ALFRED NOBEL UNIVERSITY

DEPARTMENT OF GLOBAL ECONOMICS

Master's Thesis

Ghana's Foreign Direct Investment inflow and the impacts on Real GDP Growth

Student: OSEI, Wilfred Padmore

Group: МЕВангл -19м

Specialty 292: International Economic Relations

Scientific Supervisor: Kuzminov, S. V., Ph.D.

(Professor, Doctor of Economic Sciences)

DNIPRO, 2021

ALFRED NOBEL UNIVERSITY
DEPARTMENT OF THE GLOBAL ECONOMICS

Second (master) level
Specialty 292 International economic relations

Approved by:
Head of Department _______________
Doctor of Science, professor
A Zadoya
____
(signature, last name, initials, scientific degree, academic status)

“____” _________________20__ p.

The Bachelor’s Thesis Assignment

_______________ *Wilfred Ossei Padmore.* ____________
Student’s full name

1. Title __ Ghana’s Foreign Direct Investment inflow and the impacts on Real GDP Growth __

2.Supervisor____ Kuzminov S.V., Doctor of economic sciences

(last name, initials, scientific degree, academic status)

Approved with the Order of «___" _____________ 20___, No. _______________
3. Deadline for submission _01-06-2021__
4. Aim of the paper ____
To analyze the main indicators of investment climate of India and to make project of starting there Courier service business
5. Thesis outline (list of issues to be developed):
1. To characterize Ghana as the subject of international investment activity
2. To analyze Ghana’s international economic relations
3. To make the prospect of investment project in Ghana
6. Date of issue of the assignment 02-02-2021

7. Thesis schedule

no	Stages	The deadline for submission	
		Schedule date	Actual date
1	Chapter 1	01.04.2021	01.04.2021
2	Chapter 2	15.04.2021	15.04.2021
3	Chapter 3	15.05.2021	15.05.2021
4	The whole paper	01.06.2021	01.06.2021

Student _________ Wilfred Ossei Padmore
signature *last name, initials*

Supervisor _________ S.Kuzminov
signature *last name, initials*

ACKNOWLEDGEMENTS

The debts to be recognized are several that any register must be predisposed and followed with unqualified apologies to those herein not mentioned. I express my foremost thanks to the Almighty God for endowing me with the wisdom and the tenacity to come out with this thesis successfully amidst the trepidation accompanying the global enemy of coronavirus (Covid – 19) .

A myriad of challenges was encountered during the writing of this thesis. Nevertheless, my scientific supervisor, Prof. Sergii Kuzminov made the yoke easier by his unflappable support. In fact, I do not have the repertoire of words to thank him for lending his intellectual credence and invaluable contribution to the success of this work.

It would be an irredeemable error to decouple the strides I have made at the Department of Global Economics from the supportive faculty. I am particularly indebted to Prof. Iryna Shkura for imparting knowledge to me and making me pass through a tough but extremely rewarding learning process. Her timely response to my emails is something that I can vouch for always. Doctors Oksana Koshulko, Ruslan Kliuchynk and Victoriia Lapa have been very instrumental to my study for which reason I ask for God's continuous blessings for them.

Also, I thank my colleague master's students at the department for their thought-provoking questions during class presentations and seminars which has made this thesis better than I imagined it would be. Sergii Myronenko stands tall among the lasting relationships I have established here at the Alfred Nobel University in Ukraine – he was always at my beck and call to ensure that I do not feel blind while I walk on the streets even with my two eyes widely opened.

Finally, my unfeigned appreciation goes out to my family back in Ghana and the US for sacrificing the happiness of the entire family just to make me realize my dream of starting graduate school as I carve a path in academia. The leaders and members of my church here (PIWC Dnipro) deserve mention for the ceaseless prayers. To this end, I say God continuously bless each one of you for believing in me. ***Большое спасибо!***

DECLARATION

I, hereby, declare that this thesis is the result of my own original work and that no part of it has been presented for another academic award in this university or elsewhere, except where due acknowledgement has been made in the text.

Signed: OSEI, Wilfred Padmore   Date: 7th June, 2021
(Student)

DEDICATION

This scholarly work is hereby dedicated to my parents and siblings (Heitty, Eunice & Galahadia), Dr. Kwesi Koomson, Clara Wyche Burgess, Benedict Nyarko, and Olufunmilola Oriyomi Bamidele.

MASTER’S THESIS ASSIGNMENT

ABSTRACT

The heightened competition to attract FDI inflows into developing and transition economies especially in Sub-Saharan Africa has spawned debate among Economists pertaining to the relevance of FDI in stimulating economic growth (Agrawal, G. and Khan, M.A. (2011)). This study seeks to assess the impact of FDI inflows into Ghana on real GDP growth. Data spanning a period of 20 years (2000 to 2019) from UNCTAD, World Bank, GIPC, and Bank of Ghana are used. Additionally, the literature review in this research was made possible by the availability of both local and international journal articles. The author employs two strands of related statistical methods to predict the level of correlation between FDI and real GDP growth. The coefficients of correlation by Pearson's r and Spearman's rho indicate that the nexus between Ghana's FDI and Real GDP growth from 2000 to 2019 is very weak. The study advanced that FDI inflow into the country can be harnessed to prepare adequately for the fourth industrial revolution; develop an economic cluster by drawing worthy lessons from the USA's Silicon Valley, and to mitigate all forms of environmental nuisances. Finally, it recommends that studies be conducted to investigate the connection between outflow of FDI and GDP growth in Ghana since there is lack of empirical evidence on it.

Keywords: Foreign Direct Investment, Real GDP growth, Spearman's rho, Pearson's r, Ghana

ABSTRACT (IN UKRAINIAN)

Keywords:

LIST OF ABBREVIATIONS

AfCFTA	African Continental Free Trade Area
AGI	Association of Ghana Industries
BoG	Bank of Ghana
BoP	Balanced of Payment
CGIT	China Global Investment Tracker
CSO	Central Statistics Office
DIE	Direct Investment Enterprise
ECOWAS	Economic Community of West African States
ERP	Economic Recovery Programme
FDI	Foreign Direct Investment
FDIE	Foreign Direct Investment Enterprise
GDP	Gross Domestic Product
GIPC	Ghana Investment Promotion Centre
HIPC	Highly Indebted Poor Country
ILO	International Labour Organization
IMF	International Monetary Fund
ISSER	Institute of Statistical, Social and Economic Research
LDCs	Less Developed Countries
M&A	Mergers and Acquisitions
MNCs	Multinational Corporations
MNEs	Multinational Enterprises
MoTI	Ministry of Trade and Industry
OECD	Organisation for Economic Co-operation and Development
PCC	Pearson’s Correlation Coefficient
SMEs	Small and Medium-sized Enterprises
SRCC	Spearman’s Rank Correlation Coefficient
SSA	Sub-Saharan Africa
TNCs	Transnational Corporations
UNCTAD	United Nations Conference on Trade and Development

TABLE OF CONTENTS

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

INTRODUCTION

Generally, foreign direct investment (FDI) has, peu a peu, become a concept of increasing discourse in the sphere of international economic relations. As of today, the leading provider of FDI on the globe is transnational corporations (TNCs). Historically, TNCs stemmed from the shackles of colonialism and imperialism from Western Europe, principally England and Holland, taking off in the 16th century and persisting for several centuries. During this era, firms like British India Trading Company was incorporated to advance trading activities or territorial acquisitions of their home countries in the Far East, Africa, and the Americas. Unlike in the 20th centuries where their presence was not felt, the call for globalization has given birth to the over 35,000 TNCs operating globally which are controlling about 15,000 foreign subsidiaries.

According to (Zadoia, et al., 2011, p.108), globalization is an objective process of which a separate country or a union of countries cannot cancel it, because its effects on countries are different. This creates the opportunity for rapid transitions of financial resources from one country to another and, thus, threatens the world security where crises in one economy trickles down to all economies like the financial crises between 1997 to 1999 and 2008 to 2009. Thus, heightened advocacies for more free trade agreements among nations have made it possible for foreign direct investment to move from home to host countries. UNCTAD (2018) report indicated that the global FDI had increased from US$0.96 trillion in 2005 to US$1.29 trillion in 2018. However, this figure was a 13% decline from the 2017's US$1.49 trillion, where developing countries received 47% of the total world FDI. Undoubtedly, TNCs are the trail blazers in FDI supply which makes any action they take effectual in throwing the global market into disarray. For instance, US multinational Corporations repatriated their accumulated foreign earnings following President Trump's tax cut since 2017 – one of the key justifications of the 2017 drop in FDI stocks. With regards to UNCTAD (2012) report, FDI flow over the years has proven to be a major source of economic growth and development particularly for emerging economies. This is well supported by statistical analysis shown in the empirical study of Kim, D.-H., & Trumbore, P. F. (2010) which showed that developing countries benefit more from cross-border mergers and acquisitions (M & A).

Beyond the merits developing countries derive from hosting TNCs, there are available studies that adduce corresponding threats posed by TNCs. There are hues and cries that in attempt to attract foreign investments by TNCs, governments of developing countries attenuate labour unions by holding down wages, benefits, and labour standards (Korten, 1996). Governments create congenial atmosphere for TNCs to thrive through giving them tax breaks, subsidies, and minimizing environmental regulations. Additionally, Rondinelli (2003) affirms that TNCs have garnered the power to operate beyond the confines of any country's laws and regulations in ways that are pernicious to host countries. As dominant economic actors, TNCs, gain vast influence over governments and international bodies who fear to lose jobs which may trigger social conundrums should TNCs shift their activities elsewhere (Ellwood, 2001). Exposed to these realities, unnecessary pressure is mounted on governments to take decisions which portend well for foreign-owned businesses in lieu of locally owned businesses (SMEs) which rather need some modicum of protection from the governments. Besides, Ingham, H., Read, R., & Elkomy, S. (2020) opined that aggregate inflows of FDI into Egypt adversely affect its economic growth performance due to the possibility of crowding-out more productive domestic investment. The crux of this study, therefore, is to examine the nexus between FDI inflows into Ghana and its impact on real GDP growth.

Rationale of the study

Taking inference from the highlights of the various literatures, this study will be anchored on two principal pillars:

1. To empirically determine whether the FDI inflow to Ghana has a ripple effect on real GDP growth.

2. To ascertain whether there is a policy mix that will position Ghana well to attract more FDI inflows.

Research questions

A plethora of questions can be extrapolated from the above rationale, but, in the scope of this study, the two cardinal questions to be answered are:

1. Does FDI inflow to Ghana influence real GDP growth?
2. Has Ghana prepared well to attract more FDI inflows?

Relevance of the study

With Ghana chosen as the headquarters of the African Continental Free Trade Area (AfCFTA), Ghanaian businessmen are ambivalent whether it is a blessing or an anathema to local firms (over 80% of which are in the category of SMEs according to the Association of Ghana Industries (AGI)). The fear is that as the floodgate is opened for strong international competitions under the guise of foreign direct investment which may lead to the folding up of local firms as and when they become insolvent. Sadly, just a handle full of empirical studies has been done to address this weightier matter either in full or part. To this end, this paper will fill that lacuna, and in the end, present all stakeholders especially the government of Ghana a proper framework to formulate policies that will inure to the speedy growth of the Ghanaian economy taking cognizance of the high levels of unemployment among the youth of Ghana and the efforts required in addressing it as chronicled by the sustainable development goal 8.

Research data and methodology

This research work will rely largely on secondary sources of data from the UNCTAD, World Bank, IMF, Bank of Ghana annual reports, and other germane international journal articles. The analysis of the data compiled will be done using two related strands of statistical methods: the Karl Pearson's correlation coefficient (Pearson's r) and the Spearman's rank correlation coefficient (Spearman's rho).

Organisation of the study

This thesis is divided into three main chapters. Chapter 1 will be devoted to the scholastic meaning of foreign direct investment (FDI), modern trends of FDI, and how to measure the effectiveness of FDI. The assessment of Ghana's investment climate and how it correlates with real GDP growth in the country will be discussed in chapter 2. Chapter 3 will present a framework that will propel a positive relationship between FDI and real GDP growth in Ghana.

CHAPTER ONE

FOREIGN DIRECT INVESTMENT (FDI): DEFINITIONS, CONTEMPORARY TRENDS, AND MEASUREMENT OF ITS EFFECTIVENESS

1.1 Definitions and Useful concepts of Foreign Direct Investment (FDI)

1.1.1 *Definition of Foreign Direct Investment (FDI) by different scholars*

The ubiquitous nature of foreign direct investment (FDI) defies a single watertight definition. Bhattacharyya, S. and May, A. S. (2012) aver that there has not been in any informative, instructive, and internationally accepted legal definition of what form a direct investment ought to be. They underscore that the test for the existence of a considerable level of control and influence differs in latitude based on applicable law in a specific jurisdiction, where some jurisdictions draw no line of dichotomy between the various forms of foreign direct investment. This makes it imperative to critically understand how FDI is being defined in each legal regime when regulating it. To this end, several descriptions of FDI have been postulated by different scholars and or international policy thinktanks some of which are presented below to set the tone for this research.

Agrawal, G. and Khan, M.A. (2011) define foreign direct investment (FDI) as a long-term participation by country A into country B. It usually involves participation in management, joint-venture, transfer of technology, and expertise.

Foreign Direct Investment (FDI) refers to overseas equity investments by private multinational corporations (Todaro, P.M., and Smith, C. S. (2003)). This designation valorizes the assertion that multinational corporations (MNCs) which, in recent times, are christened as transnational corporations (TNCs) lead in the supply of international finance.

Adding to the discussion, United Nations Conference on Trade and Development (UNCTAD) describes FDI as an investment that comprises a long-term relationship and reflects a lasting interest and control by a resident entity in one economy (parent enterprise) in an enterprise resident in a different economy other than that of the foreign direct investor.

Implicatively, the investing entity is clothed with the clout to influence the other country's affiliate entity. Investment of this kind involves both the initial transaction between the two entities and all commensurate transactions between them and among foreign affiliates, both merged and standalone.

The Organization for Economic Co-operation and Development (OECD) has offered a standardized definition of FDI to facilitate the compilation of statistics and has released its own yardstick that is largely affirmed by the International Monetary Fund (IMF) in its balance of payment (BoP) manual. According to OECD (1996), FDI is a type of investment that indicates the objective of forming a perpetual interest by a resident enterprise in one economy (direct investor) in an enterprise (direct investment enterprise) that is in a different economy other than that of the direct investor. The relationship referred to here is indicative of the existence of a long-term cohesion between the direct investor and the direct investment enterprise and a significant degree of influence on the management of the enterprise. The direct or indirect ownership of at least 10% of the voting power of an enterprise resident in one economy by an investor resident in a different country confirms same.

The Ghana Investment Promotion Centre (GIPC), Act 865, categorizes "*direct investment*" as an investment made to acquire a lasting interest in an enterprise operating in the economy of Ghana and intended to give the investor an effective control in the management of the enterprise. Also, in the same Act, GIPC identifies "*indirect investment"* to be an act or contract by which an investor contributes, whether tangible or intangible, to an enterprise in Ghana without obtaining an equity interest in the enterprise but under which the investor holds an entitlement to returns based on profits accruing to the enterprise.

Another Bretton Wood institution that adds its voice to the discourse on FDI is the World Bank. It acknowledges FDI as the net inflows of investment needed to garner lasting management interest (10 % or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital.

FDIs comprise two main operations. The first deals with operations done on internal growth inside the same transnational corporation between the parent company and its various foreign branches (subsidiaries, representative offices, etc.); ex nihilo creation of new units, expanding production capacity of existing units, financial flows between institutions (increase in capital, loans, and cash advances by the parent, etc.), and local reinvestment of profits. The second operation covers those made through acquisitions if only they attain 10% or more of the desired foreign company's capital. However, in recent times, this ceiling is universally considered to differentiate FDI from "portfolio investment" with the latter being much more volatile and related to participation less than 10% of a company's capital. In this regard, such an investment is considered by the company as a form of international portfolio diversification. Hence, it stands to reason that FDI is the sine qua non of transnational corporations.

1.1.2 *Useful Variables of FDI as seen in the 2020 E-Handbook of Statistics given under the hand of UNCTAD (https://*unctad.org/statistics*)*

- **FDI inflows** encapsulate capital supplied by a foreign direct investor to its affiliate in a foreign country, or any form of capital a foreign affiliate gives to its foreign direct investor.

- **FDI outflows** signify the same flows from the perspective of the other country.

- **FDI flows** are shown on a net basis, where debits are deducted from credits. Hence, FDI is likely to be negative under the circumstance of reverse investment or disinvestment.

- **FDI stock** is the amount of capital and reserves attributable to a non-resident parent enterprise added to foreign affiliates' net indebtedness to parent enterprises.

$$FDI\ stock = Outward\ FDI - Inward\ FDI \qquad (1.1)$$

1.1.3 *Some Relevant Terminologies of FDI provided in OECD (2008) Handbook on Economic Globalization Indicators (4th Edition)*

The author does not intend to provide a detailed description of all the indicators presented in the said handbook. Nevertheless, it is salient to explicate a few of them, which are germane to understanding what FDI is about both theoretically and numerically.

- **Foreign Direct Investment Enterprise (FDIE):** This is an enterprise located in one country and in which an investor resident in another country owns, either directly or indirectly, at least 10% of its voting authority if it is incorporated or the equivalent for an unincorporated enterprise.

  The numerical strength of ownership of 10% of the voting authority bespeaks the existence of a direct investment relationship between the direct investor and the direct investment enterprise. And satisfying this threshold is a significant testament that the investor has the ample influence to possess an effective voice in the management of the enterprise.

- **Foreign Direct Investor:** It is an entity located in one country that has possessed, either directly or indirectly, a 10% or more of the voting authority of an enterprise, or equivalent for an unincorporated enterprise, situated in another country.

  A *direct investor* could be associated with any sector of an economy and could be any of the below:

  (i) an individual;
  (ii) a group of related individuals;
  (iii) an incorporated or unincorporated enterprise;
  (iv) a public or private enterprise;
  (v) a group of related enterprises;
  (vi) a government body;
  (vii) an estate, trust or other societal organisation or;

(viii) any combination of the aforementioned.

- **Affiliated enterprises:** This is a collective term used in the framework of direct investment relationship to refer to a particular direct investor, its direct investors, subsidiaries, associates, and its branches, besides all fellow enterprises.

- **Associate, Direct Investment Enterprise (DIE)**: Per the OECD benchmark definition, *an associate* is regarded as a direct investment enterprise if:
  (i) an investor holds a 10% or more of a direct voting power and at most 50%.
  (ii) an investor and its subsidiaries put together have at least 10% an enterprise's voting authority but does not exceed 50%.
  (iii) an associate, either in an individual capacity or combined with its affiliates, owns more than 50% of an enterprise. In such a scenario, the associate is deemed as a higher-level investor.

- **Subsidiary, Direct Investment Enterprise**: A direct investment enterprise is classified as a *subsidiary* if:
  (i) an investor has more than 50% of its voting power.
  (ii) An investor and its subsidiaries put together acquire more than 50% of the voting power of another enterprise.

- **Branch, Direct Investment Enterprise**: A *branch* is any unincorporated direct investment enterprise situated in a host country which the direct investor owns it completely. Hence, this a branch, primarily, is the umbrella covering formally organized business operations and activities that are carried out by an investor in its own name in addition to other types of unincorporated operations and activities.

(a) For a branch to recognized, it must undertake or plan to undertake production for at least one year in the region other than that of its head office:

   (i) if the production process consists of physical presence, then the operations should be physically sited in that region. This can be done by buying or renting business premises, procuring capital equipment, and hiring local staff.

   (ii) if the production excludes physical presence, such as in some cases of banking, insurance, or other financial services, the operations should be recognized as being in the region by virtue of the registration or legal domicile of those operations in that region.

(b) The recognition of its operations as being subject to the income tax system, if any, of the country in which it is located even if it may have a tax-exempt status.

- **Directional Principle**: FDI data is presented on a directional basis which indicates the direction of influence by the direct investor anchoring the direct investment: *inward* or *outward* direct investment. This principle corresponds to the treatments of reverse investment and fellow enterprises.

  (a) Reverse investment which is the acquisition by a direct investment enterprise of a financial claim on its direct investor.

  (b) Investment between fellow enterprises. Here, if the ultimate controlling parent is a resident of the compiling economy, then the transactions and positions are between the two fellow enterprises.

- **Inward investment**: OECD considers this to be an investment by a non-resident direct investor in a direct investment enterprise located in the host country; the direction of the influence by the direct investor is *inward* for the reporting economy. It is also treated as a direct investment in the reporting economy.

- **Outward investment**: This kind of investment is made by a resident direct investor in a non-resident direct investment enterprise; the direction of influence by the direct investor is *outward* for the reporting economy. In other words, it is a direct investment abroad.

- **Positions**: FDI positions, invariably referred to as FDI stocks, data show the investment levels at a specific period.

- **Round-tripping**: For round-tripping, direct investors channel local funds abroad and repatriates them to the local economy in the form of direct investment.

1.2 Origin and current trends of FDI

The need for FDI could be traced to the 19th century, an era that followed the ghastly World Wars I & II. The untold hardships that visited those who lived in such an epoch could be taken as enough justification to moot such a global economic philosophy to resuscitate economies from passing out.

According to Ietto-Gillies, G. (2012), the concept of FDI which is interwoven with the activities of Multinational Corporations (MNCs) or Transnational Corporations (TNCs) was postulated by neoclassical economics hinged on macroeconomic principles. These theories considered classical theory of trade in which the canon behind trade was linked to the disparity in production costs of goods between two economies, pitching their tent on the low production cost as the topmost drive for a firm’s foreign activity. Joe Staten Bain, an American Economist, narrowly explained the bane of internationalization focusing on three main pillars: *absolute cost advantage*, *product differentiation merits*, and *economies of scale*. Again, the theories put forward by neoclassical economists assumed the existence of perfect competition.

However, in the 1960s, Stephen Hymer got hypnotized by the incentives that necessitated large foreign investments made by US corporations and modelled a framework that gave an in-depth picture of the challenges the earlier theories sought to explain. Hymer's theory was directed to closing the gaps in international investment. Unlike the traditional macroeconomics-based theories of investment, he differentiated between capital investment, otherwise termed portfolio investment, from direct investment. The key distinguishing feature between the two concepts was the issue of control. He further reasoned that the capital movements theory was not a sufficient explanation for international production. According to Hymer, S. (1976), FDI is not necessarily a movement of funds from a home country to a host country, and that it is concentrated on specific industries within several countries. This sharp contrast to the polemic that if interest rates were the cardinal reason for international investment, then FDI would consist of several industries within a few countries. Another point of departure from the neoclassical theories is that in established that FDI is not only about investing excess profits abroad; it can be financed through loans secured in the host country, payments in exchange for equity, and other methods.

World FDI inflows got revived after several years characterized by economic depression and wars where the geographical FDI pattern saw a dramatic transformation. Nevertheless, between 1945 and 1980, a hunk of the investment flows was intra and inter-developed economy – this is a phenomenon referred to as the 'Lucas Puzzle' according to Lucas, R. (1990).

UNCTAD data present three distinct economies (developed, developing, and transition) in FDI flow. Until 1980, there had not been a single FDI inflow into any country under the transition economy. Serbia and Montenegro (previously Yugoslavia) received 100% of all inflows into the transition region for 12 consecutive years (1980 – 1991) averaging an infinitesimal 0.02% of the global FDI inflow as a result of negative inflows recorded in 1984 and 1986.

Following the dissolution of the Soviet Union in the late-1991, in 1992, countries like Russian Federation, Ukraine, Republic of Moldova, Belarus, Kazakhstan, Uzbekistan, et cetera became attractive to foreign investors. In 1992, Russian Federation outstripped Serbia and Montenegro with a total FDI of $1,161 million while Ukraine came second with a total inflow of $200 million. In the past two decades, Russian Federation continues to be the highest recipient amongst the transition economies.

Kazakhstan, the next after Russia Federation, had a tune of $14,322 million in 2008 (the highest it has attracted since 1992). The narrative of Serbia and Montenegro has taken a tailspin since duo seceded from each other through a referendum in May 2006, but Serbia has since been more attractive to foreign investors than Montenegro – Serbia was second in FDI inflow among the transition economies between 2018 and 2020 with an average of $4,517 million.

Within the developing economies (Africa, Latin America, Asia, and Oceania), Africa was the second destination of FDI between 1970 and 2000 with an overall average of 0.40%. The steadily increase in annual growth in its FDI inflow took off from 1993 with a yearly growth above 0.60% of the total inflow to the developing region. A cursory look at the UNCTAD data (last update on December 1, 2020), it is conspicuous that FDI inflows into developing Africa continues to outweigh Oceania, but lags far behind that into Asia and the Americas as illustrated by Table 1.1 and Figure 1.1 below.

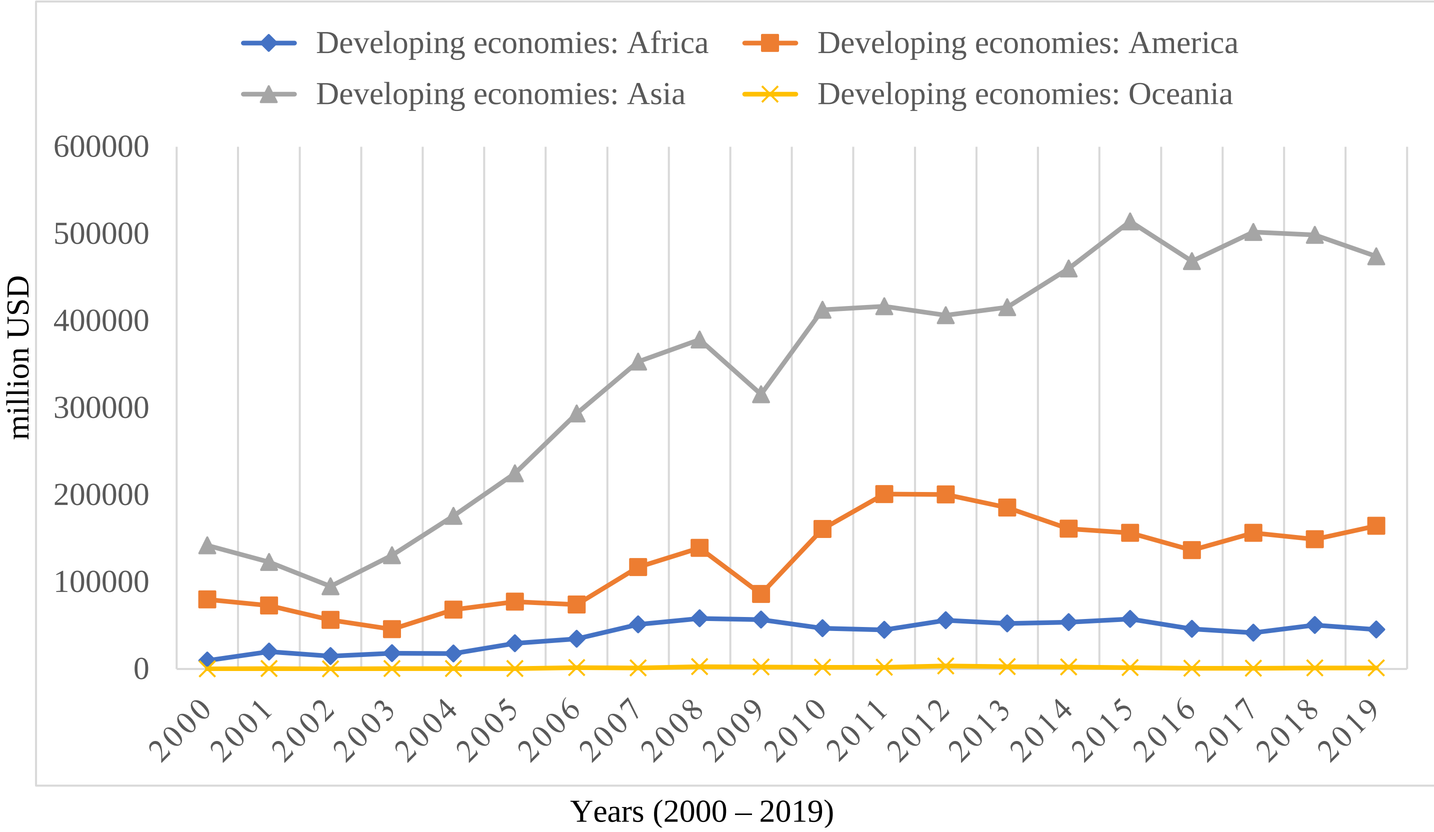
Table 1.1: Average FDI inflows into Developing Economies between 2000 and 2019 (in million USD)

	Year range			
Economy	**2000-2004**	**2005 - 2009**	**2010 - 2014**	**2015 - 2019**
Africa	16047.9	45924.9	50700.68	48213.42
Latin America and the Caribbean	64532.25	98604.59	181674.75	152474.37
Asia	133284.63	313038.85	422397.84	491433.96
Oceania	249.27	1556.26	2484.69	1184.75

Source: *Author's own calculation on* *https://unctadstat.unctad.org/wds/TableViewer/tableView.aspx*

From Table 1 above, it is discernible that the inflow into each of the economies within the developing region saw a consistent increase between 2000 and 2009. Africa witnessed a 186.17% increase in its inflow between 2000 – 2004 and 2005 – 2009, the increase in the same period within Latin America and the Caribbean was 52.80%, an upsurge of 134.86% in Asia, and the most incredible increase of 524.33% in Oceania even though the $1,556.26 million between 2000 and 2004 from the paltry $249.27 million between 2005 and 2009 to Oceania comes nowhere near to any figure that had been recorded in any of the developing economies in the years under review. Also, it was revealed that Africa, Oceania, and Americas (Latin and Caribbean) received the highest inflow between 2010 and 2014 whereas Asia attracted its highest FDI between 2015 and 2019.

Figure 1.1: Trends in FDI flows into Africa, Asia, Oceania, and Latin America and the Caribbean, 2000 to 2019 (millions of dollars)



Source: *Author's graph based on data from UNCTADstat available at:* [*https://unctadstat.unctad.org/wds/TableViewer/tableView.aspx*](https://unctadstat.unctad.org/wds/TableViewer/tableView.aspx)

The distribution of FDI inflow into developing economies in the past two decades (2000 – 2019) continue to witness an undulating trend. Africa lags behind Asia and the Americas despite the tireless efforts by some African countries to position themselves well to attract foreign investors. As seen in figure 1 above, in 2000, Africa and Oceania received the same amount of investment ($116.37 million) whereas the Americas and the Asian developing economies got $79,789.96 million and $142.031.35 million respectively. The global financial crisis in 2008, however, had a more dire consequence on the Americas and developing Asia resulting in a 16.7% and 38.04% decline from the previous inflows, respectively. According to Kouame, A. & Reyes, I. M. (2010), the upshot of the financial crisis on Latin America and the Caribbean nations is attributable to their heavy reliance on the United States (and to a lesser extent, the United Kingdom) as their trade partner or source of FDI, tourism, and remittance. This trend reveals that Africa's highest FDI inflow between 2000 and 2019 remains its 2008 record of $58,009.60 million in spite of the worldwide financial crisis. The resilience of developing Asia and the Americas was crystal clear when their inflows peaked at $514,307.92 million in 2015 and $200,989.36 million in 2011, respectively. Amongst the developing economies, Asia best resuscitated its economy after the 2008 financial crisis, because it drew relevant lessons from a similar happening famously referred to as the 1997 Asian Financial Crisis. With that, it mapped out some pragmatic short-, medium-, and long-term measures (see Table 1.2) that have culminated in it becoming the major bastion of foreign investment in the developing region.

Table 1.2: Summary of responses to the 2008 financial crisis in the Asian economic territory

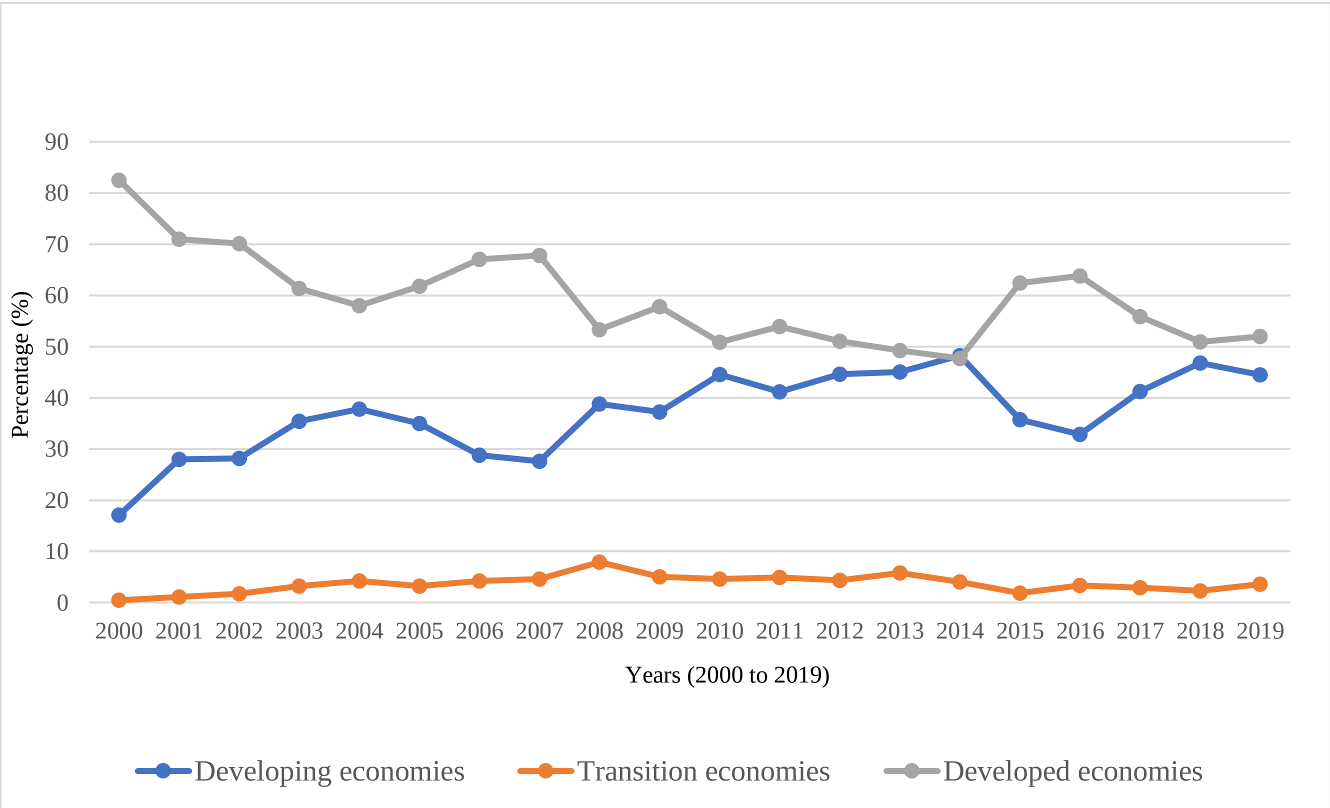
Timeframe	**Objective**	**Policy options**
Immediate	Containment of financial panic	Guarantee bank deposits
		Guarantee interbank loans
		Provide liquidity to banks
		Forbearance on regulations
Short term	Resolution measures	Recapitalize banks
		Mergers and acquisition in financial sector
	Monetary expansion	Reductions in the costs of borrowing
		Raise inflation targets
	Fiscal expansion	Increase in spending on social safety nets, including conditional and unconditional grants and public works
	Trade expansion	Lowering of protective measures
		Maintain competitive exchange rates
Longer term	Domestic financial development	Increase the access to finance
		Improve domestic resource mobilization
		Improve efficiency of banking sector
		Avoid financial repression
		Improve supervision and regulation
		Strengthen property and contract rights, judiciary, and rule of law

		Proceed, but with caution, with financial openness
	Reform of international financial architecture	Move to a more inclusive system of global financial governance
		Improve the share, efficiency, and management of global aid system
		Reform Bretton Woods Institutions

Source: Naudé, W. (2009)

The world investment report given under the hand of UNCTAD in mid-2019 indicated a third successive decline in FDI flows, a 13% drop in 2018. Yet, the chunk of the flows found its way into developed economies with the United States still in the lead and followed in an orderly manner by China, Hong Kong (China), and Singapore. Developing economy flows, however, remained steady (increasing by 2%), which enabled push flows to the developing world to 54% global flows from 46% in 2017 and just over a third prior to the 2008 financial crisis.

Figure 1.2: World FDI inflow between 2000 and 2019 (in percent)



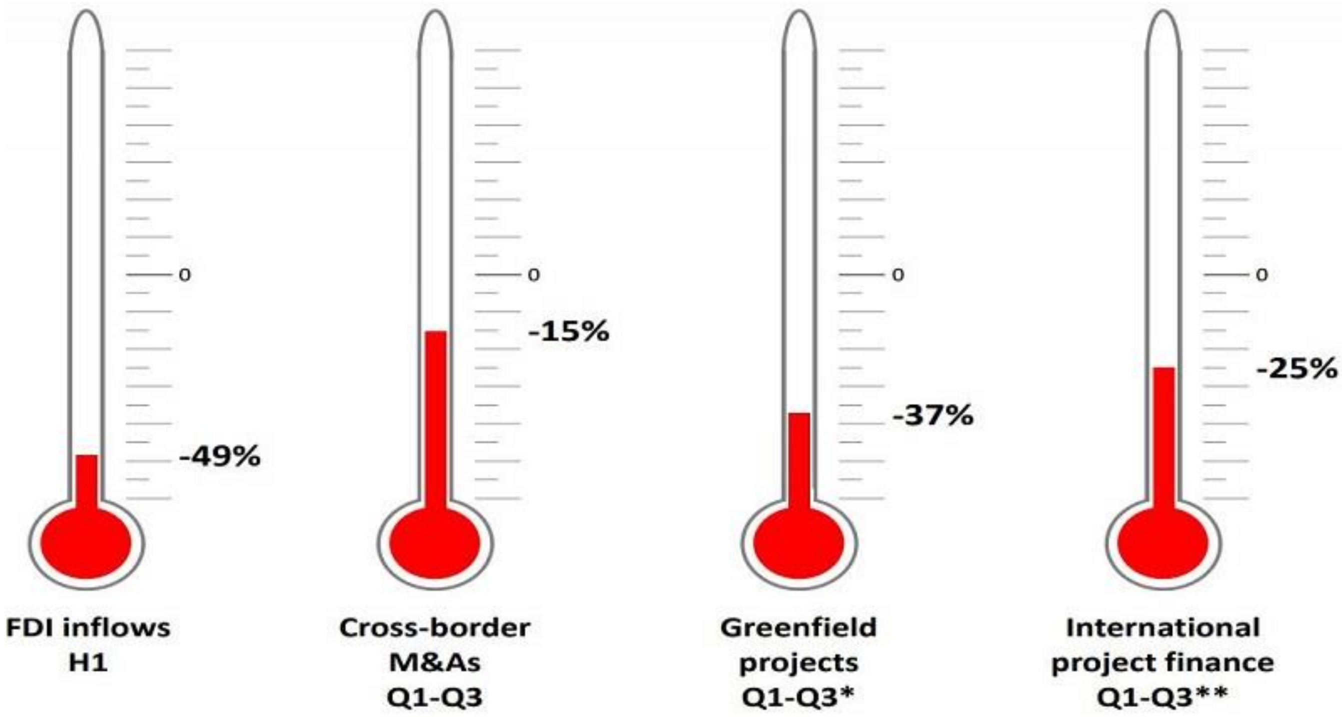
Source: *Author's graph based on data from UNCTADstat.*
Available at: https://unctadstat.unctad.org/wds/TableViewer/chartView.aspx

The trends seen in Figure 1.2 corroborate the assertion that developed economies receive the highest FDI followed by developing economies. One can observe an inverse relationship between the inflow into developed and developing economies. From 2010, the graphs of developed and developing economies kept converging till they intersected in 2014 when both had 47.7% of the global inflow with the remaining 4.07% shared among transition economies. In 2014, FDI in transition economies declined by 52% to $48 billion. This was ascribed to regional conflict interlaced with falling oil prices and international sanctions which deteriorated economic growth prospects and withered investor interest in the region. Developing Asia's inflow shot up to a historic highest level of 9% (the largest amount of FDI in the world in that year) which moved the overall position of developing economies leading to the enervation of the position of developed economies.

In developed economies, inflows dropped by 28% to $499 billion because of divestment and large swings in intracompany loans ending in the lowest level of FDI inflows since 2000. Between 2000 and 2019, FDI inflows into developed economies have always been at least 50% of global inflow except in 2013 and 2014 when they received 49.2% and 47.7% respectively.

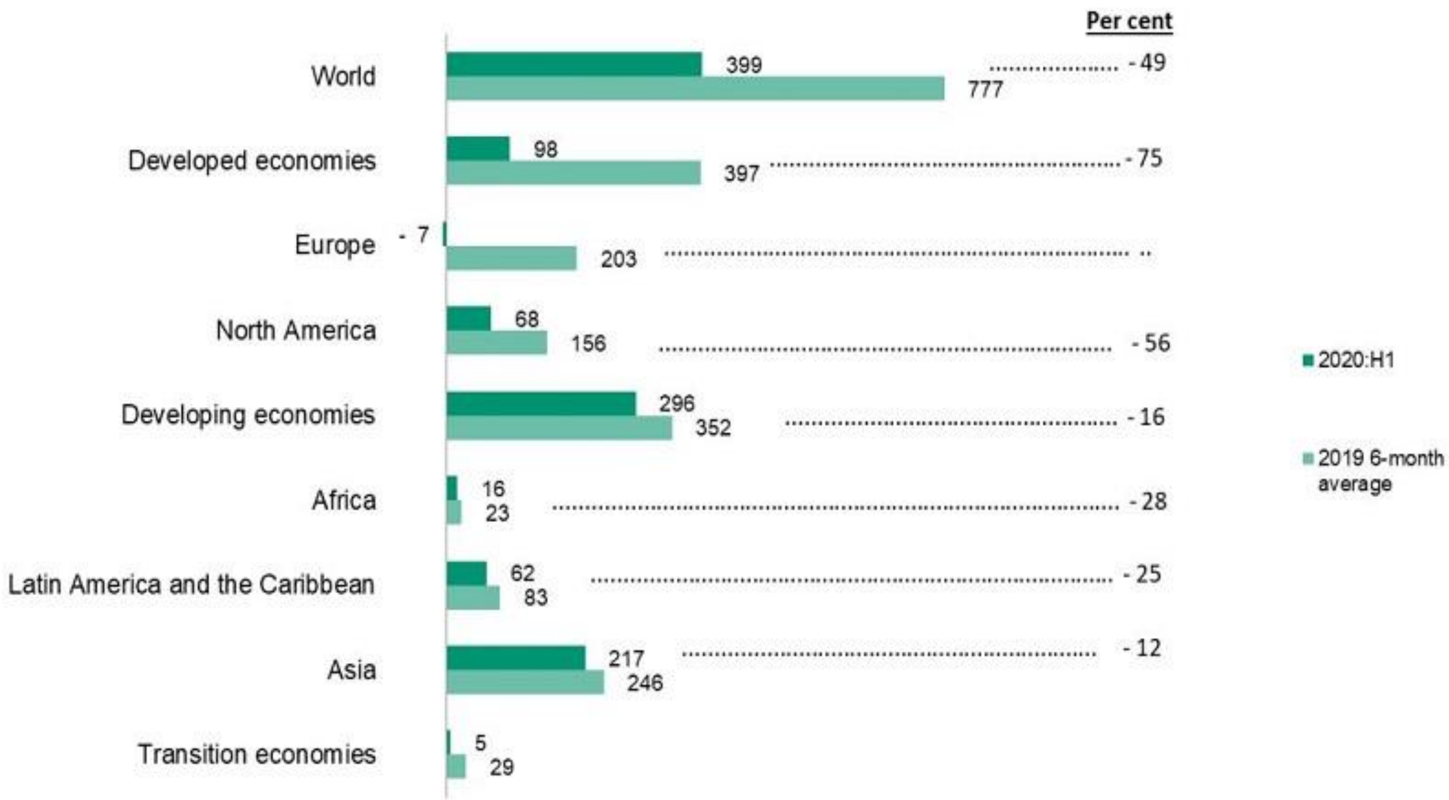
The story of transition economies is bizarre since the inflows have never reached 8% of world FDI inflow. After the longstanding record of 82.5% of global inflow into developed economies in 2000, the region's inflow has never hit even 70% since the other economies continue to push for more foreign investments. Last but not least, transition economies, in 2019, saw a major boost of 55% from 2018 in their inflows; developed economies did not see any significant improvement (2.06% jump from 2018); whereas developing economies' FDI inflows in 2019 reduced by 4.92%.

Figure 1.3: Global investment thermometers, 2020 Q1 – Q3 (% change vs 2019)



Source: *UNCTAD*
Available at https://unctad.org/news/global-foreign-direct-investment-falls-49-first-half-2020

Figure 1.4: FDI inflows by region, 2020 H1 vs 2019 6-month average



Source*: UNCTAD*
Available at https://unctad.org/news/global-foreign-direct-investment-falls-49-first-half-2020

The trends, as shown in Figures 1.3 and 1.4 above, evince that given the spread of the global pandemic (Covid – 19), all economies have experienced a slump causing a 49%

drop in global FDI flows in the first half of 2020 juxtaposed with the same period in 2019. Unquestionably, worldwide lockdown stifled existing investment projects and the potential of a deep recession spurred transnational corporations (TNCs) to re-evaluate new projects. In reference to the world investment trend monitor, developed countries suffered the steepest fall, with FDI reaching an estimated $95 billion in the 6-month period – a sharp fall of 75% in comparison to 2019. The trend was worsened by sharply negative inflows in European economies, largely in the Netherlands and Switzerland. FDI flows to North America decreased by 56% to $68 billion. Meanwhile, owing to the buoyant investment in China, the 16% drop of FDI flows to developing economies was less than anticipated. In Asia, the decline was just 12% but 28% lower than in 2019 in Africa and 25% in Latin America and the Caribbean. FDI inflows into transition economies reduced by 81% because of a strong fall in the Russian Federation. According to UNCTAD (2020), cross-border mergers and acquisitions (M&A) values reached $319 billion in the first nine months of 2020. The 21% drop in developed countries, which represents about 80% of international transactions was verified by the prolongation of M&A activity in digital industries. The value of greenfield investment project announcements, an indicator of tomorrow's FDI outlook was $358 billion in the first eight months of 2020. The number of declared cross-border project finance deals sank by 25%, with the biggest drops in the third quarter of 2020, implying that the skid remains unabated.

1.3 The Pros and Cons of FDI of Foreign Direct Investment

There is a school of thought that foreign direct investment has better prospects for economies than foreign aid. Besides, there are tons of empirical evidence, for instance the IMF (World Economic Outlook, 2007), to the effect that FDI flows have less volatility than other international capital flows such as private loan flows, invisibles, trade flows, and external commercial borrowings, among others.

In the below subsections, I seek to highlight some of the arguments for and against FDI.

1.3.1 *Arguments in favour of FDI*

- **Balance of Payment (BoP) effects**: The presence of a foreign company that produces goods in an economy where such goods were, hitherto, imported would count as import-substitution. This positively affects the balance of payment outlook of the host nation, and in a case where goods are exported, it improves the position of the economy where the company is sited.

- **Development of the domestic economy**: As part of the corporate social responsibility of transnational corporations (TNCs), they commit resources to the improvement of the physical and social infrastructures of the countries where they operate. Consequently, as the countries develop accompanied by better living standards, people will have the wherewithal to buy and sell which eventually presents foreign investors the opportunity to ploughback their profits.

- **FDI as the major source of private external finance**: Unlike other key forms of external private capital flows, FDI has replaced them as the main source of private external finance for developing countries, because investors are motivated by the long-term prospects for recouping profits from production activities that they can largely influence (Mallampally, P. and Sauvait, K. P., 1999).

- **Reduction in the cost to profit ratio**: In a foreign economy where local assets exist, a lot of products can be manufactured at cheap cost. Long-term profits are realized if there is no discontinuity in investments into FDI infrastructures since each investment has the potency to beat down costs drastically.

- **Consumers gain from low prices**: One reason for price hikes is the cost of production. FDI allows companies to produce in locations where wage rates are low – a justification for why most American companies build production plants in Asia and Eastern Europe, where there are lax labour laws and tens of thousands of labor force are willing to provide their services at any given rate just so they are not idle and, at least, are able to find their daily bread.

1.3.2 *Arguments against FDI flows*

- **Adverse effect on competition**: There is no denying that multinational enterprises (MNEs) wield enormous power because they are the leading providers of FDI in the world. This confers on them the power to influence governments most especially those of less developed countries (LDCs) to formulate policies that inure to their benefit at the expense of domestic firms. Given the unfair exposure to intense competition from MNEs, small to mid-size enterprises (SMEs) usually owned by local investors, in the long run, fold up as and when they become insolvent and there is no expectation of liquidity support from the government.

- **Perceived loss of national sovereignty**: There are hues and cries from policymakers for need to properly regulate the influx of TNCs in the global market. As TNCs are clothed with more power, they tend to monopolize some sectors of a foreign economy. This undermines the sovereignty of the economy in question and more damning is the fact that citizens rather become voiceless aliens in their own homeland. It is not farfetched to cite China-Africa trade relations as a typical example in this realm. Presently, China is the second largest investor in Africa after the United States with a total investment and contracts in Sub-Saharan Africa amounting to $303.24 billion between 2005 and 2020, according to China Global Investment Tracker (CGIT). Owing to this, it operates in the region as it deems fit. For example, in 2018, China resolved to take over the electricity company of Zambia, ZESCO for Zambia defaulting in repaying its Chinese loan facility (Anoba, 2021).

- **An avenue for exploitation**: Foreign investors are able to exploit developing nations with flexible labour laws interlaced with ballooning unemployment rates. TNCs harness this leeway and thereby shift their production plants among countries in order not to incur high operational costs; meanwhile, the working conditions of the local employees are nothing to write home about, and they often apply their transfer pricing tool so as to evade the payment of high taxes. A prime example is Nike which has been heavily lampooned for using sweatshop labour with an hourly wage rate of $1 in China, Indonesia, and Vietnam (Huston, 2021).

1.4 The Pulling and Pushing Factors of FDI

According to OECD (2021), FDI inflows in the world in the last 15 years (2005 – 2020) reached a historic record of 2.18 million US dollars in 2016 but dwindled to 1.1 million US dollars (1.21% of GDP) in 2020 given the global pandemic, Covid-19. With this, every country particularly developing and transition economies are elbowing for a position in the international investment ecosystem. Nevertheless, one needs to also note that there is scattershot evidence regarding what really magnetizes FDI flows and even trickier is the not-so-hidden fact that developed, developing, and transition economies have different catalysts for FDI attraction. In the subsequent subsections, some factors generally believed to have the proclivity to pull and push foreign direct investment are adumbrated.

1.4.1 *Pulling Factors*

These are the ingredients in a destination economy that depict that the economy is viable enough for foreign direct investment. Some of the factors include but not limited to:

- a high level of openness of the host economy;
- the size and potential of the host economy to grow;
- political stability;
- a business friendly environment;
- positive macroeconomic indicators.

1.4.2 *Pushing Factors*

These factors are the main drivers in the source economy that disincentivize local investments and thus inform the decision to transfer investments to a foreign economy. Among them are:

- imposition of high taxes;
- high cost of labour;
- inadequate raw materials for production;
- unfair government regulations.

1.5 Useful Methods for Measuring the Effectiveness of FDI

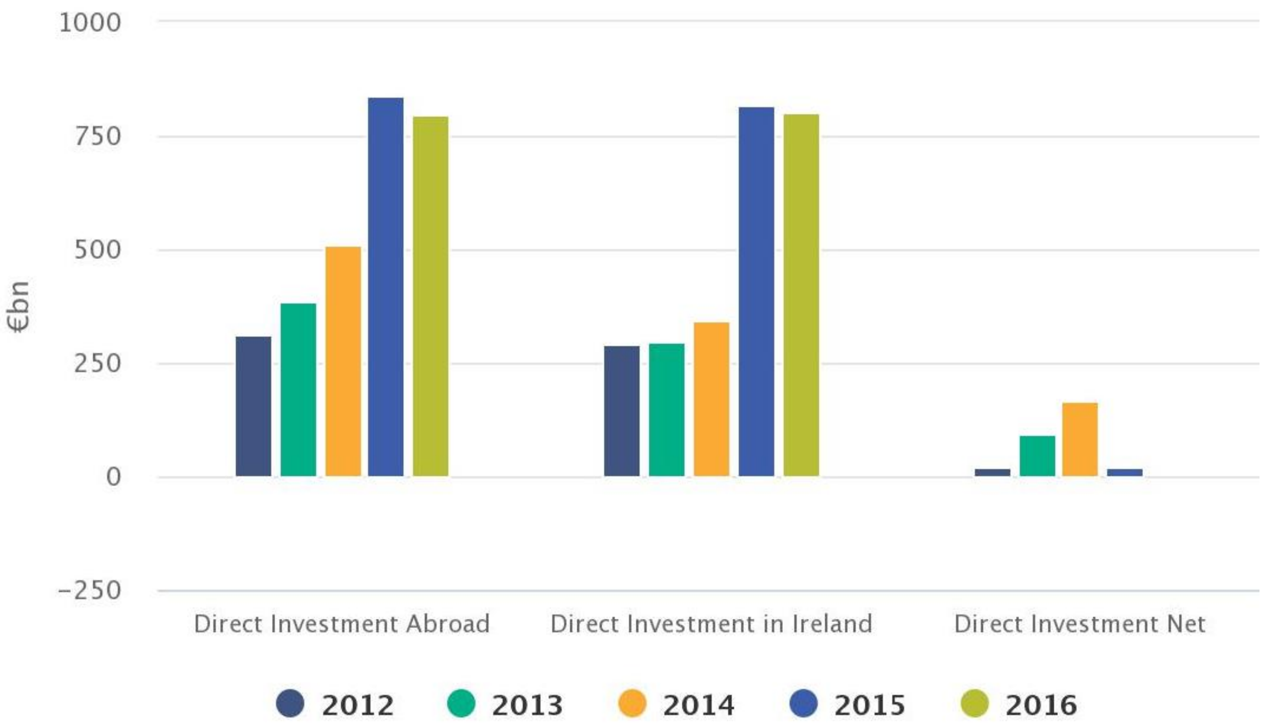
By and large, FDI is two-dimensional: inflow or outflow and asset or liability. It is salient to trace its movement. There is always the question of why local investors would prefer to invest abroad while the country of their residence seeks to attract investors (mostly non-residents). The Central Statistics Office (CSO) of Ireland proffers two main ways of evaluating the flow of FDI – directional and asset/liability presentations.

Figure 1.5: FDI values in Ireland using asset/liability presentation (in billion euros) between 2002 and 2016

Source: *CSO Ireland*

By the application of the asset/liability method to compile FDI data, assets are quantified as total assets held by both Irish resident parent companies and their affiliates. In like fashion, liabilities are measured as total liabilities of both Irish parent companies in Ireland and affiliates. This method is extremely useful when considering the extent to which increased investment necessitates higher or lower levels of assets and liabilities possessed by Irish resident parent companies and affiliates. More importantly, it gives room for the evaluation of an economy's exposure to crises.

Figure 1.6: FDI calculations in Ireland using directional presentation (in billion euros) between 2002 and 2016



Source: *CSO Ireland*

Unlike the asset/liability method, the directional presentation encapsulates two key variables of FDI: inflow and outflow. Inward FDI is sieved from outward inflow. This method compiles an economy's data based on net.

$$Net\ Direct\ Investment = Direct\ Investment\ abroad - Direct\ Investment\ at\ home \qquad (1.2)$$

The Central Statistics Office (2021) regards the direct investment abroad by Irish MNCs as outward FDI whereas direct investment in Ireland by foreign resident companies is classified as inward FDI. Additionally, with the aid of the netting process, one can analyze Ireland's FDI relationship with the rest of the world. Worth of note is that the directional method allows for more detailed analysis by source and destination of FDI.

For these justifications, this method is preferred to that of the asset/liability especially when providing detailed statistics by geography and economic activity. From figure 1.6, direct investment abroad and direct investment in Ireland were almost equal in 2012 and 2015 and so the net effects (direct investment net) were insignificant.

CHAPTER TWO

ASSESSMENT OF GHANA'S INVESTMENT CLIMATE AND ITS RELATIONSHIP WITH REAL GDP GROWTH

Ghana briefly

Ghana, one of the 55 countries in the second most populous and second largest continent on the planet earth, officially christened as the Republic of Ghana, was a former colony of the Great Britain. She came out of the shackles of colonialism becoming an independent state on March 6, 1957 and later a Republic on July 1, 1960. It is a country along the Gulf of Guinea and the Atlantic Ocean in the subregion of West Africa. Spanning a land mass of 238,535 km^2 (92,099 sq. mi), Ghana is bordered by the Ivory Coast in the west , Burkina Faso in the north , Togo in the east , and the Gulf of Guinea and Atlantic Ocean in the south. The demographics of Ghana indicate that 15,399,000 are women and 15,334,000 are men, which means there are 996 men per 1000 women. As far as age distribution is concerned, 48.0% of the population is at most 19 years, 48.7% is between age 20 and 64, and 3.4% (1,038,809) is over 65 years. Thus, Ghana has an appreciable labour force per the International Labour Organization (ILO) standard. The 2020 World Bank report showed that it is easier to do business in Ghana than in Nigeria.

Figure 2.1 A picture showing a group of Ghanaian celebrants brandishing the country's flag

Source: *Gerry Dincher see ThoughtCo. (2021)*

Ghana is a lower-middle-income country with a distinct and rich resource base comprising the manufacturing and exportation of digital technology goods, automotive and ship construction and exportation, and the exportation of diverse and rich resources such as hydrocarbons and industrial minerals which makes it one of the countries with the highest GDP per capita in West Africa. According to the Heritage Foundation (2020), Ghana's GDP stands at $190.7 billion; per capital income is $6,452; inflation rate (CPI) is 9.8%; FDI inflow is $30 billion; unemployment rate is 6.7% and a 5-year compounded annual growth rate of 4.5%. As of 2017, the principal export partners of Ghana were India (23.8%), United Arab Emirates (13.4%), China (10.8%), Switzerland (10.1%), Vietnam (5.2%), and Burkina Faso (4%) while her imports largely came from China (16.8%), United States of America (8%), United Kingdom (6.2%), Belgium (5.9%), and India (4.1%).

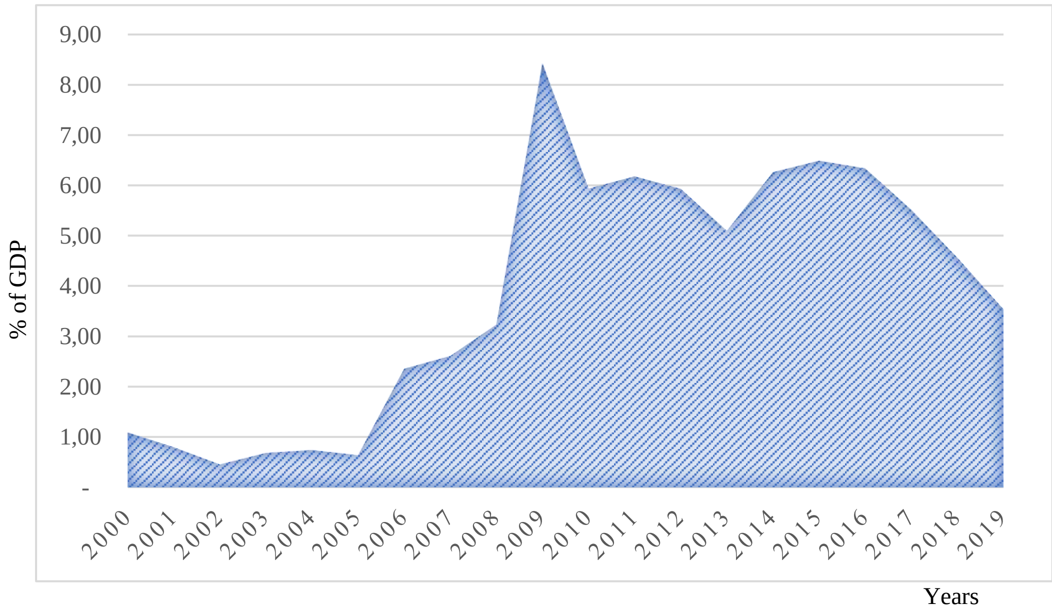
Indubitably, the backbone of every economy is its human resource and so drastic measures have been put in place to propel an active labour force to drive economic growth. Currently, all secondary school students do not pay a dime towards their education. This policy is synonymous with the South Korean model because, in 1960, Ghana's per capita income was $189 as against $158, but today South Korea is an Asian tiger due to their heavy investments in education. In 2019, for instance, South Korea's gross tertiary enrolment ratio was 94% whereas Ghana had 17%. With this social intervention scheme, Ghana projects to reduce her illiteracy rate while increasing the number of skilled labour force.

2.1 The Driving Force of FDI inflow into Ghana

Historically, Ghana was amongst one of the countries in West Africa to receive FDI in 1970. In that year, its inflow was $68 million, second after Nigeria which attracted the highest inflow of $205 million. The long years of military junta in Ghana between 1966 and 1985 marred the image of the country on the international front. FDI inflows deteriorated after 1970 with negative net flows and even the positive flows were single digits. The ramifications thereof were scores of Ghanaians migrating to Nigeria and others to Cote D'Ivoire. Alas, in 1983, the Nigerian President, Shehu Shagari repatriated about 2 million undocumented immigrants from West Africa half of whom were Ghanaians. This was a year that Ghana was still battling extreme hunger because of the previous year's severe drought. Ghana was plunged into untold economic crises and that informed the government's plan to launch the Economic Recovery Programme (ERP) in 1983 with unflappable support from the Bretton Wood institutions like the IMF and World Bank.

In early 2001-2002, Ghana had to sign up for the highly indebted poor country (HIPC) initiative through which she got about 50 billion Great Britain Pounds (GBP) to help clear its loan indebtedness. Within a space of 2 to 3 years, the economy showed resilience and made it susceptible to FDI inflows which led to Ghana's exit from the HIPC programme in 2004. Beyond HIPC, there is a continuous investment in all sectors of the economy with much focus on the extractive sector. In Figure 2.2 below, FDI inflows were dwindling between 2000 and 2004 with an average inflow of 0.75% of GDP. The upward trend from late 2005 peaking at 2009 (8.43% of GDP) when Ghana's FDI stock surged as a result of the discovery of crude oil in late 2008 and its mining in commercial quantities starting off in 2011.

Figure 2.2 Ghana's FDI inflow between 2000 and 2019 measured as per cent of GDP



Source: *Author's own graph based on data from UNCTADstat*

To track the flow of FDI in the country, some special agencies specifically the Ghana Investment Promotion Centre (GIPC) and the Ghana Exports Promotion Agency (GEPA) have, over the years, established an unfettered relationship with the Ministry of Trade and Industry (MOTI) – MOTI is the main ministry at the forefront of any business engagement with foreign investors.

Political stability

Ghana is often touted as the beacon of democracy for her undoubted credential of having been able to survive the vicissitudes of four different regimes usually referred to as Republics: first (1960 to 1966); second (1969 to 1972); third (1979 to 1981); and fourth (1992 to present). In exception of the fourth Republic, all the preceding Republics were marred by political insurrections which led to loss of lives and property and citizens having to seek refuge in other countries on the continent and beyond. Most prominent amongst them is the first president of Ghana, Osagyefo Dr. Kwame Nkrumah who got ousted from office in 1966 by the first-ever joint military and police overthrow of government in the post-independent era. This was fueled by the averment that the Conventions People Party (CPP) which he led had not only muzzled the howls of opposition parties but also mapped out strategies that were characteristic of a totalitarian government rather than promoting the interest of democracy in a country at such nascent stage of independence.

Despite these socio-economic topsy-turvy, Ghana has kept its democratic ethos till today which is an essential item in the first-aid box of foreign direct investment. The country has worked assiduously to build and resourced institutions to deal with individuals or group of individuals whose actions and inactions run afoul to rule of law and respect for human rights. According to GIPC report, Ghana is ranked as the country with the best judicial system globally in the sphere of rule of law by the World Justice Projects Rule of Law Index 2017 – 2018.

The essential role of democracy in pulling FDI to Ghana has been affirmed by several empirical findings (Tsikata et al (2000), Obwona, M. (2002), Nyarko et al (2011)).

The bastion of natural and human resources

Obviously, most investing entities are profit oriented. They seek to maximize their profits while cutting down production cost. The availability of natural and human resources are worthy drivers of FDI (Hailu, Z. A. (2010)). Asiedu, E. (2002) corroborates this assertion with his finding that there is a positive connection between natural resource abundance and FDI inflow into Africa. Additionally, Diechmann et al. (2003) discovered that transition economies in Europe and Asia became viable for foreign direct investments because of the chunk of natural resources. According to UNCTAD (2006), the driving force behind Chinese FDI in Africa has been the increasing domestic demand for raw materials. Besides, Chinese companies benefit largely from the low labour cost in Africa and do spend meagre amounts in training the African workers. Ghana is incredibly attractive to foreign investors due to its being one of the West African countries with the highest literacy rates. Again, Ghana appears on the list of the most competitive minimum wage rates in the West African subregion at a yearly rate of GH¢3,828 or US$660 (News, T. 2021). Ghana happens to be the second producer of cocoa in the world which accounts for about 30% of her export revenue. To increase cocoa cultivation, over 100,000 hectares of forest were cleared between 2010 and 2015. The country is Africa's largest miner of gold after South Africa. In 2019, Ghana exported about US$4.68 billion of crude petroleum. Today, Ghana is projected to host between 5 to 7 billion barrels of crude oil reserves which has wooed multinational oil moguls like Tullow, Shell, Singapore Petroleum Company, Vetro Energy et cetera.

The size and growth of the market

Undisputed acceptance has been given to the number of consumers to patronize the goods and services of a firm and the resilience of such market to grow. Theoretically, it is logical to conclude that an economy with a larger market will have a greater production capacity as a result of FDI inflows and ultimately more potential investors coming on board. Dupuch, S. and Milan, C. (2002) conducted an empirical analysis on the driving forces of FDI into Eastern European countries. It was revealed that market size and geographical proximity are necessary ingredients of FDI mobility. Sajilan et al. (2019) also demonstrated that market size, which represented by GDP, signifies the total consumption of a host country where foreign investors looked up. Again, Morisset, J. (2000) and Obwona, M. (2002) confirmed the size and growth of an economy as a determinant of FDI inflow. This is widely the case of Ghana is it plays host to one of West Africa's largest ports (Tema Port currently upgraded to handle 3.5 million Twenty-foot Equivalent Units) located in the centre of West Africa. As a member of the Economic Community of West African States (ECOWAS), it has immediate access to over 350 million markets. Ghana is geographically closer than any other country to the centre of the planet (World Population Review). The mean flying time from Ghana to Europe and the Americas is 8 hours. KPMG reports that Ghana has a relatively young growing population of approximately 2% yearly with a matching surge in urbanization and growing middle class comprising individuals with at least US$8.44 daily income.

Favourable macroeconomic variables

One key feature of an economy that a potential investor considers is its macroeconomic variables. Every risk averse individual would want to pump resources into economies where their investments will be able to create ripples beyond one's wildest imaginations (ploughback the profit). For this reason, Basu, A. and Srinivasan, K. (2002) identified macroeconomic stability, well-designed structured reforms et cetera as having the wherewithal to pull FDI into Africa. In clearer terms, economic restructuring should include but not limited to privatization of public corporations, currency and current accounts liberalization, stable interest rates, low levels of inflation that will whet more investment appetites. In 1981, for example, Ghana witnessed a hyperinflation of 116.50% (World Bank report) due to unchaperoned monetary and fiscal policies. This brought the economy in serious recession and that led to the advent of the economic recovery programme that brought the economy back to life. Beyond that, the country has had diverse reactionary and proactive macroeconomic changes like the mining sector reforms, telecommunication reforms in the mid-2000s, and the 2017/8 financial sector clean up. More so, the credit facility agreement with the IMF between 2015 and 2019 has improved the macros of the Ghanaian economy. Ayim, E. (2021) contends that Ghana's fiscal deficit has been narrowed, single digit inflation rate of 7.18% (2018-2019) , and GDP growth rebounded, thanks to the increases in oil production. In 2017, Ghana's economy grew at an average 7%. Thus, Ghana's investment prospects remain favourable, as the Government of Ghana seeks to diversify and industrialize, through Agro-processing, mining, and manufacturing.

2.1.1. FDI inflows into Ghana versus inflows into Sub-Saharan Africa (2000 – 2019)

There is evidence that countries within the Sub-Sahara African (SSA) enclave have lost much of their attractiveness to FDI inflows. A research conducted under the auspices of the Deutsche Bank about two decades ago indicated that SSA hosts 12% of the entire global population, 60% of the world's uncultivated arable land, 60% of the world's diamonds, 5% of the world's oil, and 30% of the world's cobalt resources. Yet, countries in the region have less to show from the abundant of resources due to the incidence of resource curse – SSA only contributes 2% of the total world trade, 2% of the total GDP, 1% of the total world manufacturing, and a paltry 3% of the global FDI inflows (Muhlberger, M. (2012) see Adams et al. (2014)).

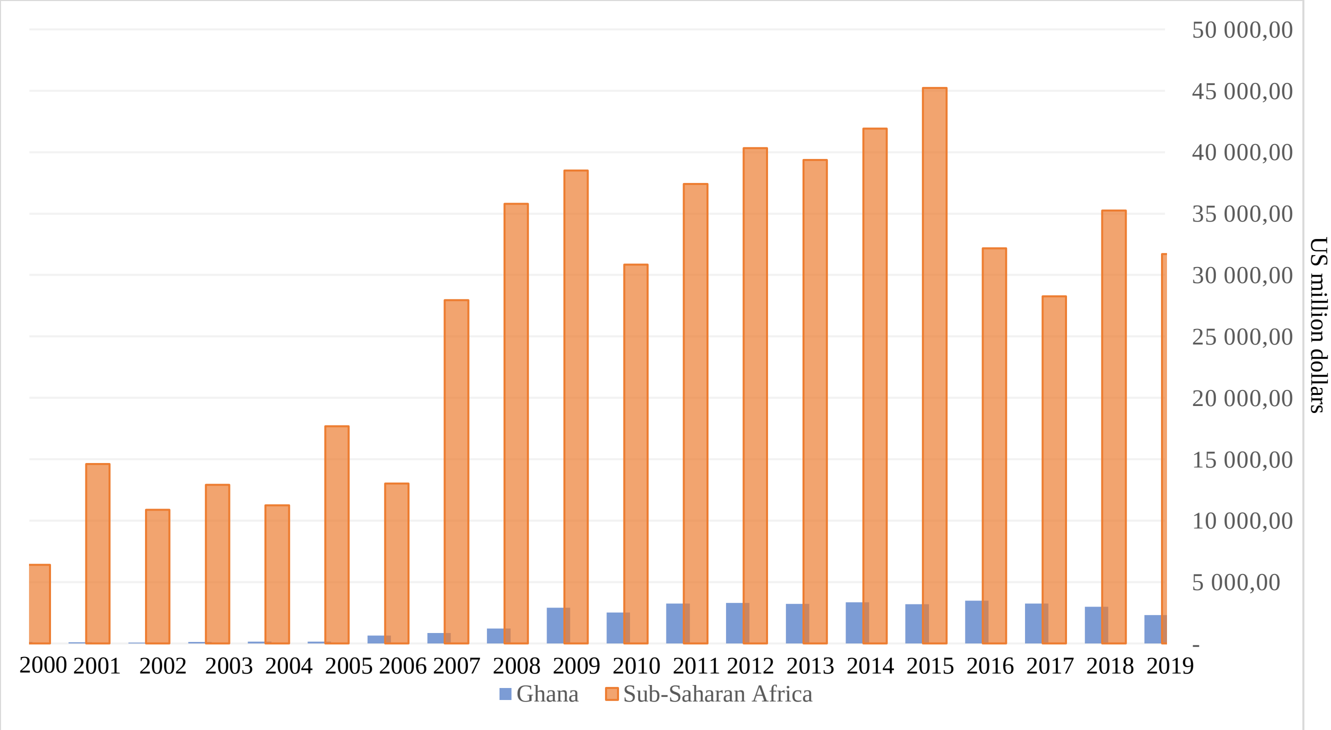
SSA recorded a total FDI inflow of US$219,861.20 million representing 1.78% of the total global inflow between 2000 and 2010. In the immediate past decade, SSA's total inflow shot up by 50% with about US$28,355 million making its way into the Ghanaian economy (Table 2.1).

Table 2.1 FDI inflows into Ghana versus Sub-Saharan Africa in US$ million from 2000 to 2019

Year	Ghana	Sub-Saharan Africa
2000	114.90	6401.02
2001	89.30	14615.95
2002	58.90	10889.7
2003	110.02	12912.53
2004	139.27	11235.4
2005	144.97	17675.03
2006	636.01	13027.04
2007	855.40	27956.55
2008	1,220.42	35804.46
2009	2,897.10	38511.17
2010	2,527.36	30832.39
2011	3,237.39	37411.9
2012	3,293.43	40331.8
2013	3,226.33	39369.38
2014	3,356.99	41913.2
2015	3,192.30	45237.88
2016	3,485.30	32173.83
2017	3,255.00	28261.97
2018	2,989.00	35238.54
2019	2,318.80	31706.9

Source: *UNCTAD (2020)*

Figure 2.3 Ghana's FDI inflow against Sub-Saharan FDI inflow (2000 to 2019)



Source: *Author's own graph based on data from UNCTAD*

Ghana had never recorded even a thousand million US dollar in the first seven years (2000 to 2007) with its least inflow throughout the period under review in this study being US$58.90 million. Apart from 2003 to 2009 where inflows into Ghana saw consecutive increase traced to the reparation the country got from the IMF in the early to mid-2000s, the remaining years have been unstable. On the contrary, the entire SSA region has no record of a continuous rise of more than 2 years. Also, while Ghana attracted its highest inflow of US$32,173.83 million in 2016, the SSA region's highest was in the foregoing year with a total inflow of US$45,237.88 million.

By and large, one can discern that the FDI trajectory in Ghana is influenced by the happenings within the whole SSA since in most cases a ballooning FDI inflow into the SSA enclave necessarily matched with the rise in the figures of Ghana (Figure 2.3).

2.2 Correlation Analysis Between FDI inflow and Real GDP Growth in Ghana

Policymakers have a keen interest in whether these two variables influence each other in any way. For any bivariate data, one needs to note that a statistical relationship between two variables does not essentially mean the existence of a causal relationship. However, if there exists a relationship between them then they must be correlated (Lipschutz, S. and

Schiller, J. (1998)). Research works conducted on these two useful variables of the Ghanaian economy have mostly been to determine whether there is any link between FDI and economic growth. Specifically, this part seeks to forecast the kind of relationship between FDI inflow and real GDP growth in Ghana using two alternative statistical methods: *Pearson's correlation (r) and Spearman's rank (ρ) correlation coefficients*. To estimate the correlation coefficients, I will use data on Ghana's FDI inflow (measured as percent of GDP) and real GDP growth and these variables will be denoted as x and y respectively.

2.2.1 An overview of Ghana's real GDP

The GDP of a country is calculated by adding the gross value of manufacturers residing in the country and any product taxes and then subtracting all forms of subsidies that are included in the value of the products. This means that the computation does not consider the depreciation of assets and natural resources depletion. Real GDP is an inflation-adjusted measurement of a country's economic output over the course of a year. It is important to note that real GDP is lower than nominal GDP in the period of inflation whereas in deflationary times real GDP exceeds nominal GDP (Investopedia, 2021). Accordingly, real GDP growth is the percentage growth measured at market prices based on constant local currency. Real GDP is indicative of how healthy an economy is and so investors keep a keen eye on this variable.

$$\text{Real GDP} = \frac{\text{Nominal GDP}}{\text{R}} \tag{2.1}$$

where R = GDP deflator

$$\Rightarrow \text{Real GDP growth} = \frac{\text{Real GDP in } Q_1 - \text{Real GDP in } Q_0}{\text{Real GDP in } Q_0} \times 100\% \tag{2.2}$$

As a country that has come out of four Republics, the economy has obviously, over the years, experienced some economic downturns owing to both human induced and natural occurrences like the coronavirus pandemic.

Table 2.2 Ghana's real GDP from 2000 to 2019 measured in billion US$

Year	Real GDP (in billion US$)	Annual change (%)
2000	4.98	-0.70
2001	5.31	0.30
2002	6.71	0.50
2003	7.63	0.70
2004	8.88	0.40
2005	10.74	0.30
2006	20.44	0.50
2007	24.83	-2.35
2008	28.68	4.80
2009	26.05	-4.31
2010	32.20	3.06
2011	39.34	6.15
2012	41.27	-4.75
2013	62.41	-1.98
2014	53.66	-4.42
2015	48.56	-0.72
2016	55.01	1.27
2017	59	4.70
2018	65.56	-1.88
2019	66.98	0.21

Source: *Bank of Ghana*

The Ghanaian economy had run into an economic quagmire prior to the year 2000 which is evident by the negative growth rate of 0.70% in 2000. The economy got resuscitated after joining and exiting the HIPC programme (2001 – 2004). Also, the discovery of oil in large quantities on the Jubilee field in 2007 by Tullow Oil and Kosmos Energy boosted growth but a decreasing rate. Between 2000 and 2019, the highest annual growth rate was 6.15% in 2011, the year in which commercial oil mining started in Ghana. Unfortunately, the country experienced a severe power crisis between 2013 and 2015 which stampeded production especially in the industrial sector since it relies heavily on electricity.

Table 2.3: Ghana's FDI inflow (% of GDP) and real GDP growth (in percent) from 2000 to 2019

Year	FDI (% of GDP)	Real GDP growth (%)
2000	1.09	3.70
2001	0.79	4.00
2002	0.45	4.50
2003	0.68	5.20
2004	0.74	5.60
2005	0.64	5.90
2006	2.35	6.40
2007	2.61	4.35
2008	3.23	9.15
2009	8.43	4.84
2010	5.93	7.90
2011	6.18	14.05
2012	5.93	9.29
2013	5.10	7.31
2014	6.26	2.90
2015	6.49	2.18
2016	6.34	3.45
2017	5.52	8.14
2018	4.56	6.26
2019	3.54	6.48

Source: *BoG & World Bank* (2021)

2.2.2 Determining the nexus between Ghana's FDI inflows and Real GDP growth using Pearson's Correlation Coefficient (PCC)

The Karl Pearson's correlation coefficient is defined as:

$$r\,(X, Y) = \frac{n(\sum xy) - (\sum x \sum y)}{\sqrt{[n\sum x^2 - (\sum x)^2][n\sum y^2 - (\sum y)^2]}}, \text{ where } n = 20 \qquad (2.3)$$

Table 2.4 Calculating the Pearson's Correlation Coefficient

Year	FDI (x)	Real GDP growth (y)	xy	x^2	y^2
2000	1.09	3.70	4.03	1.19	13.69
2001	0.79	4.00	3.16	0.62	16.00
2002	0.45	4.50	2.03	0.20	20.25
2003	0.68	5.20	3.54	0.46	27.04
2004	0.74	5.60	4.14	0.55	31.36
2005	0.64	5.90	3.78	0.41	34.81
2006	2.35	6.40	15.04	5.52	40.96
2007	2.61	4.35	11.35	6.81	18.92
2008	3.23	9.15	29.55	10.43	83.72
2009	8.43	4.84	40.80	71.06	23.43
2010	5.93	7.90	46.85	35.16	62.41
2011	6.18	14.05	86.83	38.19	197.40
2012	5.93	9.29	55.09	35.16	86.30
2013	5.10	7.31	37.28	26.01	53.44
2014	6.26	2.90	18.15	39.19	8.41
2015	6.49	2.18	14.15	42.12	4.75
2016	6.34	3.45	21.87	40.20	11.90
2017	5.52	8.14	44.93	30.47	66.26
2018	4.56	6.26	28.55	20.79	39.19
2019	3.54	6.48	22.94	12.53	41.99
	$\sum x = 76.86$	$\sum y = 121.60$	$\sum xy = 494.06$	$\sum x^2 = 417.10$	$\sum y^2 = 882.24$

Source: *Author's own calculation*

Given the estimated variables in addition to equation (2.3), the required the correlation coefficient for the bivariate distribution above is calculated as follows:

$$r\,(X,Y) = \frac{(20 \text{ x } 494.06)-(76.86 \text{ x } 121.60)}{\sqrt{[(20 \text{ x } 417.10)-(76.86)^2][(20 \text{ x } 882.24)-(121.60)^2]}}$$

$$r\,(X,Y) = \frac{535.02}{\sqrt{(2434.54)(2858.24)}}$$

$$r\,(X,Y) = \frac{535.02}{2637.90}$$

$r\ (X, Y) = 0.2$

2.2.3 Determining the nexus between Ghana's FDI inflows and Real GDP growth using the Spearman's Rank Correlation Coefficient (SRCC)

Table 2.5 Calculating the Spearman's rank correlation

Year	FDI (x)	Real GDP growth (y)	Rank of x	Rank of y	Square of deviation
2000	1.09	3.7	15	17	4.00
2001	0.79	4	16	16	0.00
2002	0.45	4.5	20	14	36.00
2003	0.68	5.2	18	12	36.00
2004	0.74	5.6	17	11	36.00
2005	0.64	5.9	19	10	81.00
2006	2.35	6.4	14	8	36.00
2007	2.61	4.35	13	15	4.00
2008	3.23	9.15	12	3	81.00
2009	8.43	4.84	1	13	144.00
2010	5.93	7.9	6.5	5	2.25
2011	6.18	14.05	5	1	16.00
2012	5.93	9.29	6.5	2	20.25
2013	5.1	7.31	9	6	9.00
2014	6.26	2.9	4	19	225.00
2015	6.49	2.18	2	20	324.00
2016	6.34	3.45	3	18	225.00
2017	5.52	8.14	8	4	16.00
2018	4.56	6.26	10	9	1.00
2019	3.54	6.48	11	7	16.00

Source: *Author's own calculation*

The Spearman's rank correlation coefficient is given by:

$$\rho = 1 - \frac{6\sum d^2}{n(n^2-1)}, \qquad (2.4)$$

where n = 20, and deviation (d) = difference between the ranks of x and y.

From the computations shown in Table 2.5 in tandem with the equation (2.4), the associated Spearman's rank correlation coefficient is as follows:

$$\rho = 1 - \frac{6(1312.50)}{20(20^2-1)}$$

$$\rho = 1 - \frac{7875}{7980}$$

$$\rho = 1 - 0.99$$

$$\rho = 0.01$$

2.3 Factors That Stifle FDI Inflows to Ghana

Ghana continues to push for more FDI inflows, but there are a variety of factors that constrict its efforts in this direction. The factors illuminated below are not exhaustive but are the most important amongst the lots.

Trade openness

The incessant call for globalization rides on the obliteration of autarky on the global market. There is no possibility for international capital flow, be it mergers and acquisitions (M&A) or greenfield investment, if the potential market is closed to the rest of the world. One cannot deny the fact that no economy on earth is self-sufficient for which reason it will not entertain investments especially those emanating from foreigners. The United States, often referred to as the world's economic powerhouse has a pool of FDIs, both vertical and horizontal. FDI inflows into the US increased by 81% from the first quarter of 2020 to the third quarter totaling US$44 billion most of which were reinvested earnings rather than new equity flows (UNCTAD, 2020). International companies investing in the US cite the ease of doing business as one of the cardinal points of attraction. Ozekhome, H. O. (2016) demonstrated that trade openness was one of the main drivers of economic growth in the ECOWAS region between 2000 to 2013.

Besides, Asiedu, E. (2002) and Morisset, J. (2000) agree that trade liberalization fuels the interest of foreign investors.

However, in Ghana, the picture is still unclear given the level of bottlenecks that foreign investors will have to contend with. Presently, Ghana has three preferential trade agreements in place – this puts her trade-weighted average rate at 11.3% with five other nontariff measures in force. Though Ghana is more welcoming to foreign investments and ownerships than some other countries in Sub-Saharan Africa, there are some modicums of restrictions on investments in some sectors which means that investors seeking to enter such sectors are hampered.

Regulatory framework

With the notion that no business can be conducted in a vacuum, foreign investors are meticulous about honing their comprehension of the nuances of legal frameworks and dimensions that will regulate the conduct of their businesses. Hailu, Z. A. (2010) defines a regulatory framework as encompassing the legal environment of doing business in a country. There are a lot of extant literatures that contend that poor governance, austere business regulation environments, high incidence of corruption, low levels of transparency, imposition of restrictions on foreign ownership of assets et cetera are the regulatory factors that encumber the inflow of FDI into an economy. Ghana has made strides in improving all these variables that stampede its attempt to pull FDI but there is more to be done. For example, the corruption index in Ghana has moved 2 notches up from 41 points to 43 points between 2019 and 2020 (Transparency International). This means that the country is perceived to be corrupt and that dents its image on the international front. Furthermore, the country's economic freedom score of 59.2% making its 101st freest in the 2021 index suggests that Ghana remains in the mostly unfree category in five consecutive years. It is more worrying for a judicial case involving a foreign investor to drag on for a long period of years. Over the last decade, the interests of most Ghanaians in the rule of law have waned drastically especially so because judges have been implicated in corruption scandals brought to the fore by investigative journalism.

Infrastructure

Infrastructural facilities stand tall whenever an investor is confronted with the challenge of the economy in which to pitch their tent. Aryeetey et al. (2008) found that infrastructure is salient in attracting FDI inflows into Ghana. An economy with poor ICT infrastructure, acute supply of water, erratic energy supply, and unmotorable road networks is unattractive to foreign investors. Given the vision of the country to shift from primary production to industrialization, the demand for electricity continues to skyrocket. As of 2010, the average electricity consumption was 298 kWh per capita. Energy Commission of Ghana (2019) indicated that industrial consumption of electricity (4,242 GWh) is second to residential consumption (6,357 GWh). The world Bank ranked electricity as the second most significant constraint to business activities in the country. The Institute of Statistical, Social and Economic Research (ISSER) at the University of Ghana estimated that Ghana had an average production loss of US$2.1 million representing 2% of GDP daily in 2014 due to the power conundrum alone (ISSER, 2015 see Kumi, N. E. (2017)). As well, more than 23 million (over 77%) Ghanaians are deprived of potable water which a worrying trend and comparing that with the World Economic Forum's evaluation of water crisis as being one of the top 3 global crises foreign investors get discouraged since they perceive a burden of having to spend a lot of money on regular water supply for their commercial activities. Another pressing problem is the poor road networks. In 2019, the spate of carnage snatched 2,284 lives which showed an upward trend from the 2,020 deaths on Ghana's roads in 2018 (Motor Traffic and Transport Department, 2020). Annually, Ghana has an infrastructure funding deficit of at least US$1.5 billion.

Exchange rate volatility

An exchange rate is deemed to be volatile when it fluctuates continually. In Ghana, the real exchange rate, by virtue of its effect on the international competition of an economy, assumes a dominant relevance among multiple policy indicators (Alagidede, P. and Ibrahim, M. (2017)). As Ghana relies heavily on the importation of raw materials, capital goods, and consumer goods, it is vital to stabilize exchange rate to bring price hikes under strict control in the country.

The introduction of inter-bank market transactions and wholesale auction system drove the exchange rate regime which was birthed in the early 90s. conspicuously, exchange rate is determined in the money market by the forces of demand and supply. That notwithstanding, research findings about exchange rate volatility's influence on FDI inflows have been somewhat dissenting; majority of them acknowledge that an economy characterized by high exchange rate volatility lingers in attracting foreign investors. Barkoulas et al (2002) concluded that exchange rate instability dampens the zeal of foreign investors to expand trade volumes and that minimizes the accrued benefits.

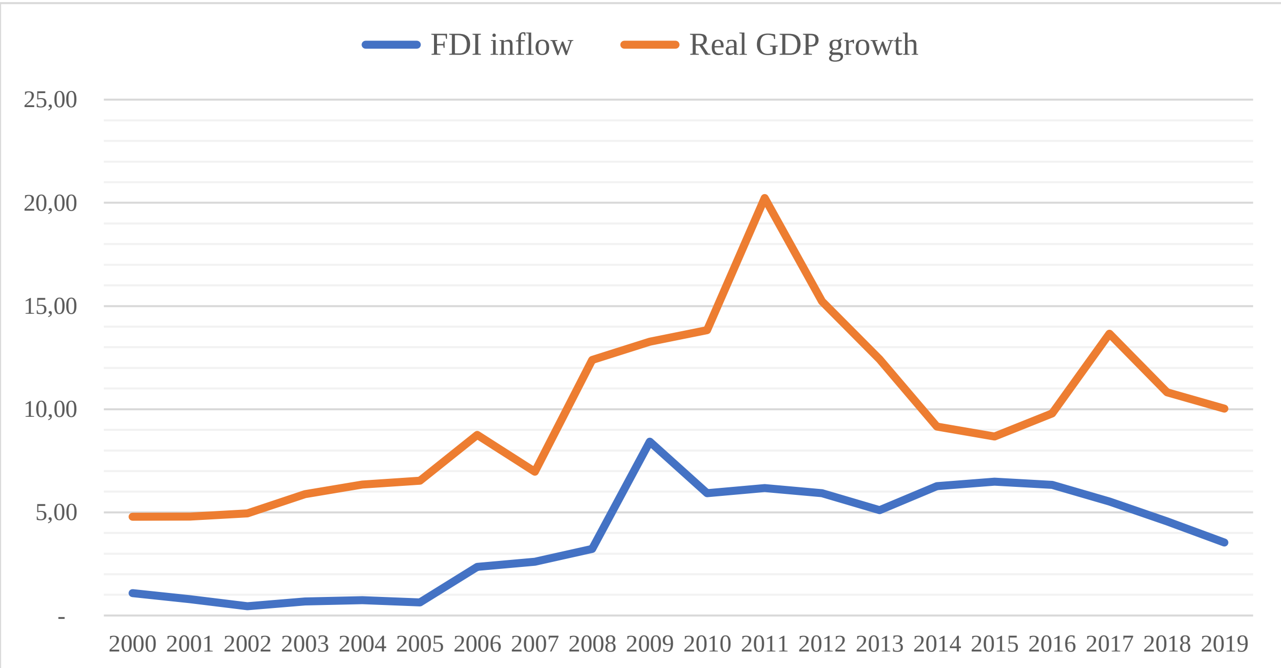
CHAPTER THREE

ACHIEVING A POSITIVE RELATIONSHIP BETWEEN FOREIGN DIRECT INVESTMENT AND REAL GDP GROWTH IN GHANA

3.1 Relationship between foreign direct investment inflow and real GDP growth in Ghana (Between 2000 and 2019)

Foreign direct investment pumped into an economy goes a long way to trigger economic growth. This explains why Economists have and continue to delve into the niceties of how FDI inflows impact macroeconomic variables like real GDP. As an open economy, Ghana attracts both vertical and horizontal FDIs by which her economy booms. With reference to the first-quarter 2021 IMF report, Ghana's economy grew by 0.88% despite the outbreak of coronavirus pandemic which necessitated a total lockdown of about a month in the country. It was the 5th fastest growing economy in the West African subregion and 20th in the whole world. Besides Gambia with 0% GDP growth, only 27 out of the 195 countries experienced a positive GDP growth.

Figure 3.1 Ghana's FDI inflow and Real GDP growth from 2000 to 2019



Source: *Author's own graph based on data from UNCTAD & World Bank*

Figure 3.1 above depicts that both FDI inflow and real GDP growth in Ghana in the last 20 years have had several fluctuations. FDI inflow peaked at 8.43% of GDP in

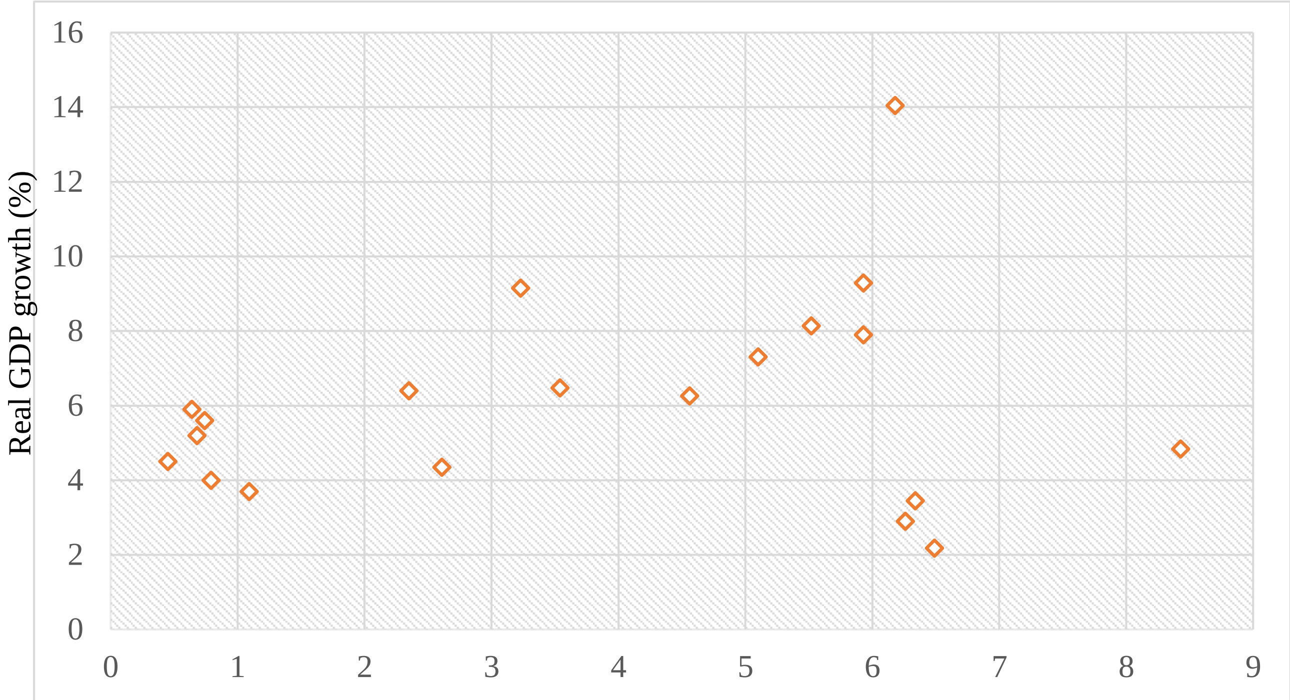
2009 with its ripple effect felt in 2011 where the economy grew at a remarkable 14.5%. This is largely linked with heavy foreign investments into the oil sector of the economy; non-oil growth stood at 9.4% in 2011. We also learn that Ghana's worst performance in real GDP growth within the period of study is between 2014 and 2015. In these years, the debt to GDP ratio had started ballooning and so the IMF had to put conditionalities on government spending which meant that employments into the public sector had to be frozen in addition to some workers having to be rendered redundant. Furthermore, the graph shows a drop in FDI inflow between 2015 and 2016. Foreign investors repatriated some of their investments as it is the norm in every election season with all the uncertainties regarding how the next government is going to fare. The upshot was that production declined drastically. In 2017, the Bank of Ghana undertook financial sector clean-up exercise that increased FDI inflow by 17.39% but real GDP growth dropped significantly by 30.03% since depositors' funds got locked up within the period of the exercise and a portion of the active labour force was rendered jobless. Finally, real GDP growth went up from 6.26% to 6.48% as against the sharp decline in FDI inflow from 4.56 to 3.54 per cent of GDP between 2018 and 2019. This reveals some level of correlation between these two key variables of the Ghanaian economy.

3.2 Examination of The Extent of Link Between FDI and Real GDP Growth in Ghana

Past studies have used econometric models to estimate the interrelatedness between FDI and economic growth with varied results. In this study, the spotlight is put on FDI and real GDP growth with prime focus on finding how intricately linked they are. After extracting data from 2000 to 2019, I estimated correlation by the aid of the Pearson's correlation coefficient and Spearman's rank coefficient.

Both estimated coefficients show that FDI and real GDP growth are correlated. The Pearson's r (Table 2.4) is 0.2 which indicates that there these two variables have weakly positive correlation. In a similar fashion, I found that there is negligible correlation between Ghana's FDI inflow and real GDP growth as per the Spearman's rho (Table 2.5).

Figure 3.2 Scatter diagram showing the correlation between Ghana's FDI inflow (% of GDP) and Real GDP growth (in per cent) from 2000 – 2019



Source: *Author's own diagram*

From figure 3.2, we realize that the band of points do not exhibit a well-defined pattern. A number of dots cluster in region whilst the remaining dots are sparsely populated in other regions of the diagram. This implies that the level of interconnectedness between Ghana's FDI inflows and real GDP growth is at the lowest ebb. One can conclude that inflows contribute just a little portion to push real GDP growth in the economy.

3.3. Harnessing Ghana's FDI Inflows to Improve Real GDP Growth

Several literatures have demonstrated that TNCs are the highest suppliers of FDI. Greer, J. and Singh, K. (2000) posit the total sales of Mitsui and General Motors are greater than the GDPs of Denmark, Portugal, and Turkey combined, and exceed the overall GDPs of Sub-Saharan African countries by US$ 50 billion. The meaning thereof is that it is almost impossible to decouple TNCs from any discussion bothering on foreign direct investment. One thing most countries particularly developing and transition have in common is their attempt to appeal to foreign investors through their tax policies. For example, in Ghana's effort to attract more foreign investments, members of parliament have passed some bills on tax exemptions captured in Ghana Investment Promotion Centre (GIPC) Act, the 2019 Exemptions Bill, the Income Tax Act, the Value Added Tax (VAT) Act, and the Free Zones Act. It, therefore, comes as no surprise having been ranked 7th largest recipient of FDI in Africa in 2018 with a capital of US$ 1 billion for hosting 30 international projects as shown in Figure 3.3. below.

Figure 3.3 Largest recipients of FDI in Africa as of 2018

Country	Jobs 000	Capital US$bn	Projects
Egypt	32	12	91
South Africa	12	5	110
Morocco	15	5	71
Nigeria	10	8	65
Kenya	6	2	64
Ethiopia	16	7	29
Ghana	7	1	30
Algeria	10	9	18
Cote d'Ivoire	4	2	30
Zimbabwe	6	6	18
Tunisia	10	1	19
Uganda	6	0	17
Tanzania	3	1	19
Mozambique	1	2	15
Zambia	2	1	15

Source: *FDI Intelligence and EY Africa Attractiveness Report, 2019 See Madden, P. (2021)*

But Professor Godfred Bokpin of the University of Ghana Business School at a public lecture in 2018 made a call for review of these exemptions vis-à-vis the over US$2 billion losses Ghana makes annually. With the kind of control that foreign companies have over their associates and or how their actions and inactions affect local businesses leave much to be desired in developing countries such as Ghana.

So, how does a country like Ghana nuance this process without necessarily disincentivizing local entrepreneurs which will culminate in deoxygenizing real

GDP growth? A similar question: ‘Is the transfer of control that is associated with foreign ownership appropriate under these circumstances? That is, loosely speaking, are foreign corporations taking over control of domestic enterprises because they have special competence, and can run them better, or simply because they have cash and the locals do not? . . . Does the fire-sale of domestic firms and their assets represent a burden to the afflicted countries, over and above the cost of the crisis itself?’ (Krugman, P. (1998)).

As the Danish economist Ester Boserup believes, ‘necessity is the mother of invention’, Ghana can capitalize on the FDI inflows into the country to do these important things that will, in the long run, improve real GDP growth.

Work toward the fourth industrial revolution

Ghana should learn from the success story of Estonia which has experienced a drastic transmogrification from being a poor country to a country now nicknamed by many economists as the ‘country of the future’. After regaining its independence in 1991 after the breakdown of the Soviet Union (USSR), it travelled on the path of digital economy which started with the private sector and later the government adopted same where all public sectors are digitized. Even though some efforts have been made in Ghana, more needs to be done in digitizing every aspect of the economy especially in the sphere of revenue mobilization and wealth distribution to make things easier for every Tom, Dick, and Harry in the country. This, when done, will reduce the cost of collecting government revenues like taxes, road tolls, et cetera. Digitizing the economy would go a long way in ensuring accountability and transparency in the awards of contracts since the issue of information asymmetry would be relegated into the dustbin of history and make our local investors more informed to compete with their foreign rivals fully and squarely. With this, corruption that often engulfs the awards of government contracts where those willing to pay higher kickbacks win would come to an end. As Lee Jokokka says, *‘The one who owns information, owns the world’*, the governance would become more inclusive and not oligarchic as is widely alluded to by development economists as being one of the characteristic features of governments of less developed countries (LDCs). According to transparency international, Ghana, loses about US$3 billion to corruption each year. If these loopholes are blocked the economy would be able to make the most out of the FDI inflows she receives in order to drive economic growth.

Environmental protection

One of the longest problems in Ghana is with its environment. An appreciable amount of investments pumped into fighting the destruction of the environment should be used to empower institutions responsible for dealing with this threat. A case in point is Rwanda, which used to be one of the dirtiest countries in the world. But tracing back to the early 1960s embarked on the long-term agenda of becoming the cleanest city in Africa, a feat which was officially declared by the United Nations in 2008. This was made possible by embarking upon some measures, which some sections of its population thought were utterly draconian. The first step was to ban the use of non-biodegradable bags. This came on the back of the campaign launched by the World Health Organization (WHO) in 2002 to curb air pollution and the destruction of the ecosystem largely orchestrated by the incessant use of plastic bags. Rwanda was the first country in Africa and second in the world after Bangladesh to heed this life-saving call by prohibiting the manufacturing and importation of plastic bags. It went further to give a clear blueprint by couching *zero tolerance* to the use of plastic bags which is accompanied by a commensurate sanction for those who fall foul of this law. Ghana spends millions of dollars each year on waste management alone. With proliferation of illegal mining in the country, the government needs to clamp down on all perpetrators (both citizens and foreigners) and make them face the full rigours of the law; otherwise, Ghana will have to import water in the not distant future.

Building an economic cluster

For the medium to long-term goal of Ghana to build an economy beyond aid to become feasible and not just a political phantasmagoria, it is imperative that the country gives much premium to the building of an economic cluster, the secret behind the success of the Silicon Valley in San Francisco, California in the United

States of America. This is a way to foster a strong intra-industry trade leading to the gaining of economies of scale. Again, it can emulate the measures taken by one of its biggest trade partners in recent times, China through which they have been able to move their economy from a third world pedestal to the second economic power of the world. Deng Xiaoping in 1980 created a Special Economic Zone (SEZ) in Shenzhen – it was a worthy bait for foreign direct investment. Today, Shenzhen contributes about 3% of China's GDP, because it plays host to tech giants such as Tencent, Huawei, ZTE, and drone-maker DJI in addition to being the source of approximately 90% of the world's electronics (China Sector Analysis: Information Technology, 2021). This obviously affirms the averment of Brooks, L. (2021) that the 21st Century is for China whereas the 22nd century will be Africa's.

CONCLUSION AND RECOMMENDATION

This research was conducted on the effects of Ghana's FDI inflows on real GDP growth. The study was distilled into two main objectives and they are: to empirically determine the relationship between FDI inflow and real GDP growth and to assess whether Ghana's preparation to drive FDI inflow into the country is well.

Research data was obtained from 2000 to 2019. Pearson's correlation was employed as the main estimation technique and Spearman's rank correlation applied to corroborate the correlation coefficient computed by the former since their interpretations of the direction and strength of the relationship between the two variables under review are the same.

To address the research questions, the coefficient (r) predicted proved that Ghana's FDI inflows and real GDP are positively correlated. The Pearson's $r = 0.2$ meant the extent of correlation between them is weak, but the Spearman's rho (ρ) = 0.01 signifies an infinitesimal correlation.

The main pulling factors of FDI inflows into Ghana are stable political environment, availability of natural and human resources, the market size and growth potential, and good macroeconomic variables. Free trade, regulatory framework, inadequate infrastructural facilities, and exchange rate fluctuation have been identified as the most salient factors that torpedo Ghana's effort to draw more inflows of FDI between 2000 and 2019.

However, the research suggests that Ghana can make the best of her inflows of FDI by working sedulously to properly position herself for the fourth industrial revolution, expedite stringent measures to clamp down on perpetrators of environmental degradation, and purposefully create an economic ecosystem.

From the foregoing conclusions, the underlisted recommendations are advanced:

1. The government of Ghana should develop a well-documented policy to regulate the activities of TNCs taking into full grasp the large number of local businesses categorized as SMES. It is extremely important to invariably offer liquidity support to local firms as a conscious effort to bolster them up until they reach the status of MNCs.

2. Provision of infrastructural facilities should be made top priority in government spending to bridge the deficit. In doing so, it will be helpful to embark upon public-private partnership in specific sectors like energy and roads since they have a great deal of influence on production capacity in the economy.

3. Improvement of rule of law is urgently needed. Just as the supreme of court of Ghana has amended laws that will expeditiously settle all election disputes, there is the need to codify proper timelines to adjudicate lawsuits brought either in favour or against investors just so investment litigations do not last unnecessarily long.

4. Institutions responsible for fighting corruptions should be well-resourced and be clothed with all the power they need to fight to bring corruption to the barest minimum.

5. There is paucity of evidence on of how FDI outflows in Ghana influence economic growth. To this end, researchers should consider working in this direction.

ATTACHMENTS

Attachment 1: Theories and formulae of the statistical methods used for the study

(a) Pearson's correlation coefficient (Pearson's r)

- The *Pearson's r* is defined as the covariance (its measure of how much two variables change simultaneously) of the two variables divided by the product of their standard deviations.

- It is the most widely used correlation coefficient also called *Pearson Product-Moment correlation*.

- It compares two sets of linear data that are of the ratio or interval type.

- When determining a relationship two scores from each variable must be derived. There scores **cannot** be separated when the data is analyzed.

$$r = \frac{n\Sigma xy - (\Sigma x)(\Sigma y)}{\sqrt{n\Sigma x^2 - (\Sigma x)^2} \bullet \sqrt{n\Sigma y^2 - (\Sigma y)^2}} \quad \text{Or} \quad r = \frac{1}{n-1}\Sigma \frac{(y-\bar{y})}{s_y} \bullet \frac{(x-\bar{x})}{s_x}$$

where:

n = number of pairs of scores

$\sum xy$ = sum of the products of paired scores

$\sum x$ = sum of x scores

$\sum y$ = sum of y scores

$\sum x^2$ = sum of squared x scores

$\sum y^2$ = sum of squared y scores

Mean of x $(\bar{x}) = \frac{\sum x}{n}$

Mean of y $(\bar{y}) = \frac{\sum y}{n}$

Standard deviation of x $(S_x) = \sqrt{\frac{\sum(x-\bar{x})^2}{n}}$

Standard deviation of y $(S_y) = \sqrt{\frac{\sum(y-\bar{y})^2}{n}}$

Attachment 1: Theories and formulae of the statistical methods used for the study (continued from previous page)

(b) Spearman's rank coefficient

- The *Spearman's rank* or *Spearman's rho* (ρ) is a nonparametric alternative to Pearson's r used for data that follow curvilinear, monotonic relationships, (whether the order between the variables is preserved) and for ordinal data.

- It is a robust measure of association between two variables.

- *Spearman's rho* is determined by ranking each of the two groups in an order of magnitude, either ascending or descending order.

- In case of ties in the data, the average rank is used.

- The minimum number of observations needed in each sample is 10 for the Spearman's rank test to be valid.

$$\boldsymbol{\rho} = 1 - \frac{6\Sigma_i {d_i}^2}{n(n^2 - 1)}$$

where:

n = number of observations and deviation

d = deviation = Rank of x (R_x) – Rank of y (R_y)

$\sum d^2$ = sum of squared deviations

Attachment 2: Interpretation of the correlation coefficient (r)

Correlation coefficient value	*Direction and strength of correlation*
$r = -1$	Perfectly negative
$r = -0.8$	Strongly negative
$r = -0.5$	Moderately negative
$r = -0.2$	Weakly negative
$r = 0$	No association
$0.01 \leq r \leq 0.19$	Negligible or infinitesimal
$0.2 \leq r \leq 0.29$	Weakly positive
$0.3 \leq r \leq 0.59$	Moderately positive
$0.6 \leq r \leq 0.79$	Strongly positive
$0.8 \leq r \leq 0.99$	Very strongly positive
$r = 1$	Perfectly positive

Note: [1]

[1] The interpretations presented in the above table are not sacrosanct since different scholars have diverse intervals to interpret the coefficient r. In coming up with the above, I referred to multiple sources including the Schaum's series, journal articles on ResearchGate, ScienceDirect, and other useful materials.

However, the interpretations of $r = 0, \pm 1$ are strictly in consonance with universal standard.

REFERENCES

Adams et al. (2014). Causes of Financial FDI inflows into Sub-Saharan Africa (SSA): Evidence from Ghana. Thunderbird International Business Review, United Kingdom.

Alagidede, P., and Ibrahim, M. (2017). On the causes and effects of exchange rate volatility on economic growth: Evidence from Ghana. Journal of African Business, 18(2), 169 – 193

Alfaro, Laura; Kalemli-Ozcan, Sebnem; Volosovych, Vadym (2008). *"Why Doesn't Capital Flow from Rich to Poor Countries? An Empirical Investigation"* (PDF). *Review of Economics and Statistics*. 90 (2): 347–368. *doi*:*10.1162/rest.90.2.347*

Annual Report – Bank of Ghana. Bog.gov.gh. (2021). Retrieved 25 May 2021, from https://www.bog.gov.gh/publications/annual-report/.

Anoba, I. (2021). China is taking over Zambia's National Assets, but the Nightmare is just getting Started for Africa | Ibrahim Anoba. Retrieved 22 May 2021, from https://www.africanliberty.org/2018/09/10/china-is-taking-over-zambia-national-assets-but-the-nightmare-is-just-starting-for-africa/#:~:text=China%20is%20taking%20over%20Zambia%E2%80%99s%20National%20Assets%2C%20but,the%20Nightmare%20is%20just%20getting%20Started%20for%20Africa

ANON (2021). Retrieved 22 May 2021, from https://www.aei.org/china-global-investment-tracker/

ANON (2021). Retrieved 26 May 2021, from https://www.imf.org/external/pubs/ft/fandd/2001/06/loungani.htm.

ANON (2021). Retrieved 31 May 2021, from https://statisticsbyjim.com/basics/spearmans-correlation/

Asiedu, E. (2002). *On the Determinants of Foreign Direct Investment to Developing Countries: Is Africa different?* World Development, 30:107 – 119. Available at: https://doi.org/10.1016/S0305-750X(01)00100-0

Ayim, E. (2021). *Ghana attracts biggest FDI in Africa in 2020 – JCS Investments*. Jcs.com.gh. Retrieved 1 June 2021, from https://jcs.com.gh/newsletter/2021/03/18/ghana-attracts-biggest-fdi-in-africa-in-2020/.

Barkoulas et al. (2002). Exchange rate effects on the volume and variability of trade flows. Journal of International Money and Finance, 21(4), 481 – 496

Basu, A. and Srinivasan, K. (2002). Foreign Direct Investment in Africa: Some case studies: IMF Working Paper 02/61, IMF, Washington, DC.

Bhattacharyya, S. and May, A. S. (2012). Legal Regimes Governing Foreign Direct Investment (FDI) in Host Countries. Advocates for International Development (A4ID) Publications.

Bokpin, G. (2018). *Tax exemptions costing nation: Ghana loses more than US$2 billion yearly*. Presentation at the public lecture organized by IMANI Africa in Accra, Ghana. Available at: https://www.peacefmonline.com/pages/business/economy/201811/368683.php

Brooks, L. (2021). The 21st century belongs to China—but the 22nd will be Africa's. Retrieved 23 May 2021, from https://qz.com/1550626/chinas-investment-will-allow-africa-to-lead-the-22nd-century/#:~:text=Chinese%20investments%20and%20contracts%20in%20sub-Saharan%20Africa%20total,invest%20a%20further%20%2460%20billion%20into%20African%20nations

China Sector Analysis: Information Technology. (2021). Retrieved 24 May 2021, from https://seekingalpha.com/article/4422295-china-sector-analysis-information-technology

Compare countries | TheGlobalEconomy.com. TheGlobalEconomy.com. (2021). Retrieved 1 June 2021, from https://www.theglobaleconomy.com/compare-countries/.

Diechmann et al. (2003). Foreign Direct Investment in the Eurasian Transition States. Eastern European Economics, 41(1):5 – 34

Dupuch, S. and Milan, C. (2002). Les déterminants des Investments directs étrangers Européens dans les pays d'Europe Centrale et Orientale. Working Paper No. 2003 – 07

Ellwood, W. (2001). *The no-nonsense guide to globalization.* United Kingdom: New Internationalists Publications

FDI flows by industry. (2021). Retrieved 24 May 2021, from https://stats.oecd.org/Index.aspx?DataSetCode=FDI_FLOW_INDUSTRY

Foreign direct investment, net inflows (BoP, current US$) - Ghana | Data. (2021). Retrieved 24 May 2021, from https://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD?view=chart&locations=GH

GDP growth (annual %) - Ghana | Data. Data.worldbank.org. (2021). Retrieved 25 May 2021, from https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?end=2019&locations=GH&start=2000.

Ghana - The Economic Recovery Program. (2021). Retrieved 24 May 2021, from http://countrystudies.us/ghana/70.htm

Greer, J., & Singh, K. (2000). *A brief history of transnational corporations*. Available at: https://www.globalpolicy.org/empire/47068-a-brief-history-of-transnational-corporations.html

Group, P. (2021). *Causal Link Between FDI and Economic Growth? Panel Data Analysis of MINT Economies*. Academia.edu. Retrieved 29 May 2021, from https://www.academia.edu/45573791/Causal_Link_Between_FDI_and_Economic_Growth_Panel_Data_Analysis_of_MINT_Economies.

Hailu, Z. A. (2010). *Demand Side Factors Affecting the Inflow of Foreign Direct Investment to African Countries: Does Capital market matter?* International Journal of Business and Management, 5(5):104 – 116

Huston, W. (2021). Nike Still Plagued by Accusations of Unsafe and Unfair Labor Practices. Retrieved 23 May 2021, from https://www.breitbart.com/sports/2019/07/02/nike-still-plagued-accusations-unsafe-unfair-labor-practices/

Hymer, S. (1976). *The International Operations of National Firms: A Study of Direct Foreign Investment.* Cambridge, Mass.: MIT Press.

Ietto-Gillies, Grazia (2012). *Transnational corporations and international production: Concepts, theories, and effects*. Cheltenham, UK; Northampton, MA: Edward Elgar. ISBN 978-0-85793-225-9

IMF (2007). *Managing Large Capital Inflows*. World Economic Outlook, 2007, International Monetary Fund, Washington DC, USA.

Ingham, H., Read, R., & Elkomy, S. (2020). *Aggregate and Heterogeneous Sectoral Growth Effects of Foreign Direct Investment in Egypt*. *Review of Development Economics*, 24(4), 1511-1528. https://doi.org/10.1111/rode.12698

ISSER (2015). Electricity insecurity and its impact on Micro and Small Businesses in Ghana. *Electricity Insecurity and its Impact on the Economy of Ghana*. Accra: Institute of Statistical, Social and Economic Research.

Kim, D.-H., & Trumbore, P. F. (2010). *Transnational mergers and acquisitions: The impact of FDI on human rights, 1981—2006.* Journal of Peace Research, 47(6), 723–734. Retrieved from https://doi.org/10.1177/0022343310382204

Korten, D. C. (1996). *When corporations rule the world.* United States: Kumarian Press & Berrett-Koehler Publisher

Krugman, P. (1998). Firesale FDI, Working Paper, Massachusetts Institute of Technology, USA. Available at: https://web.mit.edu/krugman/www/FIRESALE.htm.

Kumi, N. E. (2017). The Electricity Situation in Ghana: Challenges and Opportunities. CGD Policy Paper. Washington, DC: Centre for Global Development. Available at: https://www.cgdev.org/publication/electricity-situtation-ghana-challenges-and-opportunities

Lipschutz, S. and Schiller, J. (1998). Theory and Problems of Introduction to Probability and Statistics. Schaum's Outline Series. McGraw-Hill.

Lucas, R. (1990). *Why doesn't Capital Flow from Rich to Poor Countries?* American Economic Review. 80 (2): 92–96.

Madden, P. (2021). Figure of the week: Foreign direct investment in Africa. Retrieved 22 May 2021, from https://www.brookings.edu/blog/africa-in-focus/2019/10/09/figure-of-the-week-foreign-direct-investment-in-africa/

Mallampally, P. and Sauvant, K.P.(1999). *Foreign Direct Investment in Developing Countries*. A quarterly magazine of the IMF, March 1999, Vol. 36, No. 1

Markets, R. (2021). *The 2019 Africa Country Benchmark Report: Gain Valuable Data & Insights on Business, Economics, Politics and Society*. GlobeNewswire News Room. Retrieved 2 June 2021, from https://www.globenewswire.com/news-release/2020/02/28/1992494/0/en/The-2019-Africa-Country-Benchmark-Report-Gain-Valuable-Data-Insights-on-Business-Economics-Politics-and-Society.html.

Montiel, P. (2021). *"Obstacles to Investment in Africa: Explaining the Lucas Paradox" (PDF). Article. Retrieved 27 February 2011*

Morisset, J. (2000). *Foreign Direct Investment in Africa: Policies Also Matter*. Transnational Corporations, 9, 107 – 125

Muhlberger, M. (2012). Sub-Saharan Africa: The Continent of the 21st century? Frankfurt, Germany: Deutsche Bank Research.

Naudé, W. (2009). *The Financial Crisis of 2008 and the Developing Countries*. Discussion Paper 2009/001. Helsinki: UNU-WIDER.

News, T. (2021). *TUC Starts Processes for Negotiation Of 2021 Minimum Wage*. The Vaultz News. Retrieved 4 June 2021, from https://thevaultznews.com/business/vaultz-business/tuc-starts-processes-for-negotiation-of-2021-minimum-wage/#:~:text=The%20Trades%20Union%20Congress%20%28TUC%29%2C%20Ghana%20has%20revealed,a%20paltry%20GHS319%20per%20month%20%E2%80%9D%20for%202021.

Nyarko, P. A., Nketiah-Amponsah, E. and Barnor, C. (2011). Effects of Exchange Rate Regimes on FDI inflows in Ghana. International Journal of Economics and Finance, 3(3), 277-286

Obwona, M. (2002). Macroeconomic Environment and Tax Policy in Uganda. Report developed for the Taxation, Aid, and Democracy.

OECD (1996). Benchmark Definition of Foreign Direct Investment, 3rd Edition, Paris.

OECD (2008). Benchmark Definition of Foreign Direct Investment, 4th Edition, Paris. Available at: 2487495.pdf (oecd.org)

OECD (2021), FDI flows (indicator). doi: 10.1787/99f6e393-en (Accessed on 22 May 2021)

Ozekhome, H. O. (2016). Trade Openness, Investment and Economic Growth: Evidence from ECOWAS countries. West African Economic and Financial Review, 14(1), 79-100

Rondinelli, D. A. (2003). *Transnational Corporations: International citizens or new sovereigns?*. Business Strategy Review. Retrieved February 14, 2005, from Business Source Elite Database

Rousseau, R., Egghe, L. and Guns, R. (2018). Becoming Metric Wise. Chandos Publishing. Available at: https://doi.org/10.1016/c2017-0-01828-1

Sajilan et al. (2019). The determinants of FDI in OIC countries. International Journal of Financial Research, 10(5), 466 – 473. Available at: https://doi.org/10.5430/ijfr.v10n5p466

Todaro, P.M. and Smith, C.S. (2003). Economic Development, 8th Edition, Asia: Pearson Education.

Tsikata, G.K., Asante, Y. and Gyasi, E. M. (2000). Determinants of Foreign Direct Investment in Ghana. Overseas Development Institute.

Two Methods of Measuring Foreign Direct Investment - CSO - Central Statistics Office. (2021). Retrieved 22 May 2021, from https://www.cso.ie/en/releasesandpublications/in/mfdi/twomethodsofmeasuringforeigndirectinvestment/

Types of International Capital Flows. (2021). Retrieved 24 May 2021, from https://managementheaven.com/types-of-international-capital-flows/#:~:text=Types%20of%20International%20Capital%20Flows%201%20Foreign%20investment,commercial%20borrowings%20are%20different.%20...%20More%20items...%20

UNCTAD (1999). *Foreign Direct Investment in Africa: Performance and Potential*. New York and Geneva, 1999. [Doc. Symbol: UNCTAD/ITE/IIT/Misc.15]

UNCTAD (2006). *World Investment Report 2006*: FDI from Developing and Transition Economies: Implications for Development. Geneva.

UNCTAD (2012). World Investment Report. New York: United Nations

UNCTAD (2015). *World Investment Report 2015. Reforming International Investment Governance.* United Nations Publication.

UNCTAD (2018). World Investment Report. New York: United Nations

UNCTAD (2019). *Annual Report 2019 Highlights. Beyond Uncertainty*. United Nations Publication.

UNCTAD (2020c). *World Investment Report 2020. International Production Beyond the Pandemic.* United Nations Publication. Sales No. E.20.II.D.23.

UNCTADstat. (2021). Retrieved 24 May 2021, from http://unctadstat.unctad.org/TableViewer/tableView.aspx

What Happened to Ghana Since It Gained Independence? ThoughtCo. (2021). Retrieved 25 May 2021, from https://www.thoughtco.com/brief-history-of-ghana-3996070.

Why Ghana? – Ghana Investment Promotion Centre – GIPC. Gipc.gov.gh. (2021). Retrieved 2 June 2021, from https://gipc.gov.gh/why-ghana/.

World Bank (2015). World Bank Statistical Report, Washington DC: World Bank

World Bank (2018). World Bank Statistical Report, Washington DC: World Bank

World Bank (2020). *Supporting Countries in Unprecedented Times*. Annual Report 2020. Washington DC; World Bank

World Development Indicators | DataBank. Databank.worldbank.org. (2021). Retrieved 2 June 2021, from https://databank.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG/1ff4a498/Popular-Indicators#

Zadoia, A.O, Petrunia, Y.E, Kuzminov, Trushenko, O.M., & Kosyakina, O.A. (2011). *Macroeconomics.* Alfred Nobel University, Dnipropetrovs'k, 2011. – 296 p.