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COLLEGE OF HUMANITIES

FOREIGN DIRECT INVESTMENT (FDI) AND SUSTAINABLE HUMAN DEVELOPMENT IN AFRICA

BY

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THIS THESIS IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER OF PHILOSOPHY (M.PHIL) IN FINANCE DEGREE

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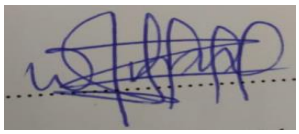
DECLARATION

I hereby declare that this research work is the outcome of my own study and has not been submitted for any academic award in this university or any other by anybody. All references used in this work have been duly referenced. I therefore accept sole responsibility of all inadequacies.



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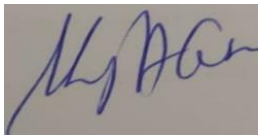
CERTIFICATION

I certify that this research work has been supervised according to all the required procedures of the University of Ghana.



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DEDICATION

In the name of the Almighty God, I am dedicating this work to Mrs. Grace Nborti Nakouwo, my loving wife, for her understanding, inspiration and care during my study period. Also, I wish to dedicate it to my adorable little daughter, Hannabelle Ipiin Nborkan Nakouwo, for sacrificing the time I should have stayed at home to care for her in the pursuance of this programme. I further dedicate this work to my whole family and more importantly my father, Mr. Simon Nmonwal Nborkan. My heartfelt appreciation goes to everyone.

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I further wish to show gratitude to my family, especially my wife, my father and all others. I can only pray for good health and the Lord's mercy for you all. Likewise, I exceptionally appreciate my friend, Felix Narteh Akplehey, My Pastor and his wife (Mr. and Mrs. Asamoah), Prof. Justice N. Bawole, Francis Tokoli, and all my MPhil course mates (especially George Klecth Lamptey and Paul Salifu Suhini) for your encouragement, prayers and support throughout this journey.

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LIST OF ABBREVIATIONS

CLIB	Civil Liberty
EDUI	Education Index
FDEV	Financial Development
FDI	Foreign Direct Investment
GCF	Gross Capital Formation
GDPPC	Gross Domestic Product Per Capita
HD	Human Development
HDI	Human Development Index
ICPD	International Conference on Population and Development
INCI	Income Index
INF	Inflation
LEI	Life Expectancy Index
MDGs	Millennium Development Goals
MNC	Multinational Corporations
MNEs	Multinational Enterprises
NEPAD	New Partnership for African Development
ODA	Official Development Assistance

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OECD	Organisation for Economic Co-operation and Development
POLITY2	Polity Index
SD	Sustainable Development
SDGs	Sustainable Development Goals
SHD	Sustainable Human Development
SUR	Seemingly Unrelated Regression
TRDOP	Trade Openness
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
WDI	World Development Indicators

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ABSTRACT

We investigated the role played by foreign direct investment in sustainable human development achievement in Africa. We examined the impact of FDI on Human Development Index (HDI) and on each of its three dimensions (i.e. health, education, and income) for 52 African countries over 28 years from 1990 to 2017. The Seemingly Unrelated Regression (SUR) estimation was employed to estimate four models jointly as a system of equations to measure the contribution of foreign direct investment to human development achievements on the African continent. We ascertained that FDI has a positive impact on Income Index and a negative impact on other human development indicators. We also found that countries with developed financial markets turn to benefit more from FDI than those with less developed financial markets. Thus, the financial sector is a channel through which FDI passes to better affect all the dimensions of human development. GDP per capita, Domestic Investment (Gross capital formation), and openness to trade were also found to positively influence HD and its dimensions in Africa. Empirical evidence was also established that democratic regimes are favourable environment for the achievement of human development in Africa. Finally, our findings held that countries with high degree of freedom performed better in terms of HD achievements than those with low degree of freedom. We concluded that African countries need targeted economic and social policies as well as developed financial markets to be able to reap the benefits of FDIs in terms of the achievements of sustainable human development.

Keywords and Terms: *Financial Development, Foreign Direct Investment, Seemingly Unrelated Regression, Sustainable Human Development.*

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CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

A decade after the conference on Human Environment held by the United Nations (UN), a great deal of environmental issues were still not properly taken into consideration. The economic activities in the countries put pressure on the natural environment year after year. Due to the apathetic attitudes of many governments towards environmental sustainability, the United Nations General Assembly proposed a resolution in 1983 that stated; "Process of preparation of the Environmental Perspective to the Year 2000 and beyond". This resolution developed to become "The Brundtland Commission" which comprised of four key missions that put up suggestions to resolve the problems that burdened the environment with the ramifications of the universal network. The Brundtland Commission's report titled "Our Common Future" was published in 1987 which called on the world to reconsider development in a new dimension referred to as "Sustainable Development (SD)" (United Nations Human Development Report, 1987).

Over the years, sustainable development has enjoyed several definitions in literature and has been modified in many ways. However, the most commonly cited definition still remains the one provided in the report published by The Brundtland Commission in 1987 that; "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs".

This proposition was intensely recommended to all the countries in the world as a comprehensive social, environmental and economic improvement strategy to be assimilated in their development frameworks as a means to protect the world and preserve the resources for future generations. To answer this call and heed the recommendations, the international community over the years took

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some key steps in the direction of sustainable development consciousness. These include; protecting the environment by using alternative sources of energy (UNCED Proceedings, 1992), promoting the right to education and health (ICPD Programme of Action, 1994), and bridging the gender inequality gap at the Fourth World Conference on Women in 1995, among others (Yahouedeou, Wu, Omedi, Fan & Zhou, 2018).

The African heads of state in the urge to materialize the Sustainable Development (SD) achievement in African countries met in Lusaka in 2001 and formed "the New Partnership for Africa's Development (NEPAD)". Fundamentally, NEPAD aimed to lead African countries in sustainable development achievement through its Coordinating Agency (NPCA) which was responsible for the implementation of the Millennium Development Goals (MDGs) on the African continent.

The targets of MDGs were set to be completed by the year 2015 in all the member countries. When reference is made to the SDGs Transition Report of 2016's MDGs to Agenda 2063, we find that the African region has obtained some positive outcomes in the achievement of the MDGs. These positive signs reported include decrease of hunger percentages, decline in gender parity, poverty reduction, and a rise in access to education.

Notwithstanding these positive outcomes in the implementation of the MDGs, many targets were still not met according to the report. These include reduction of the rate of child mortality in the Sub-Sahara Africa, sanitation improvement (70% of Africans still suffer from lack of access to improved sanitation facility), poverty reduction (41% of Africans still live with less than $1.25 a day), increase access to education (33 million of out-of-school in primary age are in Sub-Saharan Africa) and provision of a better living environment still needs to be improved in the African region. This has necessitated the call for Sustainable Development Goals (SDGs) framework with

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the primary objective of covering all the facets of human development and growth that were not included in the MDGs with the focus on sustainability. The SDGs postulate that Human Development is an essential point in SD achievement. The HDI computed by UNDP has commonly been adopted as a measure of these achievements. HDI is multidimensional in nature and encompasses the education status, the state of health, and the income status.

For Africa to better achieve these sustainable development goals (SDGs), there is a need for sustainable source of capital to develop the structures and systems to boost productivity and growth over a long time. FDI has so far proved to be the most stable and promising foreign capital inflows into developing countries for some years now. According to the 2008 report of the Organisation for Economic Co-operation and Development (OECD), FDI as an external source of funding for developing nations has out-performed the Official Development Assistance (ODA) since the 1990s. Adams (2009) emphasized that; "FDI serves as augmentation of domestic capital and enhancement of efficiency through the transfer of new technology, marketing and managerial skills, innovation, and best practices across the world into host countries". Asiedu (2006) asserted that an increase in FDI would enhance the achievements of the United Nations' MDGs by eradicating poverty in Sub-Sahara Africa by 2015 as well as pave way to materialize the SDGs' targets in 2030 agenda. Nsouli and Funke (2003) established that the primary objective of NEPAD was to serve as a vehicle to drive FDI into the African continent.

FDI can be put into two main categories such as foreign takeovers (or mergers and acquisitions) and green-field investments. Whereas foreign takeovers refer to the transfer of local assets into a foreign ownership, the green-field investments has to do with the creating of factories from scratch or set up corporations in another country other than the country of the investor. It is notable that, one of the cheapest ways of integrating a host country into the world's economy is by opening up

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to FDI. A supportive business environment and the availability of equal opportunities (in terms of law enforcements, taxes, etc.) for both foreign and local investors are key in attracting, retaining and sustaining investments from abroad. Most of the countries on the African continent have relaxed their trade barriers as a means of enhancing easy participation in certain strategic areas of their economies by foreign investors. In this light, many African countries have signed many trade bilateral agreements which aim to enhance free flow of capital into the continent. Some of these agreements include the African Growth and Opportunity Act (AGOA), the ratification of the Economic Partnership Agreements between the European Union (EU) and the African, Pacific and Caribbean (APC) countries, and the hitherto Millennium Development Goal (MDG), now Sustainable Development Goals (SDGs).

1.2 Statement of the Problem

Sustainable Development is considered as development against environmental negative externalities due to human being economical behaviour in our society and encourages an integrated economic, social and environmental politics for a stable development. The concept was officially introduced to the international community in 1987 through Brundtland Report. To complete Sustainable Development, countries on the African continent started considering foreign direct investment as an enabling factor towards its achievements. To prove the fact, several empirical studies were conducted on different African countries or regions analysing the positive nexus that exist between Sustainable Development achievements and FDI. Analyses were from different standpoints; economic, social and environment, and respectively used different dependent variables as GDP or economic growth, welfare, human capital development and halo or haven

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pollution index. For most cases, studies were conclusive that sustainable welfare improvement has a positive connection with the inflow of Foreign Direct Investment.

To add to the literature on FDI's contribution to the SD achievements on African continent and especially from the social standpoint, the present study focused on the less empirically studied area; the participation of FDI in human development. According to SDGs, Human Development is a crucial point in SD achievement. Throughout literature, Human Development Index (HDI) has been the most adopted index in measuring the achievements of human development. As showed by literature, FDI in most cases was found as a vehicle of social improvement through economic means (Handlu & Uniwersytetu, 2012; Antwi, Mills, Mills & Zhao, 2013). In fact, literature holds that FDI is able to economically boost countries real income and tax income and thus result in the improvement of wellbeing of individuals. These incomes generated from the foreign capital mostly help policy makers of the countries to achieve their social mandates through the construction of hospitals and education facilities. To the individual, it leads to creation of jobs which helps in providing the needed purchasing power to obtain quality health-care, standard education and training as well as goods necessary in welfare sustenance (Nair-Reichert & Weinhold, 2001; Nkechi & Okezie, 2013). While some works found that FDI positively impact Sustainable development (Reiter & Steensma, 2010; Tvaronavičienė & Lankauskienė, 2011; Kardos, 2014; Ridzuan, Ismail & Che Hamat, 2017), others found a negative impact (Yahouedeou et al., 2018). Also, the findings of some studies held that FDI has no significant impact on growth and development (Gui-Diby & Renard, 2015).

Based on these inconclusive findings in the literature, we sought to further investigate the link between FDI and sustainable human welfare achievement on the continent. Other researchers have analysed various causal links between FDI and human wellbeing improvement (Soumaré &

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Tchana Tchana, 2015), foreign direct investment and economic growth in the presence of strong institutions (Agbloyor et al., 2016), and FDI and environmental issues (Bokpin, 2017; Tamazian, Chousa & Vadlamannati, 2009; Khan & Khan, 2018). This study's stand point is more absorbed on how foreign direct investment is contributing to sustainable human development on the African continent. Despite numerous existing empirical studies that have analysed the role of FDI in the development path of Africa, this study is adding to the ongoing argument on the real role of FDI in the achievements of Sustainable Human Development in African by considering each of the aspects of Human Development (HD) (i.e. education, healthy life and income) individually instead of using the composite index as commonly done in the previous studies. This will enable us to identify which dimension of the human development received more positive or negative impact from FDI both in the short and long run. The existing literature points out the complexity of the issues relating to FDI and Human Development since the latter is multi-dimensional in nature. There is therefore the need for targeted policies that will regulate the inflow of FDI into each of these subdivisions of human development under consideration. Targeted FDI has also been argued as one of the ways by which countries would benefit from FDI inflow to propel economic growth. Adams (2009) in explaining the absorptive capacity of local firms to aid economic growth, concluded that sub-Sahara African countries need a targeted approach to FDI to increase economic growth. This can be achieved through a collaborative effort between Multinational National Enterprises (MNEs) and government.

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1.3 Research Objectives

The core purpose of the current study has to do with examining the role played by Foreign Direct Investment (FDI) in the achievement of Sustainable Human Development in Africa. The focus of this work is to:

1. Examine the contributions of FDI in the achievement of the overall human development of the host country on the African continent.
2. Examine the contributions of FDI in the achievement of the long and healthy life (SDG 3) in the recipient country on the African continent.
3. Examine the contributions of FDI in the achievement of the quality education (being knowledgeable (SDG 4)) in the host country on the African continent.
4. Examine the contributions of FDI in the achievement of the standard of living (have a decent standard of living (SDG 8)) in the recipient countries on the African continent.

1.4 Research Hypotheses

Hypothesis 1: A rise in the inflows of FDI leads to improvement of the overall human development of the host country.

Hypothesis 2: A rise in the inflows of FDI leads to improvement of a long and healthy life (SDG 3) of the recipient countries.

Hypothesis 3: A rise in the inflows of FDI leads to improvement of quality education (being knowledgeable (SDG 4)) in the host country.

Hypothesis 4: A rise in the inflows of FDI leads to improvement of the standard of living (have a decent standard of living (SDG 8)) in the host country.

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1.5 Significance of the study

This study provides an empirical analysis on FDI's role in the achievements of sustainable human development targets in Africa. We examined the impact of FDI on the various dimensions of human development improvement in Africa as well as its social influences on sustainable development achievement in the African region. The result and findings of this research is beneficial in two key ways:

The policy makers and governments: Since we found that some human development indicators are positively impacted by FDI while others are negatively impacted, we recommend that African governments should deploy targeted foreign capital related policies and strategies. These targeted policies would help to maximise the benefits of FDI inflows in terms of sustainable development of their citizens and at the same time to minimise the negative impacts.

Academics/Research: This current study has added to the ongoing discussions about the role played by FDI which are commonly focused on economic growth and poverty reduction. We have therefore, opened another door for further research into the extent to which FDI impact on every facet of HD since there has not been any consensus in the literature. This study has thus, expanded the academic debate on whether or not economic growth is indeed positively impacted by FDI in Africa, and whether or not that impact necessarily translates into the overall welfare of the people. The findings of this study pointed out that human welfare is multidimensional and that the impact of FDI on one dimension differs from another.

1.6 Chapter Disposition

The study was organized into five (5) chapters as outlined below:

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Chapter one provides an introductory aspect of the whole study. It comprises the background of the study, statement of the research problem, objectives of the study, research hypothesis, significance of the study, and the chapter disposition of the study.

Chapter two mainly reviews the existing theoretical and empirical literature on Foreign Direct Investment (FDI) and some related subjects. It looks at two of the theories underpinning the study such as the internationalization theory and the eclectic paradigm by Dunning (1973, 1980, and 1988). The chapter also considers the empirical literature on the concept of Foreign Direct Investment, the trend of investment in Africa, Foreign Direct Investment and Economic Growth, FDI and development in Africa, social impact of FDI, and the benefits of FDI in the recipient countries.

Chapter three centres on the method adopted in the study. It expounded the econometric models that are adopted by the study for analysing the data. It also discusses the data sources and variable description as well as their justification. The chapter equally advances the motive of the choice of the methods of data analysis used.

Chapter Four is used for the analysis of the data and discussion of findings. It presents the descriptive statistics, the Pearson correlation matrix and the results from the Seemingly Unrelated Regression (SUREG) estimations. The discussion of all the results were thoroughly done to address the objectives of the study.

Chapter five focuses on summary, conclusions and policy recommendations. The results displayed in the preceding section were summarised, various conclusions drawn and relevant policy recommendations made for stakeholders such as governments in Africa (policy makers)

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and foreign investors who are investing in Africa or prospective foreign investors of the African region.

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CHAPTER TWO

LITERATURE REVIEW

2.1 Chapter Introduction

This chapter provides a comprehensive criticism of related studies in the area of FDI, the wellbeing and improvement of the lives of the people in the recipient countries. This researcher presents literature on key concepts, underpinning theories, and empirical studies available in this area by highlighting their findings and contributions to the ongoing debate on the contributions made by FDI in the development pursuit in the recipient countries.

2.2 The Concept of Foreign Direct Investment

International investments are often categorised into direct and indirect investments. Indirect foreign investors move capital through intermediate markets and institutions like capital markets (stock exchanges, bonds market, and the like) or bank loans. Direct foreign investors, however, have some direct control of the managerial and financial operations of the company in which they have invested in another country with a lasting benefit. This is termed Foreign Direct Investment. FDI is potentially feasible to offer long-term gains to host nations. As per the International Monetary Fund (IMF); “FDI is defined as the movement of long-term capital, which represents a long-lasting interest in the production process and control over different kinds of activities, by a foreign investor into a foreign host country”. This investment comes with numerous advantages to the host country. Some of the advantages advanced by scholars include increase in capital, productive assets, building entrepreneurship spirit in citizens of host countries, better skills, increased export and upgraded marketing expertise, increased access to a wider markets across borders, transfer of managerial abilities, transfer of advance technologies and innovative skills, the

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creation of jobs, among other benefits which help to boost economic growth (Moosa, 2002; Asiedu, 2002; Dunning, 1983).

This study adopts a working definition of FDI as; "a long-term investment in a country other than that of the investors, and under the direct management and control of the investors".

2.3 Trend of Investment in Africa

Relative to other continents in the world, Africa is still the least recipient of FDI. According to Ramire (2000), the top receivers of FDI globally are the economies blessed with abundance of natural resources. Inflows to Africa peaked in 2008 following the resource boom but have since seen a consistent decline although some sub-regions saw increases. Total FDI in 2010 to Africa stood at $55 billion after declining by 9% from the 2009 value. Other developing regions performed much better than Africa and still continue to. Africa's share of developing countries' FDI decreased from 12% in 2009 to 10% in 2010. North Africa alone accounted for about 30% of Africa's inflows. Libya saw the largest increase of 40% but this was short-lived due to the political instability in that country. Ghana and Nigeria were the biggest recipients in 2010 but while Ghana saw a considerable increase, Nigeria saw a significant decline much larger than Ghana's increase and so left the West African sub-region continuing to see a decline in total inflows. West Africa's major recipients' main factor was their oil industries. Ghana was just beginning to receive high capital and infrastructural investments in its oil industry; on the other hand, Nigeria was consolidating its leadership in oil production in the region but had adverse threats from the rebels in its north.

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Inflows to southern Africa also fell by 24%. The major recipients were South Africa and Angola. South Africa's receipts fell by more than 70% to $1.6 billion which was less than a sixth of its 2008 level. Angola also saw a decline of 15%. These falls were against the background of oil companies such as Shell and BP divesting their downstream operations in more than 22 countries. Inflows to Central Africa increased in 2010 to about $8 billion and Eastern Africa to $3.7 billion. Chad, DR Congo, Equatorial Guinea and Gabon who received the largest investments in Central Africa were all due to oil related investments with some telecoms investment in DR Congo. Flows to East Africa increased marginally in 2010 after a significant dip in receipts by Madagascar, the region's largest recipient of 19%. Uganda and Tanzania continued to maintain a stable level of FDI inflows. The year 2011 followed the trend of 2010 with the only difference being marginal increases in FDI inflow in sub-Saharan Africa and large falls in the North. Inflows to Africa stood at $42.7 billion with countries below the Sahara accounting for 86% ($36.9billion). It is important to note that the north had traditionally attracted about a third of total inflows. Flows to West Africa were mainly destined for Ghana and Nigeria who accounted for about 75% of total FDI to West Africa. West Africa contributed around 44% of entire flows to Sub-Sahara Africa and 38% of total flows to Africa in 2010 making the west the biggest recipient region in that year after seeing a growth of 36% (for West Africa).

The bulk of FDI in Central Africa goes to three commodity-rich countries, Congo, Equatorial Guinea and the Democratic Republic of Congo. Although FDI inflows to Congo went up by large margins, flows to DR Congo were so weak that it resulted in a drop in the total for the sub-region by about 10.2% to $8.53 billion. Countries in the southern parts recovered strongly after a 78% decline in 2010 to double inflow to $6.37 billion in 2011. Inward FDI inflows to Uganda and Equatorial Guinea were $792 million and $737 million respectively in 2011.

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In 2012, inflow to the region stood at $50 billion posting an increase of 5% above the 2011 value. Apart from West and Southern Africa, all other sub-regions saw increases. Egypt was the major recipient in the north and the region as a whole saw 35% rise in its inflows. Morocco and Tunisia saw marginal increases.

In 2013, Africa continued to see a growth in its FDI receipts by 4% to $57 billion largely due to local and foreign market-seeking and infrastructural investments. With a growing size of Africa's middle class, significant investments went into consumer-oriented sectors such as food, IT, tourism, finance, and retail. All sub-regions saw a downward dive in receipts except the Eastern and Southern African regions. The rise in the south was driven mainly by South Africa and Mozambique with the region seeing almost twice the 2012 total inflows as investors focused much on infrastructure. Relatively also, these two regions are politically stable and peaceful compared to countries in the North, Central and West Africa. Ethiopia and Kenya led the drive in the East as investors got increasingly interested in the presence of diverse industries in the region. That notwithstanding, the level of FDI inflows to East Africa in 2013 was less than half of the total inflows to Africa. The North and West Africa saw declines largely due to political insecurity and policy uncertainty and falling commodity prices. Overall, the North and West Africa attracted $15 billion and $14 billion respectively compared to $13 billion and $6.2 billion to the Southern and Eastern Africa. Thus, even though inflows to West and North Africa fell, strong increases in the Southern and Eastern Africa caused overall inflows to the continent to rise.

Intra-Africa FDI was led largely by three countries including Kenya, South Africa, and Nigeria. Intra sub-region flows were not significant in 2013 compared to inter sub-regional flows. For landlocked and non-oil exporters, FDI remains a major source of foreign capital.

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In 2014, FDI inflows to Africa remained stable at $54 billion with the services sector of the African economy dominating FDI attraction. That represents about 4% of global FDI in 2014 and 8% of developing country FDI which is quite low. Asian countries were the biggest gainers among developing countries. The African economy in 2014 was service driven and manufacturing continued to decline in the region. The services sector quadrupled between 2001 and 2012. Countries in the north saw a decline in total FDI flows by 15% to $12 billion while countries below the Sahara saw a moderate increase of 5% to $42 billion. West Africa attracted $13 billion, a decline of about 10% due to the outbreak of Ebola, conflicts in Nigeria and Mali and falling commodity prices on the world market. Countries in the south saw a decline of 2% to $11 billion. Countries in the East and Central Africa FDI inflows rising by 33% and 7% respectively to $12 billion and $7 billion.

The top 5 recipients of FDI in Africa in 2014 were Egypt, South Africa, Nigeria, Congo, and Mozambique. Ghana and Morocco were the other countries which together with the top five received $3 billion and above. In the West African sub-region, only Nigeria and Ghana received more than $3 billion. Four other countries received between $1 billion and $1.9 billion. More than half of African countries received less than $1 billion in the year 2014.

Nonetheless, African countries have been performing poorly in terms of FDI outflow (UNCTAD, 2014). This may be partly due to the investment gap on the continent and hence the need to invest internally. There was a sharp decline of about $3billion (from $16 billion to $13 billion) in FDI outflow between 2013 and 2014. South Africa, Nigeria, and Kenya remain the top three countries as far as FDI outflow is concerned over the past five years. The total increase in FDI outflows for Africa has averaged about 1% of global flows between 2012 and 2014.

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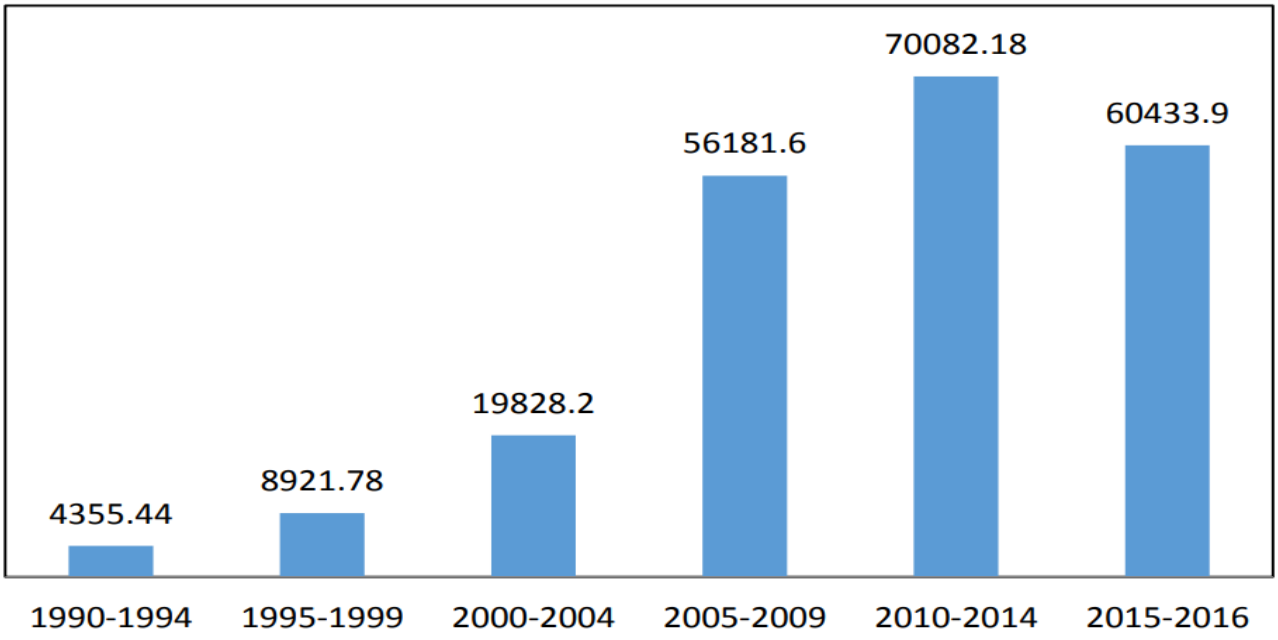
Whereas the global inward FDI flows increased almost 8.8 times, the corresponding figure for Africa displays an exponential increase of almost 14 times; from an annual average of US$4355.4 million in the 1990-94 period to US$60433.9 million in the 2015-2016 period (see figure 2.1 below). FDI flows to Africa continued to slide in 2017, reaching $42 billion, down 21 per cent from 2016. The decline was concentrated in the larger commodity exporters. The slump in FDI flows to Africa was due largely to weak oil prices and lingering effects from the commodity bust, as flows contracted in commodity-exporting economies such as Egypt, Mozambique, the Congo, Nigeria and Angola. Foreign investment to South Africa also contracted, by 41 per cent. FDI inflows to diversified exporters, led by Ethiopia and Morocco, were relatively more resilient.

Figure 2.1: Africa's Average Flow of FDI in US$ Millions



Source: Author's computation

2.4 Review of Theoretical Literature

The global trade and specialization emphasized by the works of Smith (1776), Ricardo (1817), and Smith & Cannon (1937) were later developed into theories of Foreign Direct Investment. Smith

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and Cannon (1937) asserted that given an amount of labour and capital, a country with more of these inputs of production would be able to produce more and put for export than its closest competing country to establish a trading relationship. This is known as the absolute advantage theory. With Smith's theory, deficient in explaining the process by which trade can occur between two countries when one is not producing for sale, Ricardo (1817) comes to offer an in-depth explanation of Smith's absolute advantage theory. He explains FDI using a comparative analysis between two countries producing different products with perfect factor mobility. Ricardo's analysis points to the fact that factors of production (labour and capital) are domestically mobile, but not internationally. Ricardo's theory also fails to deal with capital flights across borders. His argument on perfect factor mobility also makes FDI impossible because of perfect market information.

Kindleberger (1969) comprehensively reviewed theories of foreign direct investment along the lines expressed by Hymer (1976). He asserts that in a world of pure competition, foreign direct investment could not exist. Denisia (2010) held that if markets were efficient, with free entry and exit; then participating in the global economy would be done only through international trade.

In an attempt to extend Ricardo's (1817) theory of comparative advantage, Mundell (1957) developed a model encompassing two countries, combining two inputs (capital and labour) to produce two products. In advancing arguments for international trade, Mundell (1957) asserts that trade could occur between two countries; with each having a comparative advantage in labour and capital and producing with two identical production functions. In his analysis, Mundell failed to establish a theory for FDI because the nature of international investment considered included portfolio investments which are short-term in nature. This section of the research thus, elaborates

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the basic concepts of some of the theories that underpin the topic of study which are outlined in the succeeding subsections.

2.4.1 Internalization theory of FDI

FDI can be described differently with emphasis placed on intermediary technology and inputs (Buckley & Casson, 1976). According to Henisz (2003), the theory of international investment is gradually shifting to the determinants of FDI at the industry and firm levels rather than country level. The multinational corporations (MNCs) has been analysed a wider spectrum advanced by Coase (1937). The hypothesis they held came to be referred to as the theory of internationalisation as they focused on this reality concerning the establishment of MNCs. Their proposition of this theory was dependent on some suggestions which incorporate firms' benefits in a market that is flawed and internalisation of business sectors over the world necessitate the setting up of MNCs. When markets are imperfect, there is a motivation to sidestep them to make some gain. At the point when internationalisation includes directly establishing corporations across various nations, then it fundamentally implies FDI.

2.4.2 Eclectic Paradigm of FDI

During the 1970s, the famous and far reaching hypotheses of FDI remained the one propounded by Dunning which is referred to as the eclectic paradigm. Dunning (1977 & 1979) consolidated the principle of inconsistent market-based speculations; the oligopolistic and the internationalisation hypotheses – and included another measurement as location hypothesis to clarify why firms open outside auxiliaries. Location hypothesis responds to the huge inquiries of who produces what products or administrations in which areas, and why. Area hypothesis has

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likewise been consistently utilised by scientists in attempting to fathom the components that are viewed as when setting up an MNC unit. In light of the above mentioned, Dunning (1993) propounded his theory called the eclectic paradigm or OLI framework. Dunning recommended that a firm would take part in FDI if three conditions were satisfied, for example, having an advantage of possession more than other competing firm, having a benefit by internalising these favourable circumstances as opposed utilising the market to move them to outside firms, and having some location advantages in utilising a company's proprietorship focal points in a location either than the investor's own country.

Dunning (1980) stated that the "OLI triad of variables in determining FDI and MNCs activities may be likened to a three-legged stool; each leg is supportive of the others, and the stool is only functional if the three legs are evenly balanced".

This prototype has contributed immensely in the prevailing debate about FDI by combining a number of harmonising views by pointing out relevant factors that derive the operations on MNCs. He advanced this paradigm by integrating several prior theories on FDI. Dunning's Ownership, Locational and Internalization (OLI) theory gives credence to monopolistic advantage and firm-specific theories of imperfect market developed by Kindleberger (1969) and Hymer (1976) respectively. Makoni (2015) asserted that Dunning's OLI theoretical framework remains the most famous and widely used theory of FDI till date. Dunning postulates that, firms entering a foreign market should possess certain advantages that would lead to producing at a lower cost through better coordination and experience, which leads to higher profit margins. The company may also possess certain better assets than firms already operating in the country they may be entering. He referred to this as Ownership Advantage. Denisia (2010) grouped this advantage into three:

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1. Monopoly advantages which enable firms to monopolise markets because of privileged access to limited resources through patents, trademarks, etc.

2. Technology that allows a firm to be more innovative in production and;

3. Benefits from large scale productions which allows MNEs access to huge capital.

These advantages are specific property competencies possessed by firms that enable them to enjoy higher marginal profit and lower marginal cost relative to their competitors within a market when they relocate to foreign countries.

Location-specific factors must, therefore, be considered when relocating to foreign economies. The factors are key to recipients of foreign investments by transnational corporations. The economic factors to consider includes the cost of transport, telecommunication, and the general infrastructure level of the country. The specific government decisions that stimulate FDI must also be considered under political factors. The culture diversity and geographical distance are key determinants of social influences (Denisia, 2010). Recipients of FDI must possess facilities and natural resources that would complement the advantages possessed by foreign firms.

Boddewyn (1985) asserts that companies have a higher probability of engaging in FDI and producing in foreign countries if they enjoy more ownership advantages. The companies would, therefore, internalise these advantages to become more profitable while producing outside the country of origin. If companies possess these advantages, then it would be more profitable to enter foreign markets themselves than leasing, selling patents, and issuing copyrights or giving franchises. In other words, the ability of a company to enter into Greenfield investment or the acquisition of an existing company depends hugely on the extent to which investors are able to control both ownership and location advantages internally compared to leasing production.

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The OLI theory, therefore, emphasises that firms possess different strengths and advantages. They also face different economic, political and social threats and opportunities. How companies would simultaneously manage its international presence using the OLI framework is key in determining the success or otherwise of MNEs. Dunning's eclectic theory is, therefore, the fundamental theory for this study.

2.5 Review of Empirical Literature

The concept of Foreign Direct Investment (FDI) has been defined in several ways over time. The description of FDI that has enjoyed most citations was provided by the Organisation for Economic Co-operation and Development (OECD). This body held that, "FDI is an investment operated with at least 10% of shareholding by a direct investor in a direct investment enterprise of a host country in purpose to have a lasting interest" (OECD, 1996). Throughout literature, FDI has been examined in relation to several aspects of the economy and wellbeing. Some of these are reviewed in the succeeding sections.

2.5.1 Empirical studies on FDI and Economic Growth

FDI has been considered to be the path for the growth of most economies be they developed or developing (Handlu & Uniwersytetu, 2012; Antwi et al., 2013). For example, in developed countries, the growth in the economies was found to be largely and constructively influenced by FDI (Ridzuan, Ismail & Che Hamat, 2017), contribute to the increase of best environmental practices and clean environment promotion (Tamazian, Chousa & Vadlamannati, 2009; Franc, 2015), and increase employment due to work force demand, enhance life expectancy due to better medical assistance and eradicate poverty (Yahouedeou et al., 2018; Voica, Panait & Haralambie,

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2015). For the African continent, the findings of Ndambendia and Njoupouognigni (2010) showed solid evidence supporting the assertion that the growth in the economies are driven by FDI inflows (Handlu & Uniwersytetu, 2012). This aforementioned claim of the contributions of FDI to boosting growth in economies was backed by Seetanah and Khadaroo (2007). With the purpose of probing more into this impact of FDI in the past twenty years and its importance in less developed countries, Handlu and Uniwersytetu employed a linear regression model on data from 34 countries in the Sub-Saharan African. Their results strongly supported the claim that FDI is a vehicle that drives the growth in the economies in the sub-Saharan African (Handlu & Uniwersytetu, 2012). Bezuidenhout (2009) raising concerns of the high official aid to Africa in 2005, stretched the debate to analyse the impact of official aid and FDI on economic growth, particularly in southern Africa. He used panel data from 1990-2005 of 17 Southern African countries using GDP per capita as the dependent variable; he found a negative relationship between FDI and economic growth in southern Africa (Bezuidenhout, 2009). Ayanwale (2007) used data from 1970 to 2002 to investigate the impact of manufacturing FDI on Nigeria's economic growth and made use of the ordinary least squares and the 2SLS method. They were more in favour of the positive contribution of FDI on Nigeria's economic growth and thus, recommended that there is the need for it to be encouraged. In another study conducted by Nkechi (2013), human capital was used as a vehicle for FDI inflows improvement and the positive impact of FDI on economic growth in Ghana, found that sustaining FDI was a positive instrument of economic growth in the long run (Nkechi, 2013). This was also supported by other studies which used time series data with FDI as dependent variable from 1980-2010, confirming the robustness of FDI in economic growth in Ghana by (Antwi et al., 2013). Contrary to these group of authors supporting FDI importance in African countries' economic growth, authors such as Frimpong and Abayie (2006) were more of the view

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that such a link never existed. Findings of different empirical studies likewise indicate the contribution or lack of it by FDI to African countries economic growth which is one key pillar of sustainable development achievement. Hence, bearing in mind the consensus in the literature on the view of economic growth as a means to a country's sustainable development, FDI may be taken economically as a vehicle for the achievement or not of sustainable development (Idoko, 2015).

2.5.2 FDI, growth, and development in Africa

Africa as a continent is trying to position itself better by putting in place the right policies and programmes in order to attract FDI flow into the continent. As Görg and Greenaway (2004) put it, cross-border investment remains probably the most visible in terms of drivers of globalisation. UNCTAD (2002) noted that most African countries have moved away from just opening their economies up to FDI to the current happenings of setting up government agencies with the sole mandate of marketing investment opportunities in their respective countries to the world. For instance, the Ghana Investment Promotion Centre (GIPC), the Nigerian Investment Promotion Commission (NIPC), Liberia National Investment Commission (LNIC), Kenya Investment Authority (KIA) and the Ugandan Investment Authority among others are government agencies responsible for rallying both domestic and foreign investors to set up businesses in their respective countries.

African countries, in addition to institutionalising these investment bodies, also provide numerous incentives to attract foreign investors from both within the sub-region and overseas. Though most of these policies by the various governments are in the form of fiscal incentives like tax holidays, tax rebates, subsidies, exemptions on port duties, etc., financial incentives and rules-based

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incentives are also policies of most of these governments. Financial incentives like guarantees, loans, and grants are mostly granted to firms with specific technology that are needed to embark on projects that are essential to governments. Tradable permits, subsidies for pollution control, environmental permits and the protection of the fundamental rights of workers are some forms of rules-based incentives. Though these incentives should bring about the need impact in terms of attracting FDI to host countries, Jauch and Endresen (2002) sees the importance of these investment incentives as a matter of varied opinions.

Globalisation is one of the important tools that drive trade among countries. The movement of goods, persons, and companies across continents can chiefly be explained by globalisation. Though Africans throughout ancient times have a history of boasting of merchants trading in clothing, leather, minerals and other essential minerals, globalisation has set aside Africans superiority in terms of trade and industry. With colonialism and the continuous interest of former colonial masters on the trading activities of African countries, many MNEs sprung up on the continent securing the respective interests of various countries (Mwilima, 2003). This role is played by multinationals through direct ownership of businesses, by franchising and being given the right as the sole buyer of certain produce coming from Africa. This has given rise to the increase in FDI activities on the continent, though African's share of FDI still remains low as compared to other regions of the world (UNCTAD, 2015).

The impact of natural resources in the attraction of FDI has received ample attention in the literature (Asiedu, 2005; Alsan, Bloom & Canning, 2006; Asiedu, 2006). In his study, Asiedu (2005) used a panel data for 22 African countries and examined the impact of natural resources and market size in relation to government policies and institutions, infrastructure on FDI. The main findings of the study suggest that natural resources and large market size promote FDI. Less

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corruption, educated population, trade openness and infrastructure are equally important for the attraction of FDI. As a matter of policy, these results required that African countries that are relatively small in terms of market size with insufficient natural resources would only benefit from foreign direct investment if they have strong institutions and vibrant economic policies.

Targeted FDI has also been argued as one of the ways by which countries would benefit from FDI inflow to propel economic growth. Adams (2009) in explaining the absorptive capacity of local firms to aid economic growth, concluded that sub-Sahara African countries need a targeted approach to FDI to increase economic growth. This can be achieved through a collaborative effort between MNEs and government. Görg and Greenaway (2004), however, could not settle the doubt in the literature about whether targeted foreign direct investment is a factor for positive growth in an economy, though they highlight the role played by infrastructural development, favourable labour condition, a reliable communication system as well as the soundness of the prevailing macroeconomic climate as important factors for economic growth.

A recent study, foreign direct investment was found not to be one of the factors that derive industrialisation on the African continent (Gui-Diby & Renard, 2015). This result suggested that FDI is unable to significantly lead to industrialisation of African countries. The reason for the failure of FDI to contribute to the industrialisation efforts of African governments is due to the poor enabling business environment on the continent. The results also indicate that most MNEs that invest directly in these African countries are resource-seeking in nature and hardly helps develop local enterprises. Gui-Diby and Renard (2015) therefore suggested that, African policy makers should design national investment policies aimed at attracting FDI as well as designing and implementing policies to streamline the activities of MNEs.

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2.5.3 The Social Influence of FDI

Researchers are more concerned with the social impact of FDI on the African continent. Studies on the impact of FDI on Human capital or welfare improvement on the continent have been conducted. The overwhelming upsurge of FDI inflows into the African continent necessitated the analysis of the link between foreign direct investment and human capital or welfare improvement and its likelihood of supporting sustainable development (Tamer, 2013). Nkechi (2011) in an empirical study on FDI impact on Ghana's economic growth, established that, FDI impacted human capital through capital creation improvement or country quality of capital stock. Ndeffo (2010) in examining the nexus between foreign direct investment and human capital development in sub-Saharan Africa. His findings pointed out that FDI contributes to human capital development through its participation in children education on the continent regardless of the less proportion of FDI oriented to the sector. Empirical studies divulge the usefulness of FDI in poverty reduction or welfare improvement on the continent, especially in the Lower-middle, Upper-middle, or High-income African countries (Tamer, 2013). To keep the consistency of the results on the relationships hitherto deliberated, few authors have chosen a group of African countries that share the same geographical and socio-economic realities. In this light Soumare (2015) conducted an empirical study using several variables among which human development (proxy by welfare measurement) and FDI were the central variables. The key findings showed that there exist a strong and significant support of FDI flows to welfare improvement in the North African region.

Technology transfer for immense production is broadly recognised as one of the benefits of FDI. Dissimilar to developed countries with strict environmental rules, less developed countries have lithe environmental regulations which make it possible to pollute the environment through technology transfer. In the face of massive amount of FDI received by the African continent,

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several authors have focused their study on FDI's environmental impact. For example, Bokpin (2017) investigated foreign direct investment and Environmental Sustainability nexus on the African continent.

2.5.4 Benefits of FDI to host countries

Behera (2015) in examining the spill over effects of FDI on manufacturing firms in India, found a compelling evidence holding that local companies gain from the vertical presence of multinational companies. But local firms stand the chance to benefit from foreign firms if and only if they possess the necessary absorptive capacities like infrastructure, technology, and skilled labour. Interestingly, companies with advanced technology and robust research and development units stand a greater chance of benefiting from the spill over effects of FDI.

UNCTAD (2015) reports the relative importance of FDI over other forms of international investments. Though African countries are receiving relatively lower FDI, it remains a very pertinent source of external development finance for countries because of its greater stability and its more diverse impact on the development of national economies. Investigating how FDI affects each aspect of human development like health, education and income aside the overall impact on economic growth is therefore a worthy project.

2.6 Chapter conclusion

This chapter expounded comprehensively on the existing literature on foreign direct investment and the wellbeing of the people in host countries. The researcher has presented literature thematically on the key concepts. Theoretical and empirical literatures have been reviewed in this section of the study by highlighting previous findings and their contributions.

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CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Chapter Introduction

This chapter expounds on the type of methodology adopted by this study to address the intended objectives. It provides an in-depth description of the population and the sample size, the source of data as well as the design of the study which comprises variables and their justification and the research models used for the estimations.

3.2 Population and Sample

To extend the literature regarding how Foreign Direct Investment (FDI) contributes to human wellbeing and especially for the promotion of Human Development (HD) in terms of each dimension of Sustainable Development (SD) achievement in Africa, this present study used a panel dataset from African countries. The study involved a sample of 52 countries in Africa that had a reasonable number of data points of the selected variables during the study period. The study made use of the annual data of these African countries over a period of 28 years ranging from 1990 to 2017. The researcher restricted to this study window because the available data of the dependent variables only started from 1990 onwards in the UNDP database.

3.3 Research Design and Models

The study used thirteen (13) relevant variables in four (4) comparable empirical models that were estimated to obtain the optimal outcomes in addressing the objectives. These variables were

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subjected a basic empirical analysis for purposes of testing our research hypotheses in addressing our stated objectives.

The Seemingly Unrelated Regression (SUREG) model as advanced by Zellner (1962) was adopted for the estimation of the four models simultaneously as a system of equations. Referencing the works of Zellner (1962) and Fiebig (2001), the SUREG models contain a number of individual connections that are interrelated by the way their error terms are related. The dependent variables of the four equations in this study are influenced by similar shocks and all things considered, their error terms are expected to be related. The presence of this relationship shall be ascertained using the correlation matrix of residuals and the Breusch-Pagan test of independence before proceeding to use SUREG model technique. The inspiration for utilisation of SUREG was to obtain a more efficient estimation by consolidating data on various conditions. The SUR estimator is a speculation of a direct relapse model that comprises a few relapse conditions. Every one of these conditions are having its own dependent variable and conceivably different independent variables with varied exogenous informative factors. Every model is obviously a standard linear model that could be examined without others and can be evaluated independently, which is the reason their relationship is said to be "seemingly" since they appear as though they are not related at all.

Fiebig (2001) held the view that the SUR models could be estimated equation-by-equation applying an ordinary least squared (OLS) regression. Such estimates are consistent however, they are not in particular as efficient as the SUR method. This is because the SUR leads to feasible generalised least squares using a specific form of the variance-covariance matrix.

According to Cameron and Trivedi (2010) the SUR model consists of m linear regression equations for N individuals. The j^{th} equation for individual is:

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$$Y_{it} = \sum_{j=1}^{k_i} \boldsymbol{X}_{itj}\,\boldsymbol{\beta}_{ij} + \mu_{it}, \qquad (3.1)$$

$t = 1, 2, \ldots, T$; $i = 1, 2, \ldots, \mathrm{M}$; $\mathrm{j} = 1, 2, \ldots, k_i$

Where Y_{it} is the t^{th} observation on the i^{th} dependent variable which is to be explained by the i^{th} regression equation, $\boldsymbol{X}_{itj}$ is the t^{th} observation on j^{th} explanatory variable appearing in the i^{th} equation, $\boldsymbol{\beta}_{ij}$ is the coefficient associated with $\boldsymbol{X}_{itj}$ at each observation and μ_{it} is the t^{th} value of the random error component associated with i^{th} equation of the model. The number of observations j is assumed to be large, so as to do the analysis we assume $j \to \infty$, since the number of equations M remains fixed. With all observations stacked, the model for the j^{th} equation can be written as:

$$Y_j = X_j\beta_j + \mu_j \ , \qquad (3.2)$$

where, Y_j and μ_j are M×1 vectors, X_j is an M × k_j matrix, and β_j is a k_j × 1 vector.

We then stack the m equations to give the SUR model as:

$$\begin{pmatrix} y_1 \\ y_2 \\ \vdots \\ y_m \end{pmatrix} \equiv \begin{pmatrix} x_1 & 0 & \cdots & 0 \\ 0 & x_2 & \ldots & \vdots \\ \vdots & \vdots & \ddots & 0 \\ 0 & \ldots & 0 & x_m \end{pmatrix} \begin{pmatrix} \beta_1 \\ \beta_2 \\ \vdots \\ \beta_m \end{pmatrix} + \begin{pmatrix} \mu_1 \\ \mu_2 \\ \vdots \\ \mu_m \end{pmatrix}$$

Cameron and Trivedi (2010) pointed out that the SUR model is usually estimated using the feasible generalized least squares (FGLS) method. This model can be observed as either the simplification of the general linear model where certain coefficients of matrix are restricted to be equal to zero, or as the generalisation of the general linear model where the variables on the right side of the equations are allowed to be different in each of them. In our study, we used SUR model having

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the same group of regressors and different dependent variables in each of the four models. The models estimated as adopted from Yahouedeou et al. (2018) are displayed below:

$$HDI_{it} = \alpha_{11}FDI_{it} + \alpha_{12}LogGDPPC_{it} + \alpha_{13}GCF_{it} + \alpha_{14}TRDOP_{it} + \alpha_{15}POLITY2_{it} + \alpha_{16}CLIB_{it} + \alpha_{17}INF_{it} + \alpha_{18}FDEV_{it} + \alpha_{19}FDI * FDEV_{it} + \theta_i + \rho_t + \varepsilon_{it} \quad (3.3)$$

$$LEI_{it} = \beta_{21}FDI_{it} + \beta_{22}LogGDPPC_{it} + \beta_{23}GCF_{it} + \beta_{24}TRDOP_{it} + \beta_{25}POLTY2_{it} + \beta_{26}CLIB_{it} + \beta_{27}INF_{it} + \beta_{28}FDEV_{it} + \beta_{29}FDI * FDEV_{it} + \varphi_i + \sigma_t + \omega_{it} \quad (3.4)$$

$$EDUI_{it} = \gamma_{31}FDI_{it} + \gamma_{32}LogGDPPC_{it} + \gamma_{33}GCF_{it} + \gamma_{34}TRDOP_{it} + \gamma_{35}POLITY2_{it} + \gamma_{36}CLIB_{it} + \gamma_{37}INF_{it} + \gamma_{38}FDEV_{it} + \gamma_{39}FDI * FDEV_{it} + \vartheta_i + \rho_t + \pi_{it} \quad (3.5)$$

$$INCI_{it} = \delta_{41}FDI_{it} + \delta_{42}GCF_{it} + \delta_{43}TRDOP_{it} + \delta_{44}POLITY2_{it} + \delta_{45}CLIB_{it} + \delta_{46}INF_{it} + \delta_{47}FDEV_{it} + \delta_{48}FDI * FDEV_{it} + \nu_i + \eta_t + \mu_{it} \quad (3.6)$$

This study sought to estimate the impact of FDI on HDI and each of its three-dimensional indices. This helps to explain which dimension of HDI drives the overall contribution of FDI on Human Development improvement on the African continent. The Human Development Index (HDI) and its dimensions such as Life Expectancy Index (LEI), Education Index (EDUI) and Income Index (INCI) are the dependent variables representing sustainable human development and the

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independent variable represented by FDI with the various control variables in the four specified equations.

The research used STATA version 15.0 and Eviews version 10 to do the estimations and the analysis as outlined in the research design to test all the research hypotheses.

3.3.1 Source of Data and Variables

This current study used the secondary data in the estimations to achieve the test for the hypotheses outlined in the introductory chapter. The data is obtained from five credible sources which included the Human Development Index Annual Report from the United Nations Development Programme (UNDP) database, World Bank's World Development Indicators (WDI), the Freedom House, the Polity IV Project, and the World Bank's Global Financial Development Database. The data on Human Development Index (HDI), Life Expectancy Index (LEI), Education Index (EDUI), and Income Index (INCI) were all taken from the UNDP database. The data on Foreign Direct Investment (FDI), Gross Capital Formation, Trade Openness (TRDOP), Gross Domestic Product Per Capita (GDPPC), and Inflation (INF) were extracted from the World Bank's World Development Indicators (WDI). Also, the data on Civil Liberty (CLIB) and Polity Index (POLITY2) were sourced from the Freedom House and the Polity IV Project respectively. Finally, the data for Financial Development proxied by Private Credit was sourced from World Bank's Global Financial Development Database. The data on the selected variables covered the period from 1990 to 2017 for 52 countries in Africa as indicated earlier. The various variables, their descriptions and their sources are summarised in table 3.1 below.

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Table 3.1: Variables and their sources

Variables	Variables description	Data sources
Dependent Variables		
HDI LEI EDUI INCI	Human Development Index Life Expectancy Index Education Index Income Index	HDI and its Dimensions are all from the Human Development Report (HDR) of the UNDP
Independent Variable		
FDI	Per Capita FDI	World Bank's World Development Indicators (WDI)
Control Variables		
LogGDPPC	GDP per Capita	WDI
GCF	Gross Capital Formation per GDP	WDI
TRDOP	Trade Openness	WDI
CLIB	Civil Liberty	www.FreedomHouse.org
POLITY2	Polity Index	Polity IV Project Report
INF	Inflation	WDI
FDEV	Financial Development	World Bank's Global Financial Development Database

Source: Author's compilation (2019)

3.3.2 Variables Justification

DEPENDENT VARIABLES

To analyse how FDI has impacted Sustainable Development (SD) on African continent, a number of variables can be used to achieve it. For instance, GDP per capita or poverty incidence indicator are mostly used in studies concerning FDI and welfare relationship analysis. GDP per capita is limited in that, it only captures the economic side, while the poverty incidence indicator, although being a better indicator for human well-being improvement analysis, lacks year-on-year long time data (Yahouedeou et al., 2018). Therefore, for better analysis, the UNDP's Human Development

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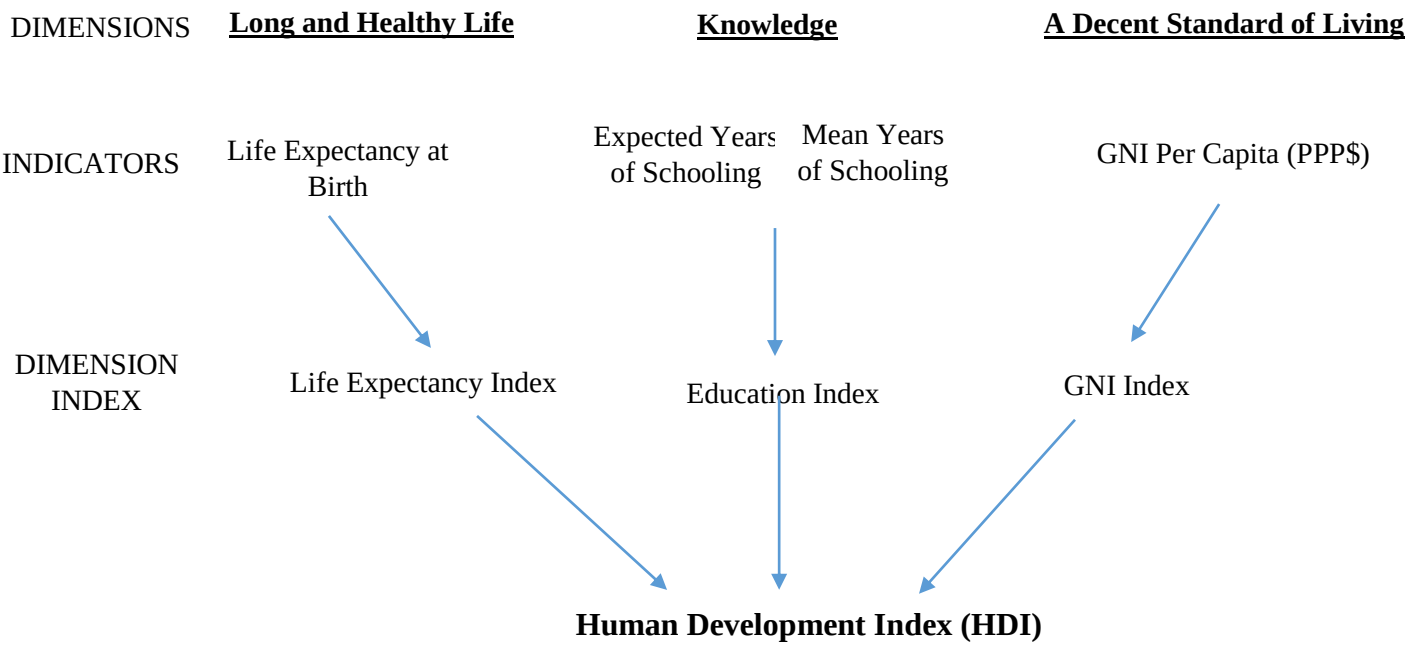
Index (HDI) has been selected as the dependent variable in model 1. In investigating FDI's disentangled effects on each aspect of human development as the main motive of this study and for purposes of targeted policies, the three Dimensions of HDI which are; Life Expectancy Index (LEI), Education Index (EDUI) and Income Index (INCI) are used as dependent variables in each of the remaining three (3) models. These are good indicators for human development analysis as they encompass the very key components of a complete well-being of an individual (i.e. a long and healthy life, knowledge and a decent standard of living). These indices are created by United Nations Development Programme (UNDP) as illustrated in figure 3.1 below as an ultimate criterion for assessing the development of the people in a country.

Figure 3.1: HDI and its dimensions



Source: Human Development Indices and Indicators: 2018 Statistical Update

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INDEPENDENT VARIABLES

As proposed across the literature, foreign direct investment is a crucial contributor of most economic growth processes on the African continent. FDI is described by the World Bank's human development indicators as; "Foreign direct investments are the net inflows of investment to acquire a lasting management interest (i.e. 10 percent 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 as shown in the balance of payments. This series shows net inflows (new investment inflows less disinvestment) in the reporting economy from foreign investors". Taking into account the numerous drivers such as human capital improvement, better political environments among others, its impacts are often beneficial to the social, environmental and political development. Thus, FDI can be considered as a direct and indirect factor of human development, which has a positive impact on human well-being improvement and HDI improvement. A number of empirical studies on related subject areas regarding the African continent have used varied form of the FDI variables as independent variables. For instance, Tamer in his study, used FDI flows per capita, FDI as a percentage of GDP, ODA flows per capita and ODA as a percentage of GDP (Tamer, 2013). Other studies used some other measures of FDI. This current study in order to obtain accurate analysis of individual level estimations, adopted the Per capita net FDI inflows (FDIPC) as the independent variable. FDI inflows per capita is a better choice because it gives a real estimation of FDI inflows per person and can better capture the impact of FDI on African country population improvement.

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CONTROL VARIABLES

The control variables considered by this study are economic variables that are able to translate to economic and social performance that derive the wellbeing of individuals in an economy as well as relevant institutional variables that affect human development.

Gross Domestic Product per capita (GDPPC): From the World Bank's world development indicators, GDPPP can be defined as, "GDP per capita is gross domestic product divided by mid-year population. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources". It expresses the productivity of a country's workforce in a given nation expressed per each member of the population. Theoretically, the better the GDPPC, the better the real income per individual. Hence, the higher the individual's real income, the higher is the possibility for the individual to purchase more goods and services to contribute to their well-being. Hence, GDPPC is expected to have a positive relationship with the dimensions of human development if higher and negative if low.

Gross Capital Formation (GCF): According to the World Bank's world development indicators, GCF can be defined as, "Gross capital formation (formerly gross domestic investment) consists of outlays on additions to the fixed assets of the economy plus net changes in the level of inventories". Fixed assets include land improvements (fences, ditches, drains, and so on); plant, machinery, and equipment purchases; and the construction of roads, railways, and the like, including schools, offices, hospitals, private residential dwellings, and commercial and industrial buildings. Inventories are stocks of goods held by firms to meet temporary or unexpected fluctuations in production or sales, and work in progress. According to the 1993 SNA, net acquisitions of

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valuables are also considered capital formation". Based on the analysis above by World Bank, theoretically, an increase in GCF is able to increase a country's GDP. To create more capital formation, the government should receive more taxes. This deprives households of satisfying their social needs for paying their taxes but at the same time give them better social living environment because of the reinvestment of the savings mostly towards social fields by the government. Thus, GCF is used to capture the size of the government investment in the nation. Indeed, it can be justified by the fact that capital formation is high in governments which constantly invest in their populations' well-being enhancement through investment in educational and health-care facilities. Therefore, the expectation is a positive relationship of GCF with the dimensions of HDI.

Trade Openness (TRDOP): Trade is the aggregate of export and imports of merchandise and enterprises estimated as a portion of total national output. According to Sikwila (2014), trade openness improves the balance of payments of a country and favourably secures the repatriation of profits by MNEs. With an open economy, firms are able to easily import raw materials, machinery and other inputs for production. Masuku and Dlamini (2009) though found openness to trade statistically significant to the determinant of FDI in Zimbabwe, concluded that trade openness alone is inadequate to attract foreign investments. They added that, a good infrastructure in the form of good communication system, cheaper and reliable energy as well as good road network linking the industrial area with ports, complements openness of an economy to enhance the inflow of FDI. The volume of import and export scaled by GDP of the host country is used as a proxy for trade openness. Following the literature, we hypothesise a positive relationship between HDI and its dimensions and trade openness.

Civil Liberty (CLIB): Freedom House defined this variable as, "The Civil Liberties index from the Freedom House evaluate the following: freedom of expression and belief, associational and

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organisational rights, rule of law, and personal autonomy and individual rights. The rating ranges from 1 (strong liberties) to 7 (no liberties)". As a result of the realities faced by countries on the African continent in terms of civil liberties such as the presence of dictatorial regimes, this special control variable was added; civil liberties rating. Theoretically, Civil Liberties are measured on a one-to-seven scale as stated above, with one representing the highest degree of freedom and seven the lowest. It is used to capture the degree of freedom for political activism which is an aspect of human well-being since a freedom status is aimed at affecting human beings' mental and physical conditions. The lower the rating score the better.

Polity Index (POLITY2): Due to the historical facts in Africa in relation to the differences in political regimes such as Autocracy, Anocracy or Democracy, another institutional control variable was added to the models. That is, Polity Index (POLITY2). The "Polity Score" represents the government regime on a 21-point scale extending from -10 (hereditary monarchy) to +10 (consolidated democracy). For the purposes of this study, negative scores represent autocratic regimes whereas the positive scores stand for democratic regimes.

Inflation (INF): The World Bank's world development indicators where we extracted this variable defined it as, "Inflation as measured by the consumer price index reflects the annual percentage change in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals, such as yearly. The Laspeyres formula is generally used". The inflation rate is included in our models in this study because it affects the purchasing power of the people and thus the overall welfare and development.

Financial Development (FDEV): This variable is of interest to us because the financial sector is be a channel through which FDI works to impact human development in the host country. In this study, financial development is proxied by private credit. The Global Financial Development

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Report described this measure of financial development as the total credit by deposit money banks and other financial institutions to GDP ratio.

3.4 Chapter conclusion

This chapter has developed the type of methodology adopted by this study. It gave a detailed explanation of the population and the sample size, the source of data as well as the design of the study which included variables and their justification and the research model. The findings are discussed and the relevant conclusions and recommendation made in the subsequent chapters of this study.

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CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Chapter Introduction

This section discusses the findings of the study using the econometric techniques discussed earlier. The discussions are boarded on the descriptive statistics, the Pearson correlation matrices of the various models and a detailed dynamic panel results analysis with much emphasis on the link that exist between FDI and HDI and each of its three dimensions (health, education and income) in Africa.

4.2 Descriptive Statistics

The summary statics is illustrated by table 4.1 below. It gives the details of the standard statistical descriptions of all the variables in a tabular form.

Table 4.1: The Descriptive Statistics

Variable	Obs	Mean	Std.Dev.	Min	Max
HDI	1305	.48	.125	.199	.797
LEI	1456	.573	.13	.117	.866
EDUI	1306	.398	.139	.081	.729
INCI	1450	.49	.148	.114	.861
FDI	1428	77.461	281.181	-914.159	6944.371
LogGDPPC	1437	6.719	1.148	4.175	10.032
GCF	1305	.22	.157	-.024	2.191
TRDOP	1314	.705	.346	.111	3.114
POLITY2	1397	.53	5.578	-10	10
CLIB	1453	4.381	1.442	1	7
INF	1290	44.128	691.958	-11.686	23773.13
FDEV	1323	22.672	44.795	.048	906.383

Note: Human Development Index (HDI) is a measure for overall human well-being, Life Expectancy Index (LEI) is a measure for a long and healthy life, Education Index (EDUI) is a proxy for access to knowledge, Income Index (INCI) is a measure for a descent standard of living, Foreign Direct Investment (FDI) is the net FDI inflows divided by the population, Log GDPPC is the logarithm of Gross Domestic Product Per Capita, Gross Capital Formation (GCF) is a proxy for domestic investment, Trade Openness (TRDOP) is the sum of import and export scaled by GDP, Polity Index (POLITY2) measures the type of political regime, Civil Liberty Index (CLIB) measures the freedom status of a country, Inflation (INF) is the consumer price index, Financial Development (FDEV) is private credit as a percentage of GDP.

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From table 4.1 above, annual data from 52 African countries over 28 years, from 1990 to 2017 was used and summarised for a simple interpretation of the data. The Human Development Index (HDI) has a mean of 48% and this indicates that the average social and economic development of African countries is about 48% which is below average of 50%. Hence, socially and economically, African countries are fairly underdeveloped in general terms. Similarly, the mean scores of the Education Index (EDUI) and the Income Index (INCI) are 39.8% and 49% respectively. Both of which fall slightly below the global average of 50% indicating that in terms of quality education and income, Africa has performed poorly on average comparative to the global score during the steady period. However, Life Expectancy Index (LEI) is averaged 57.3% being slightly higher compared with the average worldwide. This average score of LEI illustrates that with regard to a healthy and long life, Africa performed fairly well. In general, those that performed poorly when it comes to these four human development indicators had minimum scores such as HDI (19.9%), LEI (11.7%), EDUI (8.10%) and INCI (11.4%) whereas those that performed highly well had the maximum scores of HDI (79.7%), LEI (86.6%), EDUI (72.90%) and INCI (86.10%)

The measure of FDI as a Per Capita FDI recorded a mean value of 77.461 with -914.159 and 6944.371 as minimum and maximum respectively. The log GDP Per Capita (GDPPC) was taken to scale down the figures and normalise the data size. The average log GDPPC is 6.719 and the maximum and minimum GDPPC are 10.032 and 4.175 respectively.

In Africa, the size of gross capital formation – a proxy for domestic investment has an average value of 22%. Sierra Leone had the minimum GCF/GDP of about -0.24% in 1997, while Equatorial Guinea in 1996 recorded the maximum GCF/GDP ratio of about 219.1%.

The mean value of Trade Openness (TRDOP) is 70.5%. This makes African countries relatively open to international trade and portfolio movement. The least of TRDOP of about 11.1% was

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recorded in Sudan in 1990, while an outrageous openness to trade of about 311.4% been the maximum was witnessed in Liberia in 2007.

The Polity Index (POLITY2) gave an average score of 0.53. This mean value, therefore, suggests that African countries have a weak form of democracy on average.

In terms of the institutional quality, the mean value of the Civil liberties index is 4.38. According to Freedom House, the higher the index the worse the institutional qualities of countries. The mean value of 4.38 is thus an indication of the availability of weak institutions on the continent which makes most African countries partly free.

Inflation is very important to human development especially the standard of living. The average inflation in African countries during this study window was about 44.13%. Gabon in 1991 recorded the least inflation rate of about -11.69%, while DR Congo witnessed an alarming maximum inflation rate of about 23,773.13% in the year 1994 probably due to the drastic depreciation of their currency at the time.

Financial Development (FDEV) measured by Private Credit of deposit money banks and other financial institutions as a percentage of the GDP is on average 22.67% in the selected African countries during the study period. Zimbabwe experienced the least level of financial development ratio of about 0.048% of GDP in 1990 whereas Liberia witnessed the maximum financial development ratio of about 906.38% in the year 2010. This is not surprising because 2010 was the year in which Liberia won $4.6 billion in debt relief from the International Monetary Fund (IMF).

4.3 Correlation Matrices of variables

The Pearson correlation matrices for the variables used in the regression models are presented in table 4.2, table 4.3, table 4.4, and table 4.5 for model 1, model 2, model 3, and model 4 respectively.

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Table 4.2: Pearson Correlation Matrix for Model 1

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) HDI	1.000								
(2) FDI	0.307*	1.000							
(3) LogGDPPC	0.881*	0.381*	1.000						
(4) GCF	0.328*	0.245*	0.221*	1.000					
(5) TRDOP	0.369*	0.391*	0.392*	0.302*	1.000				
(6) POLITY2	0.113*	0.009	0.081*	-0.033	0.132*	1.000			
(7) CLIB	-0.229*	-0.072*	-0.208*	-0.005	-0.198*	-0.726*	1.000		
(8) INF	-0.050***	-0.014	-0.068**	-0.042	0.051***	-0.014	0.056**	1.000	
(9) FDEV	0.200*	0.047***	0.129*	0.006	0.266*	0.170*	-0.155*	-0.031	1.000

Note: Human Development Index (HDI) is a measure for overall human well-being, Life Expectancy Index (LEI) is a measure for a long and healthy life, Education Index (EDUI) is a proxy for access to knowledge, Income Index (INCI) is a measure for a descent standard of living, Foreign Direct Investment (FDI) is the net FDI inflows divided by the population, Log GDPPC is the logarithm of Gross Domestic Product Per Capita, Gross Capital Formation (GCF) is a proxy for domestic investment, Trade Openness (TRDOP) is the sum of import and export scaled by GDP, Polity Index (POLITY2) measures the type of political regime, Civil Liberty Index (CLIB) measures the freedom status of a country, Inflation (INF) is the consumer price index, Financial Development (FDEV) is private credit as a percentage of GDP. * 1% significance, ** 5% significance and *** 10% significance levels

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Table 4.3: Pearson Correlation Matrix for Model 2

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) LEI	1.000								
(2) FDI	0.224*	1.000							
(3) LogGDPPC	0.645*	0.381*	1.000						
(4) GCF	0.215*	0.245*	0.221*	1.000					
(5) TRDOP	0.272*	0.391*	0.392*	0.302*	1.000				
(6) POLITY2	0.113*	0.009	0.081*	-0.033	0.132*	1.000			
(7) CLIB	-0.194*	-0.072*	-0.208*	-0.005	-0.198*	-0.726*	1.000		
(8) INF	-0.064**	-0.014	-0.068**	-0.042	0.051***	-0.014	0.056**	1.000	
(9) FDEV	0.205*	0.047***	0.129*	0.006	0.266*	0.170*	-0.155*	-0.031	1.000

Note: Human Development Index (HDI) is a measure for overall human well-being, Life Expectancy Index (LEI) is a measure for a long and healthy life, Education Index (EDUI) is a proxy for access to knowledge, Income Index (INCI) is a measure for a descent standard of living, Foreign Direct Investment (FDI) is the net FDI inflows divided by the population, Log GDPPC is the logarithm of Gross Domestic Product Per Capita, Gross Capital Formation (GCF) is a proxy for domestic investment, Trade Openness (TRDOP) is the sum of import and export scaled by GDP, Polity Index (POLITY2) measures the type of political regime, Civil Liberty Index (CLIB) measures the freedom status of a country, Inflation (INF) is the consumer price index, Financial Development (FDEV) is private credit as a percentage of GDP. * 1% significance, ** 5% significance and *** 10% significance levels

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Table 4.4: Pearson Correlation Matrix for Model 3

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) EDUI	1.000								
(2) FDI	0.259*	1.000							
(3) LogGDPPC	0.739*	0.381*	1.000						
(4) GCF	0.228*	0.245*	0.221*	1.000					
(5) TRDOP	0.376*	0.391*	0.392*	0.302*	1.000				
(6) POLITY2	0.239*	0.009	0.081*	-0.033	0.132*	1.000			
(7) CLIB	-0.281*	-0.072*	-0.208*	-0.005	-0.198*	-0.726*	1.000		
(8) INF	-0.042	-0.014	-0.068**	-0.042	0.051***	-0.014	0.056**	1.000	
(9) FDEV	0.234*	0.047***	0.129*	0.006	0.266*	0.170*	-0.155*	-0.031	1.000

Note: Human Development Index (HDI) is a measure for overall human well-being, Life Expectancy Index (LEI) is a measure for a long and healthy life, Education Index (EDUI) is a proxy for access to knowledge, Income Index (INCI) is a measure for a descent standard of living, Foreign Direct Investment (FDI) is the net FDI inflows divided by the population, Log GDPPC is the logarithm of Gross Domestic Product Per Capita, Gross Capital Formation (GCF) is a proxy for domestic investment, Trade Openness (TRDOP) is the sum of import and export scaled by GDP, Polity Index (POLITY2) measures the type of political regime, Civil Liberty Index (CLIB) measures the freedom status of a country, Inflation (INF) is the consumer price index, Financial Development (FDEV) is private credit as a percentage of GDP. * 1% significance, ** 5% significance and *** 10% significance levels.

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Table 4.5: Pearson Correlation Matrix for Model 4

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) INCI	1.000							
(2) FDI	0.345*	1.000						
(3) GCF	0.243*	0.245*	1.000					
(4) TRDOP	0.338*	0.391*	0.302*	1.000				
(5) POLITY2	-0.022	0.009	-0.033	0.132*	1.000			
(6) CLIB	-0.159*	-0.072*	-0.005	-0.198*	-0.726*	1.000		
(7) INF	-0.054***	-0.014	-0.042	0.051***	-0.014	0.056**	1.000	
(8) FDEV	0.083*	0.047***	0.006	0.266*	0.170*	-0.155*	-0.031	1.000

Note: Human Development Index (HDI) is a measure for overall human well-being, Life Expectancy Index (LEI) is a measure for a long and healthy life, Education Index (EDUI) is a proxy for access to knowledge, Income Index (INCI) is a measure for a descent standard of living, Foreign Direct Investment (FDI) is the net FDI inflows divided by the population, Log GDPPC is the logarithm of Gross Domestic Product Per Capita, Gross Capital Formation (GCF) is a proxy for domestic investment, Trade Openness (TRDOP) is the sum of import and export scaled by GDP, Polity Index (POLITY2) measures the type of political regime, Civil Liberty Index (CLIB) measures the freedom status of a country, Inflation (INF) is the consumer price index, Financial Development (FDEV) is private credit as a percentage of GDP. * 1% significance, ** 5% significance and *** 10% significance levels

From the correlation coefficients in the tables above, it is quite clear that most of the variables have weak relationships among themselves, except the correlation coefficient between POLITY2 Index and the Civil Liberty (CLIB) which is about -0.726. According to Kennedy (2008), if the correlation coefficient is below 0.80, then the problem of multicollinearity in a regression model is avoided. Generally, the correlation among the independent variables ranged between -0.005 and -0.726 as indicated in Tables. The least and weakest negative correlation (-0.005) occurred

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between Gross Capital Formation (GCF) and the Civil Liberty (CLIB), whiles the highest and strongest negative correlation (-0.726) occurred between the POLITY2 Index and the Civil Liberty (CLIB) in the matrices for each of the four models.

From table 4.2, the relationship between HDI and FDI, Log of GDPPC, GCF, TRDOP, and POLITY2 is positive with a statistical significance of 1%. Also, there is a negative relationship between HDI and Civil Liberty Index with a statistical significance of 1%. Likewise, there is a negative relationship between HDI and Inflation with a statistical significance of 10%. In addition, both Financial Development and the interacted term of FDI with Financial Development have positive statistical significant correlation at 1% with HDI. These strong significant coefficients of these variables suggest that they serve as a vehicle that drives HDI in the African continent and thus, they are the appropriate combination of variables for this model estimation.

Table 4.3 illustrates that, "the relationship between the dependent variable Life Expectancy Index (LEI) and FDI, Log of GDPPC, GCF, TRDOP, and POLITY2 is positive with a statistical significance of 1%. Meanwhile, the relationship between LEI and Civil Liberty Index is negative with statistical significance of 1%. While the relationship between LEI and Inflation is also negative but with statistical significance of 5%. In the same light, both Financial Development and the interacted term of FDI with Financial Development have positive statistical significant correlation at 1% with Life Expectancy Index (LEI). These strong levels of statistical significance of the coefficient of these variables show that these are the suitable drivers of a long and healthy life in African.

Table 4.4 shows that, the relationship between the dependent Education Index (EDUI) and FDI, Log of GDP Per Capita, Gross Capital Formation, Trade Openness, and Polity 2 Index is statistically significant at 1% and positive. Similarly, the relationship between EDUI and Civil

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Liberty Index is statistically significant at 1% but negative. Whereas the relationship between EDUI and Inflation is neither statistically significant at 1%, 5% nor 10%. Also, both Financial Development and the interacted term of FDI with Financial Development have positive statistical significant correlation at 1% with the quality of education (EDUI). As a result of these strong significance levels of the correlation coefficients with the exception of inflation, it is clear that they are the right drivers of improved and quality education of African countries.

From table 4.5, the relationship between the dependent Income Index (INCI) – the proxy for a decent standard of living and FDI, Log GDPPC, GCF, and Trade Openness is statistically significant at 1% and positive. However, the relationship between INCI and Civil Liberty Index is statistically significant at 1% but negative. Also, the relationship between INCI and Inflation is negative with a statistical significance level of 10%. Expectedly, both Financial Development and the interacted term of FDI with Financial Development have positive statistical significant correlation at 1% with income (a descent standard of living). As a result of this strong significant levels of the coefficients of the variables used, we can conclude that they are the indicators that influence a decent standard of living in Africa.

4.4 Empirical Results of the SUR Estimations

For purposes of obtaining effectiveness in estimation by consolidating the facts on various equations as well as to accounts for heteroskedasticity and correlation in the error terms, the Seemingly Unrelated Regression (SUR) estimation of the four models as a system of equations was adopted by this study. The disturbance terms of our four models are correlated since the dependent variables are affected by the same shocks. Thus, we estimated the four equations jointly as a system of equations.

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4.4.1 Diagnostic Tests for the SUR Estimator

The appropriateness and accuracy or otherwise of the SUR technique adopted is based on the results of the correlation matrix of residuals and the Breusch-Pagan test provided in table 4.6 below.

Table 4.6: Diagnostic Tests for the SUR Estimator

Correlation matrix of residuals:

	HDI	LEI	EDUI	INCI
HDI	1.0000			
LEI	0.6851	1.0000		
EDUI	0.8276	0.2647	1.0000	
INCI	0.1878	0.0519	0.0824	1.0000

Breusch-Pagan test of independence: chi2 (6) = 1200.536, Pr = 0.0000

As illustrated in Table 4.6 above, a test was performed to check whether autocorrelation is present or not by using the correlation matrix of the error terms of the four models. From Correlation matrix of residuals, we find that, the correlation of the residuals of each pair of two equations is positive and non-zero. The correlation coefficients of the residuals range from weak positive correlation of 0.0519 between the residuals of LEI and INCI equations to strong positive correlation of 0.8276 between the residuals of HDI and EDUI equations. Hence, we reject the null hypothesis that these correlations are zero and that there is no autocorrelation. We conclude that the error terms are therefore contemporaneously correlated.

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We also conducted the Breusch–Pagan test of independence. According to Trevor Breusch and Adrian Pagan (1979), "the Breusch–Pagan test of independence examines the presence of heteroskedasticity. The Breusch–Pagan test is a chi-squared test with the test statistic distributed with k degrees of freedom. Theoretically, if the test statistic has a p-value below an appropriate threshold (e.g. $p < 0.05$) then, the null hypothesis of homoskedasticity is rejected and heteroskedasticity assumed. From our test result as shown in Table 4.6, the Breusch–Pagan test statistic of chi2 (6) = 1200.536 has a P-value = 0.0000. This means the test statistic is significant at 1% and thus, we reject the null hypothesis of homoskedasticity and conclude that the heteroskedasticity is present.

We also report the R-Squared which ascertained the fitness of all the four models. Finally, the F Statistic of each of the four models is significant at 1% as shown in Table 4.7 and Table 4.8 below. This is evident that the independent variables used in each of the four models are jointly significant and are appropriate.

Following all the test results analysed above, the Seemingly Unrelated Regression (SUR) estimator is justified to be the most appropriate technique for the system of equations as it allows us to gain efficiency in the estimation by combining information on different equations and also accounts for heteroskedasticity and correlation in the error terms. The results of Seemingly Unrelated Regression (SUR) Estimation are presented in Table 4.7 and Table 4.8 below.

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Table 4.7: The Unconditional impact of FDI on human development

	HDI(1)	LEI(2)	EDUI(3)	INCI(4)
FDI	-0.000029**	-0.000056***	-0.000027	0.000193***
	(-2.49)	(-3.08)	(-1.53)	(8.56)
FDEV	0.025543***	0.047100***	0.023509***	0.046689***
	(11.52)	(13.52)	(6.83)	(10.77)
LogGDPPC	0.075424***	0.039319***	0.075613***	
	(36.33)	(11.85)	(23.13)	
GCF	0.171546***	0.425994***	0.027860	0.323335***
	(7.13)	(11.28)	(0.75)	(6.58)
TRDOP	0.007105	-0.020079**	0.036136***	0.050902***
	(1.17)	(-2.11)	(3.85)	(4.11)
POLITY2	0.000642	0.001492**	0.004622***	-0.007509***
	(1.35)	(2.00)	(6.28)	(-7.66)
CLIB	0.001266	0.013943***	0.004358	-0.021179***
	(0.64)	(4.51)	(1.43)	(-5.19)
INF	-0.000190**	-0.000227**	-0.000164*	-0.000019*
	(-2.57)	(-1.97)	(-1.44)	(-0.12)
Constant	-0.148789***	0.051087*	-0.233078***	0.359471***
	(-8.66)	(1.88)	(-8.70)	(13.18)
No. of Obs.	946	946	946	946
R-Squared	0.7769	0.4766	0.5958	0.3493
F Statistic	3057.51***	829.91***	1298.27***	507.77***
(P-value)	(0.0000)	(0.0000)	(0.0000)	(0.0000)

Note: Human Development Index (HDI) is a measure for overall human well-being, Life Expectancy Index (LEI) is a measure for a long and healthy life, Education Index (EDUI) is a proxy for access to knowledge, Income Index (INCI) is a measure for a descent standard of living, Foreign Direct Investment (FDI) is the net FDI inflows divided by the population, Log GDPPC is the logarithm of Gross Domestic Product Per Capita, Gross Capital Formation (GCF) is a proxy for domestic investment, Trade Openness (TRDOP) is the sum of import and export scaled by GDP, Polity Index (POLITY2) measures the type of political regime, Civil Liberty Index (CLIB) measures the freedom status of a country, Inflation (INF) is the consumer price index, Financial Development (FDEV) is private credit as a percentage of GDP. ***, ** and * indicate stationary at 1%, 5%, and 10% significance levels, respectively.

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4.4.2 The Unconditional impact of FDI on human development

Table 4.7 above illustrates the unconditional impact of FDI and Financial Development on each of the human development indicators. In other words there is no interaction between FDI and Financial Development in the results displayed in table 4.7 above. HDI is Human Development Index which our proxy for the overall human well-being and is the dependent variable for the first equation in the system, LEI is Life Expectancy Index the proxy for a long and healthy life which is the dependent variable of the second equation, EDUI is Education Index representing knowledge development and is the outcome variable of the third equation, and INCI is Income Index used as a proxy for a descent standard of living and the dependent variable of the fourth equation.

FDI is net Foreign Direct Investment inflows per capita which is our independent variable of interest, FDEV is the Financial Development of the host country which is been proxied by private credit, Log GDPPC is the logarithm of Gross Domestic Product Per Capita which was taken to normalise the data size, GCF is Gross Capital Formation representing domestic investment, TRDOP is The volume of import and export scaled by GDP of the host country and is used as a proxy for trade openness, POLITY2 is the Polity Index used as an indication of the type of political regime, CLIB is Civil Liberty Index which indicates the freedom status of a country, Lastly, INF is Inflation as measured by the consumer price index,.

The seemingly unrelated regression results presented in Table 4.7 above indicate that foreign direct investment net inflows has a statistically significant independent impact on the overall human development as well as on the dimensions of human development with the exception of education as shown by the model 3 in table 4.7 above. The results are discussed in details in the succeeding subsections.

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Foreign Direct Investment Net Inflows (FDI) Per Capita

From model 1, Foreign Direct Investment (FDI) has a negative and statistically significant impact on HDI in Africa. The result shows that an increase in foreign direct investment net inflow per capita is associated with a decrease in the human development index score at 5% significance level all other things being equal. This finding suggests that foreign direct investment inflows worsen the well-being of the people on the African continent. Similarly, the result of model 2 indicates that Foreign Direct Investment (FDI) has a negative and statistically significant impact on Life Expectancy Index (LEI) in Africa. The result suggests that an increase in foreign direct investment net inflow per capita will lead to a decrease in the life expectancy index score (a long and healthy life) at 1% significance level, ceteris paribus. This implies that foreign direct investment net inflows deteriorate the health of an African and shortens his or her life expectancy. In model 3, Foreign Direct Investment (FDI) has a negative and statistically insignificant impact on Education Index (EDUI) in Africa. Thus, there is no empirical evidence that FDI unconditionally impacts on access to education on the African continent. Contrary to the results of the first three models, the result of model 4 shows that Foreign Direct Investment (FDI) has a positive and statistically significant impact on Income Index (INCI) in Africa. The result indicates that an increase in foreign direct investment net inflows per capita is associated with an increase in the income index score at 1% significance level all other things being equal. This result shown in model 4 of Table 4.7 suggests that foreign direct investment net inflows improves the income levels (a descent standard of living) of the people on the African continent.

Financial Development (FDEV) proxied by private credit measures the strength of the financial sector of an economy. Model 1 in Table 4.7 illustrates that, Financial Development (FDEV) has a

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positive and statistically significant impact on HDI in Africa. The result shows that an increase in the private credit of a country is associated with an increase in the human development index score at 1% significance level all other things being equal. This result suggests that an improvement in the financial sector development leads to an improvement in the wellbeing of the people on the African continent. Similarly, the result of model 2 indicates that Financial Development (FDEV) has a positive and statistically significant impact on Life Expectancy Index (LEI) in Africa. The result points out that an increase in the size of private credit will lead to an increase in the life expectancy index score (a long and healthy life) at 1% significance level ceteris paribus. This implies that a stronger financial sector brings about improved health status in Africa and increases the life expectancy of African countries. Likewise, in model 3, Financial Development (FDEV) has a positive and statistically significant impact on Education Index (EDUI) in Africa. The result shows that an improvement of the financial sector will cause the education index score (human capital development) to increase at 1% significance level holding all other things equal. This outcome shows that the growth of the financial sector has a beneficial effect on the human capital development of Africa. Similar to the results of the first three models, the result of model 4 also shows that Financial Development (FDEV) has a positive and statistically significant impact on Income Index (INCI) in Africa. The result indicates that an increase in the private credit will result in an increase in the income index score at 1% significance level all other things being equal. This result of model 4 as illustrated in Table 4.7 suggests that the more developed the financial sector of an economy, the high the income levels of the populace (a descent standard of living) on the African continent.

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Logarithm of Gross Domestic Product per capita (Log GDPPC)

From model 1, Gross Domestic Product per capita (GDPPC) has a positive and statistically significant impact on Human Development Index (HDI) in Africa. The result shows that an increase in Gross Domestic Product per capita is associated with an increase in the human development index score at 1% significance level all other things being equal. Therefore, Gross Domestic Product per capita and Human Development Index move in the same direction. This finding suggests that Gross Domestic Product per capita improves the wellbeing of the people on the African continent. Similarly, the result of model 2 indicates that Gross Domestic Product per capita has a positive and statistically significant impact on Life Expectancy Index (LEI) in Africa. The result shows that an increase in Gross Domestic Product per capita will lead to an increase in the life expectancy index score (a long and healthy life) at 1% significance level ceteris paribus. This implies that Gross Domestic Product per capita improves the health of an African and increases his or her life expectancy. Likewise, in model 3, Gross Domestic Product per capita has a positive and statistically significant impact on Education Index (EDUI) in Africa. The result shows that an increase in Gross Domestic Product per capita will cause the education index score (knowledge development) to increase at 1% significance level holding all other things equal. This outcome shows that Gross Domestic Product per capita promotes the human capital development (education) of Africa. In sum, the higher the GDPPC in African countries, the better the welfare of the people of the African continent.

Gross Capital Formation (GCF)

Model 1 in Table 4.7 illustrates that, Gross Capital Formation (GCF) has a positive and statistically significant impact on HDI in Africa. The result shows that an increase in Gross Capital Formation

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is associated with an increase in the human development index score at 1% significance level all other things being equal. This result suggests that Gross Capital Formation leads to an improvement in the wellbeing of the people on the African continent. Similarly, the result of model 2 indicates that Gross Capital Formation (GCF) has a positive and statistically significant impact on Life Expectancy Index (LEI) in Africa. The result points out that an increase in Gross Capital Formation will lead to an increase in the life expectancy index score (a long and healthy life) at 1% significance level ceteris paribus. This implies that Gross Capital Formation brings about improved health status in Africa and increases the life expectancy of African countries. However, in model 3, Gross Capital Formation (GCF) has a positive and statistically insignificant impact on Education Index (EDUI) in Africa. The result shows that we do not empirical evidence of impact of Gross Capital Formation the access to education in Africa. Correspondingly to the results of the first two models, the result of model 4 also shows that Gross Capital Formation (GCF) has a positive and statistically significant impact on Income Index (INCI) in Africa. The result indicates that an increase in Gross Capital Formation will result in an increase in the income index score at 1% significance level all other things being equal. This result of model 4 as illustrated in Table 4.7 suggests that the more the Gross Capital Formation (domestic investments), the high the income levels of the populace (a descent standard of living) on the African continent.

Trade Openness (TRDOP)

From model 1 as shown in Table 4.7, Trade Openness (TRDOP) has a positive and statistically insignificant impact on HDI in Africa. The result shows that we have no empirical evidence that Trade Openness (TRDOP) has an effect on the well-being of the people in Africa. Nonetheless, in model 3, Trade Openness (TRDOP) has a positive and statistically significant impact on Education

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Index (EDUI) in Africa. The result shows that an increase in Trade Openness (TRDOP) will cause the education index score (knowledge development) to increase at 5% significance level holding all other things equal. This outcome shows that the increase in Trade Openness (TRDOP) has favourable effect on the human capital development of Africa. Similar to the results of the model 3 discussed above, the result of model 4 shows that Trade Openness (TRDOP) equally has a positive and statistically significant impact on Income Index (INCI) in Africa. The result indicates that an increase in Trade Openness (TRDOP) is associated with an increase in the income index score at 1% significance level all other things being equal. This result of model 4 as illustrated in Table 4.7 also suggests that higher openness to trade positively drives the income levels (a descent standard of living) of the people on the African continent. Contrary to the results of the other three models analysed above, the result of model 2 shows that Trade Openness (TRDOP) has a negative and statistically significant impact on Life Expectancy Index (LEI) in Africa. The result indicates that an increase in Trade Openness (TRDOP) is associated with a decrease in the life expectancy index score at 1% significance level all other things being equal. This result of model 2 as illustrated in Table 4.7 thus suggests that higher openness to trade adversely affects the health status (a long and healthy life) of the people on the African continent. This can be attributed to the transfer of communicable diseases, expired consumable goods, and other bad styles of living that are associated with the free of capital across the borders and are inimical to human health.

Polity Index (POLITY2)

Polity Index (POLITY2) is measured in "Polity Score" of the chosen countries. For the purposes of this study, lower scores (negative) represent autocratic regimes whereas the higher scores (positive) stand for democratic regimes. From model 1 as illustrated in Table 4.7, Polity Index

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(POLITY2) has a positive but statistically insignificant impact on HDI in Africa. This result shows that there is no empirical evidence of the impact of the type of political regime on the overall human well-being in our sample African countries during the study period. From model 2 as illustrated in Table 4.7, Polity Index (POLITY2) has a positive and statistically significant impact on LEI in Africa. The result shows that an increase in Polity Index (POLITY2) is associated with an increase in the Life Expectancy index score at 5% significance level all other things being equal. This finding suggests that as the polity score of a country on the African continent increases and thus, its political regime status moves from either autocracy to democracy or weak form democracy to strong form democracy, the health status of the people is improved. Hence, this current study finds that African countries with democratic regimes have higher life expectancy with healthier people relative to those under the autocratic regimes. Likewise, in model 3, Polity Index (POLITY2) has a positive and statistically significant impact on Education Index (EDUI) in Africa. The result shows that an increase in Polity Index (POLITY2) score will cause the education index score (knowledge development) to increase at 1% significance level holding all other things equal. This outcome shows that as the polity score of an African country increases and thereby moving its political regime status from either autocracy to democracy or weak form democracy to strong form democracy, the educational status of the people is improved on the African continent. Thus, African countries with democratic regimes are better placed in terms of human capital development relative to those under the autocratic regimes. Contradictory to the results of the aforementioned two models, the result of model 4 shows that Polity Index (POLITY2) has a negative and statistically significant impact on Income Index (INCI) in Africa. The result indicates that an increase in Polity Index (POLITY2) is associated with a decrease in the income index score at 1% significance level all other things being equal. This result of model 4 as illustrated in Table

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4.7 suggests that as the polity score of a country increase and it moves from being an autocracy to a democracy or from a weak form democracy to a strong form democracy, the standard of living of the people proxy by their income levels is worsened on the African continent. In effect, African countries with democratic regimes are found by this study to have a mediocre standard of living comparative to those under the autocratic regimes. This is justifiable because under the autocratic regimes almost all the enterprises are state owned and most people are assured of guaranteed jobs as compared with the situation under the democratic regimes.

Civil Liberty (CLIB)

The Civil Liberties index is used to capture the degree of freedom for political activism which is an aspect of human well-being since a freedom status is aimed to affect human beings' mental and physical conditions. The Civil Liberties rating ranges from 1 (strong liberties) to 7 (no liberties). Theoretically, a rate of one represents the highest degree of freedom and seven the lowest. Thus, the lower the rating score the better. From model 1 as illustrated in Table 4.7, Civil Liberty (CLIB) score has a positive and statistically insignificant relationship with Human Development Index (HDI) in Africa. However, the result of model 2 indicates that Civil Liberty (CLIB) has a positive and statistically significant relationship with Life Expectancy Index (LEI) in Africa. The result shows that an increase in Civil Liberty (CLIB) score will lead to an increase in the life expectancy index score (a long and healthy life) at 1% significance level ceteris paribus. This implies that when the civil liberty rating score of countries on the African continent increases and thus, its level of freedom decreases or moves from "strong liberties" towards "no liberties", the life expectancy index score (a long and healthy life) of the people is favourably affected. In other words, when the civil liberty rating score is falling (indicating a higher degree of freedom), the health of the people

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is deteriorated. Hence, the finding of this current study argues that African countries with lower levels of freedom are characterised by healthier life and longer life expectancy relative to those with higher levels of freedom. Contravention with the results of the above mentioned models, the result of model 4 also shows that Civil Liberty (CLIB) equally has a negative and statistically significant relationship with Income Index (INCI) in Africa. The result indicates that an increase in Civil Liberty (CLIB) is associated with a decrease in the income index score at 1% significance level all other things being equal. This result of model 4 as shown in Table 4.7 suggests that as the civil liberty rating score of a country increase and thereby moves its freedom status from "strong liberties" towards "no liberties", the standard of living of the people (i.e. their income levels) is negatively affected. On the other hand, when the civil liberty rating score is falling (indicating an increase in the degree of freedom), the people will enjoy a higher descent standard of living as the income level appreciates. Hence, the result of this current study points out that African countries with higher levels of freedom are known for an improved descent standard of living when compared with those with lower levels of freedom.

Inflation (INF) proxied by consumer price index measures the annual percentage change in the general price level of basket of good and service. It is crucial in this study because the general price levels of goods and services affect the purchasing power of consumers and thus affects the wellbeing and development. The lower the inflation rate, the better consumers. From model 1 as illustrated in Table 4.7, the inflation rate has a negative and statistically significant relationship with Human Development Index (HDI) in Africa. The result shows that an increase in the inflation rate is associated with a decrease in the human development index score at 5% significance level all other things held constant. This finding suggests that as the inflation rate of a country on the

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African continent increases and thus, the purchasing power of consumers fall, the well-being of the people is worsened. In other words, when the inflation rate is falling (indicating an increase in the purchasing power), the total well-being of the people is enhanced. Hence, this current study finds that African countries with higher levels of purchasing power have better human development status relative to those with lower levels of purchasing power. Similarly, the result of model 2 indicates that the inflation rate has a negative and statistically significant relationship with Life Expectancy Index (LEI) in Africa. The result shows that an increase in the inflation rate is associated with a decrease in the Life Expectancy Index (LEI) score at 5% significance level all other things held constant. This finding suggests that as the inflation rate of a country on the African continent increases and thus, the purchasing power of consumers fall, the Life Expectancy of the people reduces. In other words, when the inflation rate is falling (indicating an increase in the purchasing power), the health status of the people is enhanced. Hence, this current study finds that African countries with higher levels of purchasing power have better health status relative to those with lower levels of purchasing power. Likewise, in model 3, the inflation rate has a negative and statistically significant relationship with Education Index (EDUI) in Africa. The result shows that an increase in the inflation rate is associated with a decrease in the education index score at 10% significance level all other things held constant. This finding suggests that as the inflation rate of a country on the African continent increases and thus, the purchasing power of consumers fall, the human capital development is worsened. In other words, when the inflation rate is falling (indicating an increase in the purchasing power), the human capital development of the country is enhanced. Hence, this current study suggests that African countries with higher levels of purchasing power have higher quality of human capital relative to those with lower levels of purchasing power. Consistent with the results of the above mentioned three models, the result of

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model 4 also shows that Inflation Rate (INF) has a negative and statistically significant relationship with Income Index (INCI) in Africa. The result indicates that an increase in the inflation rate is associated with a decrease in the income index score at 10% significance level all other things being equal. This result of model 4 as shown in Table 4.7 suggests that as the inflation rate of a country increase and thereby reduces the purchasing power of consumers, the standard of living of the people (i.e. their income levels) is negatively affected. On the other hand, when the inflation rate is falling (indicating an increase in the purchasing power), the people will enjoy a higher descent standard of living as their real income level appreciates. Hence, the result of this current study holds that African countries with higher purchasing power (low inflation) will experience improved descent standard of living when compared with those with lower purchasing power (high inflation).

4.4.3 Impact of FDI on human development in the presence of developed financial markets

Due to the fact that FDI may not have an independent impact on human development in the host country as analysed in the preceding section, we have tried to investigate the impact of FDI on human development in the presence of developed financial markets. To achieve that, we interacted FDI with Financial Development (FDI*FDEV). This is of particular interest because the level financial market development can influence how FDI impacts on human wellbeing in these recipient countries.

The results in table 4.8 illustrates the marginal impact of foreign direct investment net inflows per capita on each of the dimensions of human development (i.e. health, education and income) in the presence of developed financial sectors.

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Table 4.8: Interactive effects between FDI and financial development on human development

	HDI(1)	LEI(2)	EDUI(3)	INCI(4)
FDI	-0.000049***	-0.000075***	-0.000060***	0.000192***
	(-3.93)	(-3.80)	(-3.14)	(7.33)
FDEV	0.027411***	0.065319***	0.013515**	0.060790***
	(6.85)	(10.36)	(2.20)	(7.13)
FDI # FDEV	0.000071***	0.000054	0.000126***	0.000096*
	(2.87)	(1.38)	(3.30)	(1.77)
LogGDPPC	0.081263***	0.047468***	0.081929***	
	(42.83)	(15.64)	(27.78)	
GCF	0.124631***	0.373604***	-0.019900	0.250399***
	(5.74)	(10.94)	(-0.60)	(5.34)
TRDOP	0.006629	-0.019501**	0.033578***	0.044899***
	(1.14)	(-2.13)	(3.77)	(3.57)
POLITY2	0.000565	0.001414*	0.004644***	-0.008268***
	(1.20)	(1.92)	(6.47)	(-8.13)
CLIB	-0.000762	0.009275***	0.002275	-0.027004***
	(-0.41)	(3.14)	(0.79)	(-6.65)
INF	-0.000001	-0.000002	-0.000001	-0.000009*
	(-0.03)	(-0.43)	(-0.01)	(-1.67)
Constant	-0.115322***	0.119535***	-0.201031***	0.492678***
	(-7.06)	(4.61)	(-7.97)	(20.55)
No. of Obs.	1,026	1,026	1,026	1,026
R-Squared	0.7737	0.4582	0.5943	0.2772
F Statistic	33212.26***	823.67***	1390.91***	393.43***
(P-value)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Marginal Effect	**0.000022**	**-0.000021**	**0.000066***	**0.000289****

Note: Human Development Index (HDI) is a measure for overall human well-being, Life Expectancy Index (LEI) is a measure for a long and healthy life, Education Index (EDUI) is a proxy for access to knowledge, Income Index (INCI) is a measure for a descent standard of living, Foreign Direct Investment (FDI) is the net FDI inflows divided by the population, Log GDPPC is the logarithm of Gross Domestic Product Per Capita, Gross Capital Formation (GCF) is a proxy for domestic investment, Trade Openness (TRDOP) is the sum of import and export scaled by GDP, Polity Index (POLITY2) measures the type of political regime, Civil Liberty Index (CLIB) measures the freedom status of a country, Inflation (INF) is the consumer price index, Financial Development (FDEV) is private credit as a percentage of GDP. ***, ** and * indicate stationary at 1%, 5%, and 10% significance levels, respectively.

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From Table 4.8 above, we display the results of the four models that include the interaction term between foreign direct investment and financial development. The results therefore include the marginal effect of FDI when it is conditioned on the level of the financial development of the host country. From our previous discussions (see Table 4.7), we ascertained that FDI has independent negative and significant impact on HDI, negative and significant impact on LEI, negative but insignificant impact on EDUI, and only has a positive and significant impact on INCI independently. From the results in table 4.8, we find that the impact of FDI interacted with Financial Development is positive on the four indicators of human development (i.e. HDI, LEI, EDUI, INCI). We find that marginal effect of FDI on the indicators, conditioned with developed financial markets are all positive except LEI in model 2 which is still negative but has improved.

The coefficients of the marginal effects of FDI for each of the four Human Development indicator is as follows:

HDI = -0.000049 + 0.000071(Financial Development) = 0.000022 when Financial Development is 1 representing Developed Financial Markets

LEI = -0.000075 + 0.000054(Financial Development) = -0.000021 when Financial Development is 1 representing Developed Financial Markets

EDUI = -0.000060 + 0.000126(Financial Development) = 0.000066 when Financial Development is 1 representing Developed Financial Markets

INCI = 0.000192 + 0.000096(Financial Development) = 0.000289 when Financial Development is 1 representing Developed Financial Markets

Comparing the coefficients of the marginal effects of FDI above to the coefficients of the independent effects of FDI as seen in table 4.7 earlier, we find great improvement in the

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performance of FDI in terms of its impact on human development. This means that FDI inflows contribute to human development achievement better in countries with developed financial markets than in countries with less developed financial markets. Independently, FDI has a negative impact on HDI and EDUI, but in the presence of strong and developed financial markets, the impact of FDI on each of these two indicators has become positive (see the marginal effects). In the case of Life Expectancy Index (LEI), the impact of FDI is still negative but has reduced tremendously. This is an indication that developed financial markets reduce the negative impact of FDI on Life Expectancy of the people. This is thus, an improvement. Talking about Income Index (INCI), both the independent impact and the marginal impacts are positive and significant at 1%. However, the coefficient of the marginal impact is greater than the coefficient of the independent impact. This shows that developed financial markets increase the positive impact of FDI on Income Index, which exhibits an improvement.

The results of the control variables are largely similar in both instances.

4.5 Chapter Conclusion

This chapter provided a detailed investigation into the link between FDI and human development index and each of the three dimensions of human development such as health, education and income as well as the direction of the impact of FDI on these four development indicators for 52 African countries for a period of 28 years (1990 – 2017). Descriptive statistics and Pearson correlation matrices are used to summarise the data for easy presentation and analysis. An empirical analysis of the data has been carried out in this current study. The results from the seemingly unrelated regression estimation technique showed that, FDI has a negative impact on Human Development Index, Life Expectancy Index, and Education Index. In the contrary, FDI is

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found to have a positive impact on Income Index. We also found that in the presence of developed financial markets, the impact of FDI each of the four human development indicators has improved immensely. The chapter also delved more into other factors in African that can influence human development achievement including gross domestic product per capita, gross capital formation, trade openness, the type of government regime (democracy or autocracy), freedom status of the country, inflation, and the financial sector development. The study found that gross domestic product per capita has a positive and statistically significant impact on HDI, LEI and EDUI in Africa. The results also suggest that gross capital formation (domestic investment) has a positive and statistically significant impact on HDI and each of its three dimensions. Empirical evidence was also established that democratic regimes are favorable environment for the achievement of human development in Africa. Similarly, we ascertained that free countries would perform better in terms of human development achievements than countries that are not free, and countries with high purchasing power (low inflation) are more likely to do well in terms of human development achievements. Finally, a growth in the private credit (financial development) is found to have a positive association with all the dimensions of human development under consideration.

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CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Chapter Introduction

In this final chapter of our current research, we present a brief summary of the results of the study, the conclusions obtained from the results of the research work based on the empirical analysis that has been conducted to assess the effects of FDI on every one of the four human development dimensions through the use of the seemingly unrelated regressions technique. This section additionally makes relevant recommendations for policy implementations and also makes proposals or suggestions to guide future researchers.

5.2 Summary of Key Findings

For confirmation or rejection of the earlier claims about the impact of Foreign Direct Investment (FDI) on Human Development (HD) in Africa, an analysis of FDI relationship and its role on Human development achievement is undertaken on the African continent with 52 African nations for 28 years (1990 – 2017) using FDI as the independent variable and Human Development Index (HDI), Life Expectancy Index (LEI), Education Index (EDUI), and Income Index (INCI) as dependent variables, one for each of the four models. Economic variables such as Gross Domestic Product Per Capita (GDPPC), Gross Capital Formation (GCF), Trade Openness (TRDOP), Inflation (INF), and Financial Development (FDEV) are used as control variables. For realities of the political landscape and the varying political regimes on the African continent, two special politic control variables have been added; Polity Index (POLITY2) and Civil Liberty rating (CLIB). These variables have been selected based on the role they play directly or indirectly through a mechanism to influence human development in Africa. An empirical methodology has

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been applied. The Seemingly Unrelated Regression (SUR) estimator was used to estimate the four models jointly as a system of equations for the analysis of each of the four human development indicators. The results from the SUR estimation technique include the following:

We found that, FDI has a negative impact on Human Development Index in Africa. This means a growth in FDI inflows worsens the overall well-being of the people in Africa. This is not surprising because most of the foreign direct investment that flow into the African continent do not create a better environment for human abilities (health and knowledge) enhancement (Yahouedeou et al., 2018).

We also found that FDI negatively impacts on health Index on the African continent. This finding suggests that as more and more FDI, the more the health of the people deteriorates and the shorter their life span. This could be attributed to the externalities associated with FDI such as pollution. This is consistent with the finding of Herzer and Nunnenkamp (2012). FDI could help improve health conditions in the host economies if foreign firms not only paid higher wages than domestic firms but also provided their employees with better social services and safer workplaces. In addition to such direct effects within firms, economy-wide indirect effects on health could follow from FDI-induced growth to the extent that higher average incomes result in more demand for health services. Waldmann (1992) argues that health care is a superior good and should not be taken for granted. Nevertheless, positive health effects of FDI can be achieved in the presence robust financial intermediaries.

Similarly, we found that FDI negatively affects Education Index in Africa. This finding points out that an increase in FDI inflow usually in the extractive industry, attracts the youth into the casual jobs offered by these MNCs to the detriment of their education. Thus, FDI inflows inversely affect human capital development in African. This is particularly the case because foreign direct

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investors are purely profit minded and do not consider their social responsibilities for human development through participation in education sector facilities construction thus, helping African governments who sometimes lack financial resources to fulfil these social obligations.

On the contrary, FDI was found to have a positive impact on Income Index. This finding is evident that FDI inflows in Africa leads to the creation of jobs for the people and thus increase their income levels. This therefore increase their purchasing power and improves their standard of living. FDI positively affects economic growth by stimulating domestic investment and facilitating technology transfer in the host country.

We found great improvement in the performance of FDI in terms of its impact on human development in the presence of developed financial markets. This means that FDI inflows contribute to human development achievement better in countries with developed financial markets than in countries with less developed financial markets. Independently, FDI has a negative impact on HDI and EDUI, but in the presence of strong and developed financial markets, the impact of FDI on each of these two indicators has become positive. In the case of Life Expectancy Index (LEI), the impact of FDI is still negative but has reduced. This is an indication that developed financial markets reduce the negative impact of FDI on Life Expectancy of the people. When it comes to the Income Index (INCI), both the independent impact and the marginal impacts are positive but the marginal impact is greater than the independent impact. This shows that developed financial markets increase the positive impact of FDI on Income Index.

This study also considered some economic and political factors in Africa that are capable of influencing human development achievement including GDP per capita, GCF, trade openness, the type of government regime (democracy or autocracy), freedom status of the country, inflation, financial development. The study found that GDP per capita is a positive drive for human well-

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being improvement, life expectancy, and education development on the Africa continent. Gross capital formation (domestic investment) was also found to positively influence human development and each of its three dimensions in Africa. We also found that more openness to trade is a vehicle that boost human development achievement, educational status and income levels in Africa. Empirical evidence was also established that democratic regimes are favourable environment for the achievement of human development in Africa. We ascertained that free countries would perform better in terms of human development achievements than countries that are not free. Finally, our results reveal that in the presence of a strong financial sector, FDI would positively impact on the achievements of human development.

5.3 Conclusion of the Study

Human Development Index (HDI) is known to be multifaceted comprising income, health and education which translates to the overall human development status. Our work sought to explore the relationship between FDI net inflows and overall human well-being as well as each of its dimensions. The study further estimated the contribution of FDI not only in the achievement of the overall human well-being status but also on each of its facets such as the health status, the education level and the income level for policy targeting purposes. Interestingly, our results showed that FDI positively contributes to improvement in the income level (standard of living). This positive impact of FDI can be attributed to its economic role in the growth of the real income of the people, and this agrees with findings of the work of Nkechi (2013).

On the other hand, we found that FDI negatively impacted the life expectancy and education variables, which therefore translated into its negative impact on the overall welfare index (HDI). In the presence of a developed financial sector, FDI was found to positively impact on all aspects

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of human development as well as the overall index. Bearing in mind the social aspects of human development and taken into accounts the health index (LEI), the education Index (EDUI) and the overall human development index (HDI) in relation to the economic role of FDI, the existing negative impact of FDI on LEI, EDUI, and HDI in Africa could be justified by the absence of FDI's social responsibility (schools and hospitals facilities construction) or the presence of some FDIs which do not really contribute to the individual and national real income as purported in the literature. In order words, most of the FDI received by the continent may be industry and services oriented with lack of the social responsibility aspect which directly contribute to human development improvement. These findings provide empirical evidence that FDI does not directly and instantaneously satisfy the health-care, education or social needs of the people on the African continent. Hence, despite the positive role of FDI towards human development achievements through the economic means in the presence of a well-developed financial sector, it still needs to create favourable social conditions for human development promotion in terms of the health and education on the continent. This is because income is just one aspect of human development and its improvement alone is not enough to drive the needed impact on the sustainable development achievement on the African continent as targeted by the SDGs agenda 2030. Also, it is important to acknowledge that the growth of an economy is just a means to the achievement of human development and not an end in itself. This probably explains why we found that FDI has a positive impact on all the aspects of human development in the presence of strong financial systems. This overall positive impact may only be achieved after FDI inflows pass through the transformation mechanisms in the host economy financial sector including the banks and the non-bank financial institutions.

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Finally, concerning FDI participation in the sustainable development goals (SDGs) agenda 2030 achievements on the African continent, this current study using the overall human development index (HDI) concluded that FDI negatively impacts on social sustainable development achievement in Africa and thus, on its SDGs achievements. It added that, it would only take countries with good policies, vigorous economic systems, and strong financial institutions (developed financial markets) to translate the positive impact of FDI on the growth in income levels into favourable impact on the social aspects of human well-being. Hence, so as to reap these positive benefits of FDI in the process of achieving SDGs especially from human development standpoint, proper measures and targeted policies have to be put in place by the host governments to influence the FDI inflows in order to derive the intended social benefits.

5.4 Recommendations for Policy Makers

Human development is found to be multidimensional encompassing the health status, the knowledge development (quality education status), and income status (a decent living standard). The limited literature on FDI's social achievement in contributing to human development motivated the current research to focus on the dimensional role played by FDI in the achievements of human development. Following from our findings, African countries need to consider targeted economic and social measures and policies to attract socially oriented FDIs that will contribute positively to the achievement of sustainable human development. The following recommendations were proposed:

The host governments should enact and implement a law that will require industrial or services oriented FDI to give out 10% of their after tax profit to finance social amenity projects in the local communities where they operate. This will serve as their mandatory corporate social

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responsibilities for human development through their participation in education or health sector facilities construction.

The host governments should grant tax exemptions to only social-oriented FDIs especially those pairing with the Sustainable Development Goals that are targeting human development achievement. These tax exemptions should be granted to companies that are able to furnish the revenue authority with proper documentation confirming that not less than 30% of their profit before tax for a particular year under review has been voluntarily channeled to support a worthy social course in the host country that is able to create a better environment for human abilities (health, knowledge and better life living) enhancement.

The host government should establish a special purpose agency to monitor FDI activities in the country. This government agency should be mandated to ensure national accountability of FDI inflows contribution to human development in the host African country. In this way, African countries would play an active role in their population human development purposely by creating pre-conditions to facilitate FDI better achievement on the matter human wellbeing. This government agency should create periodical evaluation on the human development status in purpose to have an idea about the social needs of their population.

To prevent the exploitation of the local folks by foreign companies, the host governments should ensure a minimum wage pairing with social realities of the host countries to be paid by investors. This will help the economic agent to have an average income to cover it health, his education or child education and satisfy is others basic need for its well-being satisfaction. The minimum wage law should strictly enforced by the labour commission of the host country.

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5.5 Limitations and Recommendations for Future Studies

Notwithstanding the empirical methodology used to obtain the present results, it is imperative to note that the present study had some limitations. The African countries have been studied as a whole without considering the sub regional differences. Also, the Happiness Index which an emerging indicator of human wellbeing that is much attention in development economics has not been included in this current study. Thus, for further studies should attempts to conducted a study that will investigate the regional impact of FDI in Africa on each of the human development dimensions used in this current study. Future studies should control for income inequalities in Africa and also consider the Happiness Index as one of wellbeing indicators.

University of Ghana http://ugspace.ug.edu.gh

REFERENCES

Adams, S. (2009). Can foreign direct investment (FDI) help to promote growth in Africa? *African Journal of Business Management*, *3*(5), 178-183.

Adams, S. (2009). Foreign direct investment, domestic investment, and economic growth in Sub Saharan Africa. *Journal of Policy Modeling*, *31*(6), 939-949.

Adams, S., & Opoku, E. E. O. (2015). Foreign direct investment, regulations and growth in sub Saharan Africa. *Economic Analysis and Policy*, *47*, 48-56.

Addison, T., & Heshmati, A. (2003). *The new global determinants of FDI flows to developing countries: The importance of ICT and democratization* (No. 2003/45). WIDER Discussion Paper.

Adjasi, C. K., Abor, J., Osei, K. A., & Nyavor-Foli, E. E. (2012). FDI and economic activity in Africa: The role of local financial markets. *Thunderbird International Business Review*, *54*(4), 429-439.

Agbloyor, E. K., Abor, J. Y., Adjasi, C. K. D., & Yawson, A. (2014). Private capital flows and economic growth in Africa: The role of domestic financial markets. *Journal of International Financial Markets, Institutions and Money*, *30*, 137-152.

Agbloyor, E. K., Abor, J., Adjasi, C. K. D., & Yawson, A. (2013). Exploring the causality links between financial markets and foreign direct investment in Africa. *Research in\ International Business and Finance*, *28*, 118-134.

Agbloyor, E. K., Gyeke-Dako, A., Kuipo, R., & Abor, J. Y. (2016). Foreign direct investment and economic growth in SSA: The role of institutions. *Thunderbird International Business Review*, *58*(5), 479-497.

University of Ghana http://ugspace.ug.edu.gh

Agbloyor, E. K., Gyeke-Dako, A., Kuipo, R., & Abor, J. Y. (2016). Foreign direct investment and economic growth in SSA: The role of institutions. *Thunderbird International Business Review*, *58*(5), 479-497.

Aitken, B. J., & Harrison, A. E. (1999). Do domestic firms benefit from direct foreign investment? Evidence from Venezuela. *American economic review*, *89*(3), 605-618.

Akinlo, A. E. (2004). Foreign direct investment and growth in Nigeria: An empirical investigation. *Journal of Policy modeling*, *26*(5), 627-639.

Akiyama, K. (2006). FDI and Sustainable Development.

Alesina, A., & Rodrik, D. (1992). Distribution, political conflict, and economic growth: A simple theory and some empirical evidence. *Political economy, growth, and business cycles*, *23*, 50.

Alesina, A., Özler, S., Roubini, N., & Swagel, P. (1996). Political instability and economic growth. *Journal of Economic growth*, *1*(2), 189-211.

Alkire, S. (2002). Dimensions of human development. *World development*, *30*(2), 181-205.

Alsan, M., Bloom, D. E., & Canning, D. (2006). The effect of population health on foreign direct investment inflows to low-and middle-income countries. *World Development*, *34*(4), 613 630.

Antwi, S., Mills, E. F. E. A., Mills, G. A., & Zhao, X. (2013). Impact of foreign direct investment on economic growth: Empirical evidence from Ghana. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, *3*(1), 18-25.

University of Ghana http://ugspace.ug.edu.gh

Asiedu, E. (2002). On the determinants of foreign direct investment to developing countries: is Africa different? *World development*, *30*(1), 107-119.

Asiedu, E. (2005). Foreign direct investment in Africa. *WIDER Research Paper*, *24*.

Asiedu, E. (2006). Foreign direct investment in Africa: The role of natural resources, market size, government policy, institutions and political instability. *World economy*, *29*(1), 63-77.

Asiedu, E. (2002). Aggressive trade reform and infrastructure development: a solution to Africa's foreign direct investment woes. documento de trabajo no publicado.

Asiedu, E. (2013). Foreign direct investment, natural resources and institutions. International Growth Centre.

Ayanwale, A. B. (2007). FDI and economic growth: Evidence from Nigeria. *African Economic Research Consortium Paper 165*. Nairobi

Basu, P., Chakraborty, C., & Reagle, D. (2003). Liberalization, FDI, and growth in developing countries: A panel cointegration approach. *Economic Inquiry*, *41*(3), 510-516.

Baum, M. A., & Lake, D. A. (2003). The political economy of growth: democracy and human capital. *American Journal of Political Science*, *47*(2), 333-347.

Behera, S. R. (2015). Do domestic firms really benefit from foreign direct investment? The role of horizontal and vertical spillovers and absorptive capacity. *Journal of Economic Development*, *40*(2), 57.

Benhabib, J., & Rustichini, A. (1996). Social conflict and growth. Journal of Economic Growth 1(1): 125–142.

Benhabib, J., & Spiegel, M. M. (1994). The role of human capital in economic development evidence from aggregate cross-country data. Journal of Monetary Economics 34(2): 143–173.

University of Ghana http://ugspace.ug.edu.gh

Bezuidenhout, H. (2009). A regional perspective on aid and FDI in Southern Africa. *International Advances in Economic Research*, *15*(3), 310-321.

Boddewyn, J. J. (1985). Theories of foreign direct investment and divestment: A classificatory note. *Management International Review*, 57-65.

Bokpin, G. A. (2017). Foreign direct investment and environmental sustainability in Africa: The role of institutions and governance. *Research in International Business and Finance*, *39*, 239-247.

Bokpin, G. A., Mensah, L., & Asamoah, M. E. (2017). Legal source, institutional quality and FDI flows in Africa. *International Journal of Law and Management*, *59*(5), 687-698.

Breitung, J., & Pesaran, M. H. (2008). Unit roots and co-integration in panels. In *The econometrics of panel data* (pp. 279-322). Springer, Berlin, Heidelberg.

Brundtland, G. H. (1987). Presentation of the Report of the World Commission on Environment and Development. *Nairobi: UN*.

Brundtland, G., & Khalid, M. (1987). UN Brundtland commission report. *Our Common Future*.

Buckley, P. J., & Casson, M. (1976). The future of the multinational enterprise. *New York: The McMillan Company Buckley the Future of the Multinational Enterprise1976*.

Cameron, A. C., & Trivedi, P. K. (2010). Microeconometrics using Stata (revised ed.). *Number musr in Stata Press books. StataCorp LP*.

Chakraborty, C., & Nunnenkamp, P. (2008). Economic reforms, FDI, and economic growth in India: a sector level analysis. *World development*, *36*(7), 1192-1212.

Chinn, M. D., & Ito, H. (2008). A new measure of financial openness. *Journal of comparative policy analysis*, *10*(3), 309-322.

Coase, R. H. (1937). The nature of the firm. *economica*, *4*(16), 386-405.

University of Ghana http://ugspace.ug.edu.gh

Denisia, V. (2010). Foreign direct investment theories: An overview of the main FDI theories. *European journal of interdisciplinary studies*, (3).

Djankov, S., & Hoekman, B. (2000). Foreign investment and productivity growth in Czech enterprises. *The World Bank Economic Review*, *14*(1), 49-64.

Dunning, J. H. (1973). The determinants of international production. *Oxford economic papers*, *25*(3), 289-336.

Dunning, J. H. (1980). Toward an eclectic theory of international production: Some empirical tests. *Journal of international business studies*, *11*(1), 9-31.

Durham, J. B. (1999). Economic growth and political regimes. *Journal of Economic Growth*, *4*(1), 81-111.

Engle, R. F., & Granger, C. W. (1987). Co-integration and error correction: representation, estimation, and testing. *Econometrica: journal of the Econometric Society*, 251-276.

Feng, Y. (1997). Democracy, political stability and economic growth. *British Journal of Political Science*, 391-418.

Fiebig, D. G. (2001). Seemingly unrelated regression. *A companion to theoretical econometrics*, 101-121.

Franc, S. (2015). Foreign direct investment and sustainable development in the European Union. Journal for sustainable development *1*(1), 117-133.

Frimpong, J. M., & Oteng-Abayie, E. F. (2006). Bivariate causality analysis between FDI inflows and economic growth in Ghana.

Gasiorowski, M. J. (2000). Democracy and macroeconomic performance in underdeveloped countries: An empirical analysis. *Comparative Political Studies*, *33*(3), 319-349.

University of Ghana http://ugspace.ug.edu.gh

Görg, H., & Greenaway, D. (2004). Much ado about nothing? Do domestic firms really benefit from foreign direct investment? *The World Bank Research Observer*, *19*(2), 171-197.

Guerin, S. S., & Manzocchi, S. (2009). Political regime and FDI from advanced to emerging countries. *Review of World economics*, *145*(1), 75-91.

Gui-Diby, S. L. (2014). Impact of foreign direct investments on economic growth in Africa: Evidence from three decades of panel data analyses. *Research in economics*, *68*(3), 248 256.

Gui-Diby, S. L., & Renard, M. F. (2015). Foreign direct investment inflows and the industrialization of African countries. *World Development*, *74*, 43-57.

Hadenius A (ed). Cambridge University Press: New York; 163–194.

Hadri, K. (2000). Testing for stationarity in heterogeneous panel data. *The Econometrics Journal*, *3*(2), 148-161.

Handlu, I. & Uniwersytetu, Z. (2012). Foreign direct investment in Sub-Saharan Africa and its effects on economic growth of the region. *Working Papers Institute of International Business University of Gdañsk*, 31.

Heeks, R. (2010). Do information and communication technologies (ICTs) contribute to development?. *Journal of international development*, *22*(5), 625-640.

Henisz, W. J. (2003). The power of the Buckley and Casson thesis: the ability to manage institutional idiosyncrasies. *Journal of international business studies*, *34*(2), 173-184.

Herrero, C., Martínez, R., & Villar, A. (2012). A newer human development index. *Journal of Human Development and Capabilities*, *13*(2), 247-268.

University of Ghana http://ugspace.ug.edu.gh

Hoffmann, R., Lee, C. G., Ramasamy, B., & Yeung, M. (2005). FDI and pollution: a granger causality test using panel data. *Journal of International Development: The Journal of the Development Studies Association*, *17*(3), 311-317.

Huntington, S. P. (1968). Political Order in Changing Societies. New Haven, CT: Yale University Press.

Hymer, S. H. (1976). The international operations of national firms: A study of foreign direct investment.

Idoko, C. (2015). The Effects of Foreign Direct Investment on Sustainable Development in Nigeria. *European Journal of Business and Management*, 7(6), 82–87.

Judge, G. G., Griffiths, W. E., Hill, R. C., Lutkepohl, H., & Lee, T. C. (1980). The Theory and Practice of Econometrics, 1985. *John Whiley and Sons, New York*.

Julio, B., & Yook, Y. (2016). Policy uncertainty, irreversibility, and cross-border flows of capital. *Journal of International Economics*, *103*, 13-26.

Kardos, M. (2014). The relevance of Foreign Direct Investment for sustainable development. Empirical evidence from European Union. *Procedia Economics and Finance*, *15*, 1349 1354.

Kaufmann, D., Kraay, A. & Mastruzzi, M. (2011). The worldwide governance indicators: methodology and analytical issues. *Hague Journal on the Rule of Law 3(2)*, 220–246.

Khan, H. H. & Khan, O. (2018). *Income-FDI-Environmental degradation nexus for developing countries: A panel analysis of America continent* (No. 88154). University Library of Munich, Germany.

Kimber, R. (1989). On democracy 1. *Scandinavian Political Studies*, *12*(3), 199-219.

Kindleberger, C. P. (1969). The theory of direct investment. *American Business Abroad*, 2-36.

University of Ghana http://ugspace.ug.edu.gh

King, R. G., & Levine, R. (1993). Finance and growth: Schumpeter might be right. *The quarterly journal of economics*, *108*(3), 717-737.

King, R. G., & Levine, R. (1993). Finance, entrepreneurship and growth. *Journal of Monetary economics*, *32*(3), 513-542.

Kokko, A., Tansini, R., & Zejan, M. C. (1996). Local technological capability and productivity spillovers from FDI in the Uruguayan manufacturing sector. *The Journal of Development Studies*, *32*(4), 602-611.

Konings, J. (2001). The effects of foreign direct investment on domestic firms: Evidence from firm-level panel data in emerging economies. *Economics of transition*, *9*(3), 619-633.

Kurzman, C., Werum, R., & Burkhart, R. E. (2002). Democracy's effect on economic growth: a pooled time-series analysis, 1951–1980. *Studies in comparative international development*, *37*(1), 3-33.

Loungani, P., & Razin, A. (2001). How beneficial is foreign direct investment for developing countries?. *Finance and Development*, *38*(2), 6-9.

Makoni, P. L. (2015). An extensive exploration of theories of foreign direct investment. *Risk Governance & Control: Financial Markets and Institutions*, *5*(2), 77-83.

Masaki, T. and Van de Walle, N., 2014. The impact of democracy on economic growth in sub-

Masuku, M. B., & Dlamini, T. S. (2009). Determinants of foreign direct investment inflows in Swaziland. *Journal of Development and Agricultural economics*, *1*(5), 177-184.

McKinlay, R. D., & Cohan, A. S. (1975). A comparative analysis of the political and economic performance of military and civilian regimes: a cross-national aggregate study. *Comparative Politics*, *8*(1), 1-30.

University of Ghana http://ugspace.ug.edu.gh

Merlevede, B., & Schoors, K. (2004). Reform, Fdi and Economic Growth: Tale of the Tortoise and the Hare." *William Davidson Institute Working Paper Number 730*.

Moosa, I. (2002). *Foreign direct investment: theory, evidence and practice*. Springer.

Moricz, S. (2012). The Causal Effect of Local Elections on Economic Growth-Using a Natural Experiment in Indonesia. *Minor Field Study Series No, 217*.

Mundell, R. A. (1957). International trade and factor mobility. *American economic review*, *47*(3), 321-335.

Mwilima, N. (2003). Foreign direct investment in Africa. *Social Observatory Pilot Project, Final Draft Report for the Labour Resource and Research Institute*, 29-45.

Nair-Reichert, U., & Weinhold, D. (2001). Causality tests for cross-country panels: a New look at FDI and economic growth in developing countries. *Oxford bulletin of economics and statistics*, *63*(2), 153-171.

Nations, U. (1987). Our common future. *Report of the World Commission on*.

Nations, U. (1987). Report of the world commission on environment and development: Our common future. *Oslo: United Nations*.

Ndambendia, H., & Njoupouognigni, M. (2010). Foreign aid, foreign direct investment and economic growth in Sub-Saharan Africa: Evidence from pooled mean group estimator (PMG). *International journal of economics and finance*, *2*(3), 39-45.

Nelson, M. A., & Singh, R. D. (1998). Democracy, economic freedom, fiscal policy, and growth in LDCs: a fresh look. *Economic Development and Cultural Change*, *46*(4), 677-696.

Nembot Ndeffo, L. (2010). Foreign Direct Investments and Human Capital Development in Subsaharan Africa.

University of Ghana http://ugspace.ug.edu.gh

Nkechi, O. A. (2013). An Econometric Analysis of the Impact of Foreign Direct Investment on Economic Growth in Ghana: The Role of Human Capital Development. *International Journal of Humanities and Social Science Invention*, *2*(8), 12-20.

Nkechi, O. A., & Okezie, O. K. (2013). Investigating the interaction between foreign direct investment and human capital on growth: Evidence from Nigeria. *Asian Economic and Financial Review*, *3*(9), 1134.

Nordhaus W. D. (1975). The political business cycle. *The Review of Economic Studies 42(2),* 169 190.

Nsouli, M. S. M., & Funke, M. N. (2003). *The New Partnership for Africa's Development (NEPAD) Opportunities and Challenges* (No. 3-69). International Monetary Fund.

OECD. Centre for Educational Research and Innovation (CERI). (1996). *Education at a glance: OECD indicators 1996*. OECD, Paris, France.

Ogiogio, G. (2013). Draft Africa Regional Report on the Sustainable Development Goals1.

Okafor, G. (2015). Locational determinants of US outward FDI into Sub-Saharan Africa. *The Journal of Developing Areas*, 187-205.

Okamoto, Y. (1994). Impact of trade and FDI liberalization policies on the Malaysian economy. *The Developing Economies*, *32*(4), 460 - 478

Organization for Economic Co-operation and Development. (1996). *OECD benchmark definition of foreign direct investment*. OECD Publishing.

Owen, E. (2019). Foreign direct investment and elections: The impact of greenfield FDI on incumbent party reelection in Brazil. *Comparative Political Studies*, *52*(4), 613-645.

University of Ghana http://ugspace.ug.edu.gh

Ozturk, I., & Kalyoncu, H. (2007). Foreign direct investment and growth: An empiricial investigation based on cross-country comparison, 75-82

Prais, S. J., and Winsten, C. B. (1954). Trend estimators and serial correlation. Working paper383, Cowles Commission. http://cowles.econ.yale.edu/P/ccdp/st/s-0383.pdf

Przeworski A, Limongi F. (1997). Democracy and development. In Democracy's Victory and Crisis,

Przeworski A. (1991). Democracy and the Market: Political and Economic Reforms in Eastern Europe and Latin America. *Cambridge University Press: Cambridge*.

Pye L. (1966). Aspects of Political Development. Little, Brown: Boston, Mass; 205.

Ramirez, M. D. (2006). Is foreign direct investment beneficial for Mexico? An empirical analysis, 1960–2001. *World Development*, *34*(5), 802-817.

Ramos, X., & Silber, J. (2005). On the application of efficiency analysis to the study of the dimensions of human development. *Review of Income and Wealth*, *51*(2), 285-309.

Ranis G, Stewart F, Ramirez A. (2000). Economic growth and human development. *World Development 28(2),* 197–219.

Reiter, S. L., & Steensma, H. K. (2010). Human development and foreign direct investment in developing countries: the influence of FDI policy and corruption. *World development*, *38*(12), 1678-1691.

Ricardo, D. (1817). *On the Principles of Political Economy and Taxation: London*.

Ridzuan, A. R., Ismail, N. A., & Che Hamat, A. F. (2017). Does Foreign Direct Investment Successfully Lead to Sustainable Development in Singapore? *Economies*, *5*(3), 29.

University of Ghana http://ugspace.ug.edu.gh

Robinson, N. A., Hassan, P., & Burhenne-Guilmin, F. (1992). Agenda 21 and the UNCED Proceedings. Saharan Africa, 1982–2012 (no. 2014/057). WIDER Working Paper.

Seetanah, B., & Khadaroo, A. J. (2007). Foreign direct investment and growth: New evidences from Sub-Saharan African countries. *University of Mauritius*, *27*.

Sen, A. (1994). Human Development Index: Methodology and Measurement.

Sikwila, M. N. (2014). Foreign direct investment: does it matter? A case for Zimbabwe. *Research in Business and Economics Journal*, *10*(2014), 1-12.

Sirowy, L. & Inkeles, A. (1991). The effects of democracy on economic growth and inequality: a review. In On Measuring Democracy: Its Consequences and Concomitants, Inkeles A (ed). *Transaction Publishers: New Brunswick*; 125–156.

Smith, A. (1776). *An Inquiry into the Nature and Causes of the Wealth of Nations (Cannan Ed.)*. Online Library of Liberty.

Smith, A., & Cannon, E. (1937). *An Inquiry into the Nature and Causes of the Wealth of Nations Wealth of Nations The*. Modern Library, New York.

Soumare, I. (2015). Does foreign direct investment improve welfare in North Africa? *Africa Development Bank*.

Soumaré, I., & Tchana Tchana, F. (2015). Causality between FDI and financial market development: evidence from emerging markets. *The World Bank Economic Review*, *29*(suppl_1), S205-S216.

Tamazian, A., Chousa, J. P., & Vadlamannati, K. C. (2009). Does higher economic and financial development lead to environmental degradation: evidence from BRIC countries? *Energy policy*, *37*(1), 246-253.

University of Ghana http://ugspace.ug.edu.gh

Tamer, C. R. (2013). The Effects of Foreign Direct Investment and Official Development Assistance on the Human Development Index in Africa.

Tvaronavičienė, M. & Lankauskienė, T. (2011). Plausible foreign direct investment'impact on sustainable development indicators of differently developed countries. *Journal of Security and Sustainability Issues, 1*, 27-38.

UNCTAD, U. (2014). World investment report 2014: Investing in the SDGs: An action plan. *United Nations publication. Retrieved May, 5*, 2015.

UNCTAD, U. (2015). World investment report 2015: Reforming international investment governance. *United Nations Publications Customer Service*, 253.

United Nations Conference on Trade and Development (2017). *World Investment Report 2017: Investment and the Digital Economy*. UN.

Usman, A. S., & Manap, T. A. A. (2010). The effect of foreign direct investment and multinational corporations on sustainable development in Nigeria: halo or haven? Emphasis on CO2 anthropogenic emission. *Pros Perkem V*, *2*, 58-68.

Vergne C. (2009). Democracy, elections and allocation of public expenditures in developing countries. *European Journal of Political Economy, 25(1)*, 63–77.

Voica, M. C., Panait, M., & Haralambie, G. A. (2015). The Impact of Foreign Direct Investment on Sustainable Development. *Petroleum-Gas University of Ploiesti Bulletin, Technical Series*, *67*(3).

Walker, J. (1983). OECD Benchmark Definition of Foreign Direct Investment. *Statistical News*, *61*(61.4).

University of Ghana http://ugspace.ug.edu.gh

Yahouedeou, C. J. L. M., Wu, G., Omedi, J. O., Fan, Y., & Zhou, W. (2018). Empirical study of Foreign Direct Investment in the participation of Sustainable Development achievement in Africa: Does FDI help to achieve Human Development? *International Journal of Humanities and Social Science Invention (IJHSSI), 7(06),* 43-58

Zellner, A. (1962). An efficient method of estimating seemingly unrelated regressions and tests for aggregation bias. *Journal of the American statistical Association*, *57*(298), 348-368.

Zhao, Z., & Zhang, K. H. (2010). FDI and industrial productivity in China: Evidence from panel data in 2001–06. *Review of Development Economics*, *14*(3), 656-665.

Zukowska-Gagelmann, K. (2000). Productivity spillovers from foreign direct investment in Poland. *Economics Systems*, *24*(3), 31-42.