to see if the error terms were regular. The test for residual normality with a nearly 0.964642 percent probability shows that error terms are typical.

### ***Model Stability***

At a 5% threshold of significance, the CUSUM test and CUSUM Squares are employed to assess the model's robustness.

Figure 2

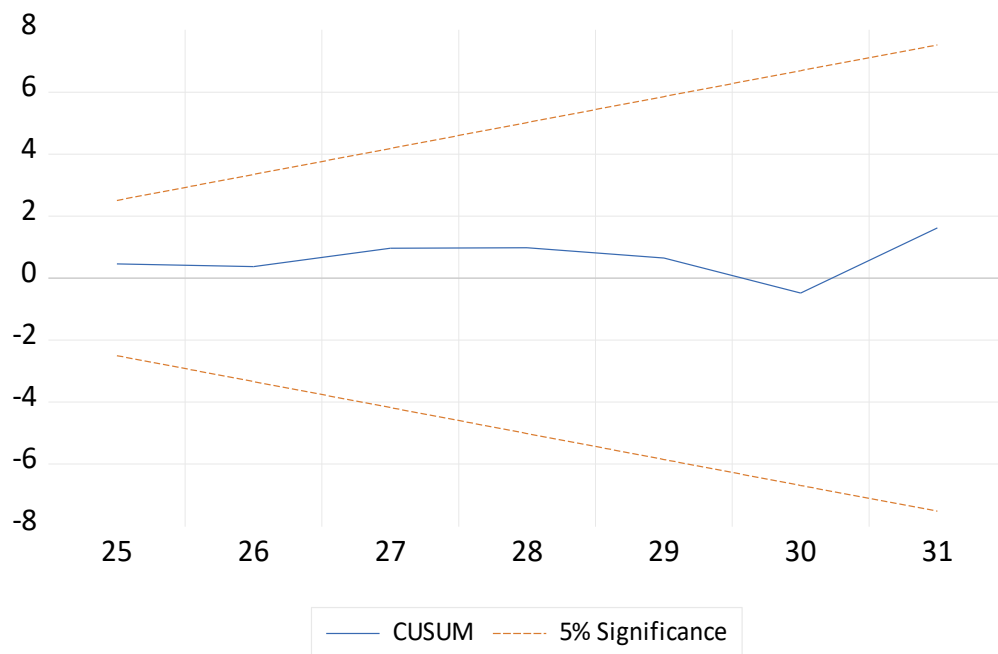
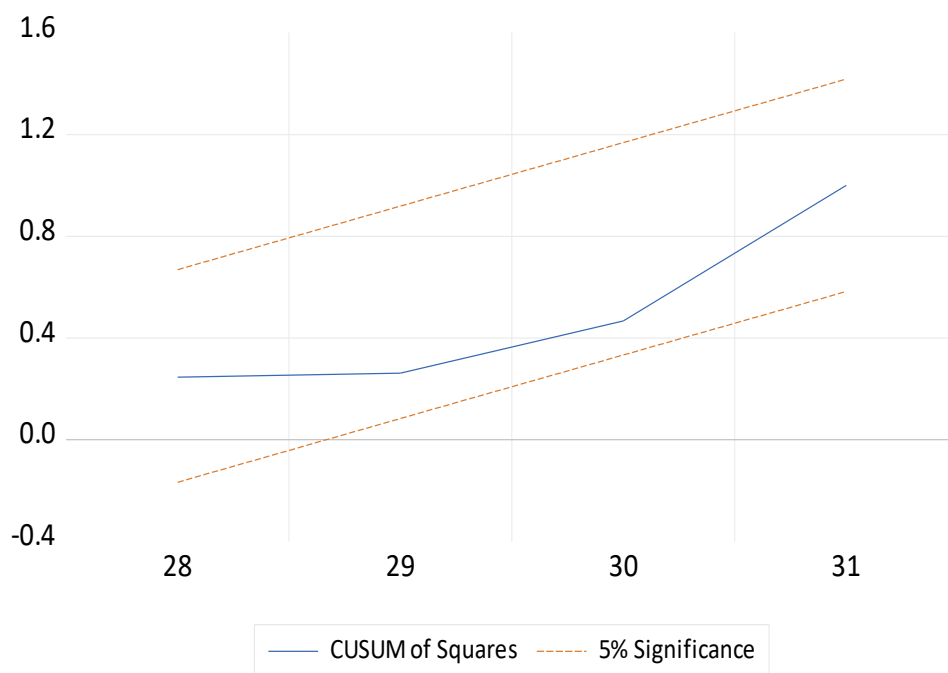
**CUSUM Test****Figure 2:** CUSUM Test ,Source:E-View 12

Figure 3

**CUSUM of Squares**

**Figure 3:** *CUSUM of Squares*, Source: *E-View 12*,

Using the CUSUM test and CUSUM Squares at a 5% significance level, Figures 2 and 3 demonstrate the model's stability. These graphs show that the data model is structurally stable since the blue line lies within the red lines, demonstrating the model's robustness.

### **Research Hypotheses**

From the respective information within the various sections of data analysis, it can be concluded that the originally constructed hypothesis is valid and true. Therefore, Hypothesis 1 is accepted.

H1: The Ghanaian economy is impacted by the presence of FDI.

## CHAPTER VII

### Discussion

This chapter discusses these findings in connection with significant findings from the literature. To find out how foreign direct investment impacted Ghana's economy's growth, this study was initiated. ITA (2022) states that “the primary exports of the country since its independence (1957) are cocoa, gold, oil, and gas. Ghana engaged in trade with the US in 2021 valued at \$1.7 billion. (ITA, 2022). China, the UAE, India, the Netherlands, South Africa, and Switzerland are Ghana's top export destinations.

Based on their report in 2022, ITA records that “Ghana saw average yearly economic growth of around seven percent in the three years. It was one of the nations in the world with the fastest pace of growth before the COVID-19 outbreak. In spite of the recession brought on by the pandemic, Ghana preserved a growth rate of 0.5 percent in 2020 and rebounded with a rise of 5.4 percent in 2021. Nevertheless, because the country is so dependent on the export of natural goods like oil, gas, gold, and cocoa, it is vulnerable to global times of recession and drops in commodities prices. GDP growth is predicted to be more than the average rate of 5% for the ensuing three years.

According to ITA (2022), the rise of the academia, healthcare, and ICT service sectors, among others, made up 49% of GDP in 2021, making the services sector the greatest source of Ghana's GDP. The farming industry comes in second at about 21% of GDP, after the industrial sector, which accounts for 30% of GDP. About 45% of Ghana's employees work in agriculture, primarily small landowners.

According to the International Trade Administration (ITA) (2022), "Ghana purchased \$983 million in goods from the USA in 2021, a large increase from the \$828 million in purchases in 2020, a year that was impacted by the global slump in wealth creation. In 2021, the last year for which complete international data was available, China (23%), the United States (9%), India (7%), Belgium (5%), the United Arab Emirates (4%), UK (3%), and Canada (3%), were the top exporters of goods to Ghana.

Additionally, the import and export of services have increased dramatically in Ghana over the past few years. 2020 saw Ghana export about \$9 billion and buy \$12 billion in services of all kinds from across the world (ITA, 2022). This growth is mostly driven by purchases of professional services, a category that also includes pc services,



building services, legal assistance, finance and accounting, and marketing channels. Freight services and inbound travel/tourism are two other development sectors.

Ghana has continuously backed the FDI-induced economic liberalization (pros and cons). But, to refute the idea that completely open markets are required for betterment. The Ghanaian government's role in managing the economy must be strengthened. If not addressed, such ideological pride could jeopardize the nation's efforts to attract foreign direct investment for economic prosperity.

Notwithstanding the nation's economic advancement, the country's unwavering work, dedication, and enthusiasm will eventually result in a more dynamic and stable economy because FDI has had a positive influence on Ghana's foreign revenues during the previous 10 years.

The study's findings are consistent with the research by Samuel et al. (2013), FDI's effect on EG: Ghana as a case study. According to them, foreign direct investment has remained important to Ghana's GDP. The analysis demonstrates through the empirical findings that there is a considerable favorable association between FDI and EG.

This demonstrates the need for the Ghanaian government for FDI to be a crucial part of the nation's economic progress. It is important to remove the barriers preventing it (costly and difficult financial activities, no transparency, fraud, poor structures, property development constraints, expensive and unstable electric, and water supply, expensive cross-border trade frameworks, a burdensome bureaucracy, and an unskilled workforce). According to the US Department of State (2021), "even with these difficulties, Ghana stands out as being one of the great neighborhoods for investment in sub-Saharan Africa because of its ample raw materials (gold, cocoa, and oil/gas), relative freedom, and peace and stability, in addition to its hosting of the African Continental Free Trade Area (AfCFTA) Secretariat. Foreign-owned companies are not discriminated against. Investment laws assure that investors can export gains and safeguard from expropriation and public ownership. Agricultural and food processing, garments, downstream oil, gas, and petroleum refining, infrastructure, and drilling services subsectors are some of the most promising industries.

As even the country is a popular destination for FDI, the Ghanaian government ought to make every effort to address the issues outlined above.

## CHAPTER VIII

### Conclusion and Recommendations

#### Conclusion

No state or nation exists in isolation on the surface of the world. It is possible to claim that all nations in the globe have become more globalized; this suggests that all countries are interrelated and encourages economic reliance amongst them regardless of the rate of economic progress.

If citizens of an economy cannot purchase many products and activities from other nations and, more importantly, must export their own items and services to produce cash for repayment of imported products, it would be difficult to benefit from economic growth and development. Experts and proponents of economic growth have long believed that FDI drives and promotes growth in LDCs, as evidenced by the hypotheses reviewed.

As a result, it has the potential to accelerate the achievement of a country's macroeconomic objectives, such as high employment, redistribution of wealth, price stability, the growth of domestic technology, a favorable BOP, and more. FDI influences the growth of the economy, which in turn has a considerable influence on the economy, according to the proxies used.

By employing FDI, EX, IM, and IF as independent variables, this study aims to clinically investigate FDI's influence on Ghana's EG. We examined the connections between Ghana's Gross Domestic Product growth rate, Foreign Direct Investment, export, import, inflation, and yearly parameter estimation secondary statistics covering the years 1990 to 2020. To demonstrate the long-term link between EG, FDI, imports, exports, and inflation according to the Johansen system of cointegration. The GMM was used to analyze how the variables related to one another. The stationarity characteristics of the series were examined using the ADF and PP unit root tests. The diagnostic and stability tests executed show that the regression residuals have a normal distribution and lack autocorrelation. According to the study's findings, Ghana's GDP and FDI are positively correlated. Our findings on FDI Inflows and Economic Growth are similar to those of Shahbaz and Rahman (2012) for Pakistan, Reza et al. (2018) for Bangladesh, and Tafirenyika, S. (2017) for South Africa. Additionally, we used different variables than those used in other studies to achieve favorable outcomes for Ghana's instance. The GMM

model examined FDI and GDP relationship. The result reveals that FDI positively and statistically affects Ghana's economic growth at a 10% significance level.

### **Recommendations According to Findings**

The following advice ought to be reviewed in light of the data examined in Chapter 4 in order to accelerate the nation's economic growth;

To increase the effectiveness of the native fiscal system, which is a requirement to attain a positive FDI spillover, the Ghanaian government should implement more financial reforms. To increase FDI, the capital account should likewise be more liberalized. Ghana should guarantee the effectiveness of service delivery and boost the massive investment. Long-term, abroad savings should complement domestic savings rather than take their place.

To strengthen its industrial base and diversify its exports, the government of Ghana should direct its policies toward importing cutting-edge technologies, intermediate goods and increase capital generation.

To draw in more FDI, the government must improve infrastructure, and lower and, if possible, remove all types of barriers, as these actions would not only boost domestic production but also foster competitiveness and economic efficiency. To fully benefit from FDI, Ghana's economy has to be able to absorb more capital.

The public sector should support the development of infrastructure facilities and policies like tax incentives to strengthen the industrial sector. Non-tariff barriers, which can be adjusted over time, are one kind of support for domestic manufacturers.

Liberalizing trade rules and how they are applied can encourage investment and lower the cost of government spending while also helping to establish an investment-friendly economy. The goal is to reduce (or eliminate) corruption's prevalence and freedom as well as competing micro- and macroeconomic strategies. So, each sector's stakeholders should establish accountability, corporate governance, and obligations as key values.

The Ghanaian economy needs to be prepared for severe competition with the finest in terms of its production capability if it is to expand and realize an improved level of living. In today's dynamic world, a country's output must be competitive with the rest of the world if we are to survive. Ghana must generate value-added products by transforming

their natural resources into completed goods and brand them 'Made in Ghana' items that can be exported in order to increase quality and ensure consistency in its production capabilities.

It is necessary for the government to improve and implement strategies for continuity in the non-major exporting product sectors (agricultural, mining, manufacturing, solid materials, hotels, and tourism, for example). Attempts to benefit from current privileges that are built into the exportation process of commodities to other nations will broaden the nation's export base, all tiers of the government's budget, and the creation of job possibilities (ongoing multilateral agreements).

### **Further Research Recommendations**

Numerous topics that would gain from further research have been identified as a result of the research conducted for this dissertation.

The assessment of the literature found significant gaps in the knowledge base. While some of these were dealt with during the study for this thesis, there are still some that require further investigation. Particularly, there aren't enough observational data to fully measure how foreign direct investment has affected Ghana's economy. This study included data on export, import, inflation, and FDI along with EG.

Given the present events in the globe (wars, an uncertain economy), it is vital to capture the most recent data to explicitly address the study's notion. Time series data from 1990 to 2020 was outsourced and utilized. It is crucial to note that there will soon be a two-year gap in research data.

The work done in this thesis has a number of potential applications and possibilities for further study. In this work, the methodologies were used to evaluate the models for Ghana, but they might also be advantageously used in a global evaluation of model performance in a cross-model comparison, like those done by Sun et al. (2006). This would allow comparison of the outcomes of these inter-model comparisons when the various strategies are utilized and would provide a better idea of overall model performance.

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## APPENDIX

### Appendix 1: Descriptive Statistics

	<b>LGDP</b>	<b>LFDI</b>	<b>LIMP</b>	<b>LEXP</b>	<b>LINF</b>
Mean	23.53032	19.93721	22.65374	22.31444	2.797472
Median	23.09768	19.31145	22.61342	22.08647	2.740170
Maximum	24.95057	22.07906	24.01570	23.96556	4.085330
Minimum	22.32930	16.51014	21.13239	20.70632	1.582148
Std. Dev	0.998462	1.831756	0.995505	1.086279	0.602438
Skewness	0.225953	-0.225644	-0.023373	0.102641	0.324804
Kurtosis	1.333213	1.651418	1.441525	1.545175	2.486907
Jarque-Bera	3.852262	2.612183	3.140078	2.788263	0.885121
Probability	0.145711	0.270877	0.208037	0.248048	0.642389
Sum	729.4398	618.0534	702.2658	691.7477	86.72164
Sum Sq. Dev	29.90777	100.6599	29.73088	35.40004	10.88793
Observations	31	31	31	31	31

### Appendix 2: UNIT ROOT

VARIABLE	ADF				PP			
	Level		1st DIFFERENCE		level		1st DIFFERENCE	
	C	T&C	C	T0&C	C	T&C	C	T&C
LGDP	0.9504	0.6526	0.0013	0.0067	0.9431	0.6203	0.0013	0.0067
LFDI	0.3801	0.7147	0.0022	0.0082	0.3838	0.7147	0.0027	0.0098
LIMP	0.7833	0.8237	0.0016	0.0083	0.7843	0.8237	0.0020	0.0107
LEXP	0.8685	0.6362	0.0009	0.0063	0.8699	0.5736	0.0013	0.0085
LINF	0.0062	0.0018	0.0002	0.0015	0.0062	0.0002	0.0001	0.0000



**Appendix :3 COINTEGRATION TEST**

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.906190	130.3211	69.81889	0.0000
At most 1 *	0.597698	64.05959	47.85613	0.0008
At most 2 *	0.539923	38.56413	29.79707	0.0038
At most 3 *	0.323423	16.82604	15.49471	0.0313
At most 4 *	0.189595	5.886203	3.841465	0.0153

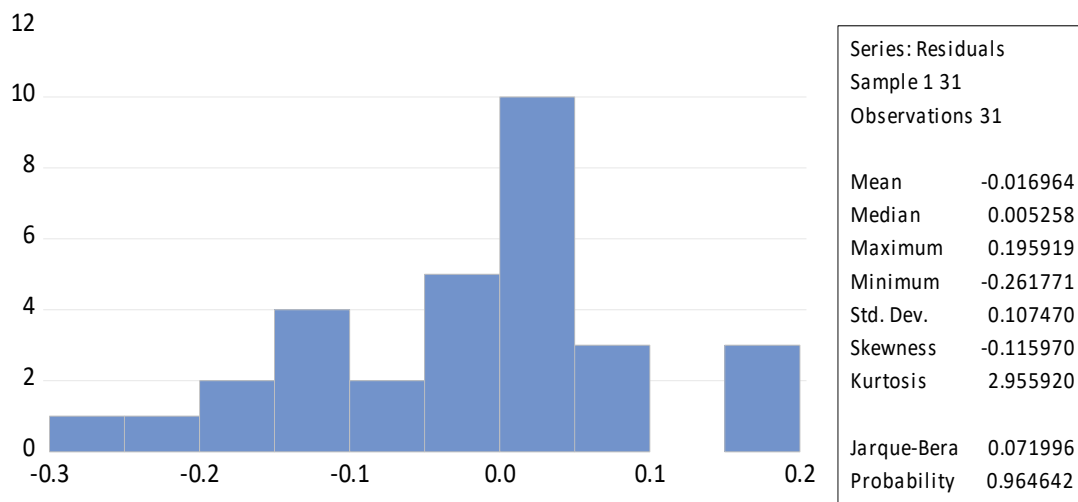
**Appendix4:GMM MODEL**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.951773	1.050909	1.857223	0.0746
LFD	0.077300	0.020766	3.720639	0.0527
LEXP	0.665140	0.230927	2.880307	0.0079
LINF	-0.008728	0.002932	-2.976807	0.0328
LIMP	-0.119905	0.027937	-4.291978	0.0176

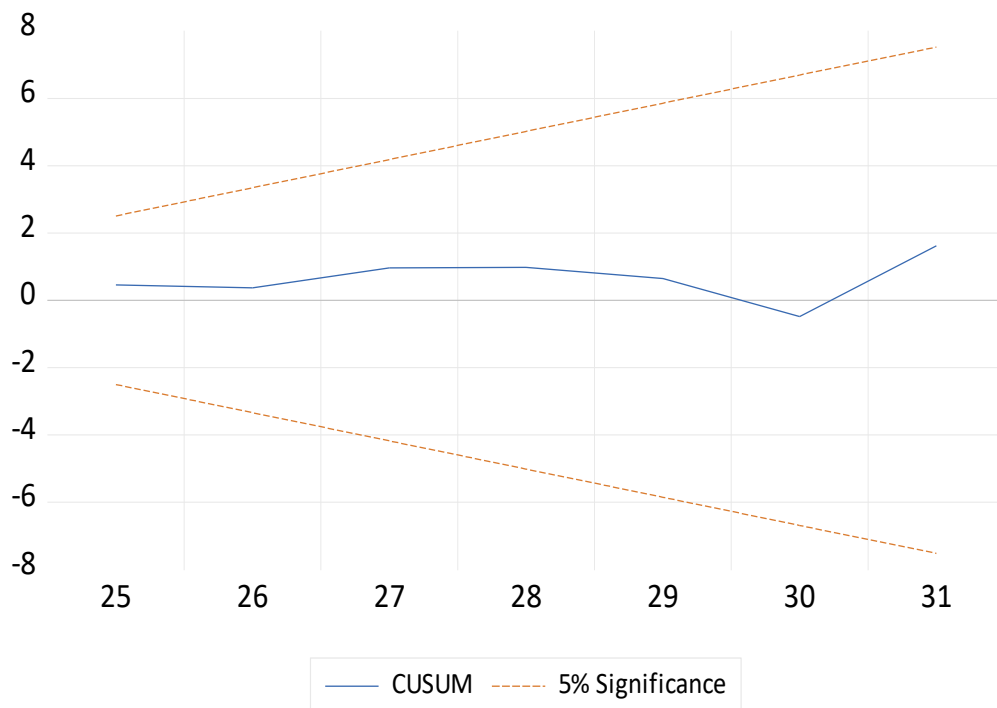
**Appendix5: Causality Test (Granger)**

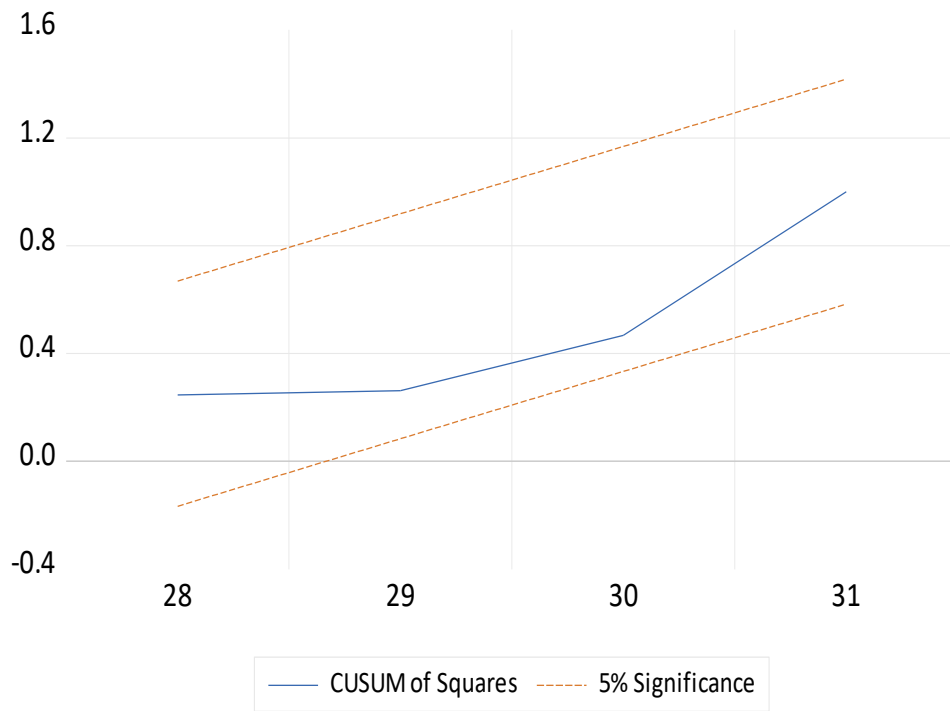
H0:	Observations	F-Statistic	Prob.
LFDI does not Granger Cause LGDP	29	0.76414	0.4767
LGDP does not Granger Cause LFDI		4.51501	0.0217
LEXP does not Granger Cause LGDP	29	2.76308	0.0832
LGDP does not Granger Cause LEXP		0.37680	0.6900
LINF does not Granger Cause LGDP	29	0.74205	0.4867
LGDP does not Granger Cause LINF		4.27040	0.0259
LIMP does not Granger Cause LGDP	29	2.59739	0.0953
LGDP does not Granger Cause LIMP		0.29461	0.7475

### Appendix: 6 Normality Test



### Appendix: 7 CUSUM Test



**Appendix: 8CUSUM of Squares**

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**NEAR EAST UNIVERSITY  
SCIENTIFIC RESEARCH ETHICS COMMITTEE**

09.11.2022

Dear Fathi Hassan Ali

Your project "**Impact of foreign direct investment on economic growth**" has been evaluated. Since only secondary data will be used the project does not need to go through the ethics committee. You can start your research on the condition that you will use only secondary data.

Prof. Dr. Aşkın KİRAZ

The Coordinator of the Scientific Research Ethics Committee