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DETERMINANTS OF FOREIGN DIRECT INVESTMENT INFLOW IN SELECTED WEST AFRICAN COUNTRIES, 1990-2019

***OKONMA, MARK CHUKWUELOKA; & **WOSOWEI, ELIZABETH CHINASA**

*Department of Economics, Ashgrove Academy, University of Port Harcourt, Choba, Rivers State.
**Department of Economics, Isaac Jasper Boro College of Education, Sagbama, Bayelsa State.
Corresponding Author: markput25@yahoo.com
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Abstract

The rate at which West African nations attract Foreign Direct Investment is poor as compared to other regions. Thus, this study ascertains the factors that determine the inflow of Foreign Direct Investment in selected West African Nations from 1990 to 2019. The study used panel data regression analysis. The study found that market size, infrastructure development, trade openness and natural resources rent accounted for about 72% variation in the inflow of FDI to the six West African nations during the period under review. The study, therefore, concluded that macro-economic factors and natural resources endowments of these nations are crucial determinants that compels Foreign Direct Investment inflow. Based on these findings, the study recommends that government authorities in [redacted] these West African nations should invest more in developing infrastructures to attract more Foreign Direct Investment to their countries. Also, Foreign Direct Investment should be directed to the industries where they have high linkage and positive spillover effects for both the long and the short run economic advantages.

Keywords: Foreign direct investment, West African Nations, Macro-economic factors, Natural resources endowments, Positive spillover.

Introduction

Basically, Foreign Direct Investment (FDI) whether it is government or private based or whether it is local or foreign based, is essential to socio-monetary transformation and economic development of any nation. In the 70s and 80s, several developing nations tried to set-up programmes and policies concerning Foreign Direct Investment inflow these activities were anchored on trade limitations and funding controls which were enforced to protect domestic industries from overbearing impacts of their foreign competitors and to marmalade (conserve) oversea exchange reserves (Dupasquier & Osakwe, 2006). The outcome of these programmes brought about instabilities on both private and social returns to invested funds which minimized FDI inflow to nations that were involved. In the late 80s and 90s, several West African nations responded to these issues and concerns of monetary advancement they faced and started reforms and restructuring to eliminate hindrances or restrictions on business and FDI which triggered some impressive monetary increment in these nations of the region (UNESCAP, 2000). Confronted with these issues of local resources to fund their economic advancement, several West African nations are currently looking out for foreign sources to finance their advancement, thus designing policies to propel and attract FDI (UNCTAD, 2013; Asongu, 2014"). FDI to advancing nations possess potential and capabilities of being mutually advantageous to both receiving nations and Multinational Corporations (MNCs) who are the givers. To these receiving nations, FDI avails more funding resources via investment and levies, create works or job employment, and create spill-over impact like skill transfer, technology transfer, management expertise, and business governance expertise.

FDI is a procedure whereby residents of resource rich nations attain assets ownership with intention or aim to control firm's activities in receiving nations. The IMF's payment balance manual defines FDI as, "an investment that is made to acquire a lasting interest in an enterprise operating in an economy other than that of the investor, the investor's purpose being to have an effective voice in the management of the enterprise". UNCTAD (2013) defines FDI as, "an investment involving a long-term relationship and reflecting a lasting interest and control of a resident entity in one economy (foreign direct investor or parent enterprise) is an enterprise resident in an economy other than that of the foreign direct investor". The most crucial feature of FDI definitions presented thus lies in the phrase "control and controlling interest", which separates Foreign Direct Investment from Foreign Portfolio Investment. But

FDI is attracted to places that have suitable locational benefits or advantages. FDI is a key element of globalization and of the world economy, a driver of employment, technological progress, productive improvements, and ultimately the acceleration and sustenance of long-term economic growth. It plays the critical roles of aiding development, foreign exchange, investment, and tax revenue gaps in developing countries (Smith, 1997; Quazi, 2007). FDI can be a catalyst for economic diversification, helping African economies move beyond over dependence on natural resources, in addition to being a critical source of long-term capital for investment in infrastructure and other developmental initiatives, it plays the critical roles of filling the development, foreign exchange, investment, and tax revenue gaps in developing countries (Smith, 1997; Quazi, 2007). Unfortunately, Africa has never been a major recipient of FDI inflows and so lags behind other regions of the world. For example, in 2014, Africa's global share was a mere 4.4 percent against 37.9 percent for Asia. At the same time, FDI inflows to Africa vary across regions of the continents. Although total Foreign Direct Investment inflow to the West African region has increased in recent times, the flow has been more to the countries that have certain advantages. Africa has the highest inflow of Foreign Direct Investment among the different regions. In 2018, the inflow of Foreign Direct Investment into Africa increased by 11 percent. The reasons for the highest Foreign Direct Investment inflow in Africa are the continued resource-seeking investments, slow expansion of diversified investments in a few economies, and more than double inflow records in South Africa (UNCTAD, 2019). Based on FDI spread in geographical sub-regions, Nigeria was highest FDI recipient in West Africa, "Mexico in Central America, China in East Asia, Indonesia in South-Eastern Asia, India in Southern Asia, Brazil in South America, and Turkey in West Asia" (World Bank, 2013, p, 78). The FDI inflow plunged for 2017 with nearly 22%, from $1.77 trillion for 2016 to over $1.42 trillion. This downward pattern on FDI and decrease in global value posed appreciable challenge to policy-makers globally, especially, and particularly in advancing nations in Africa (Osabohien et al., 2018).

STATEMENT OF THE PROBLEM

Most West African nations have demonstrated some marginal transformation in economies, organization and distribution of products. The economies of Nigeria, Ghana, Gambia, Senegal, Sierra Leone and Liberia have become important in the West African Sub region, and in Africa at large. The competition for FDI have forced these countries to change their commercial policies, making them put certain infrastructure that are aimed at stabilizing the macroeconomic environment. It is expected that,

with these economic changes or transformation in the region, the region would emerge as a strong and preferred destination for FDI (World Bank, 2012).

Notwithstanding the abundance of natural resources, favorable labor supply dynamics, easy entry policies, and improving infrastructural capacity, the West African Sub-region has not been able to attract enough FDI to stimulate its economy and bridge the gap of prosperity. Between 2010 and 2015, Africa attracted about 26% of total FDI. However, only a paltry 6.8% came to the West African region (WTO, 2016). There is still a slow growth, inadequate capital, and high unemployment, which are the challenges the supposed benefits from Foreign Direct Investment should settle. It appears the easy policies, the favorable human capital resources, large market size, and abundance of varieties of natural resources in the region are not enough attractions of FDI to the region. If nothing is done to attract enough FDI this region, the economies of the region will lose out in the competition for FDI and in attracting foreign assistance for development. This is a dangerous position, and addressing these challenges requires the understanding of the major factors which determine the flow of FDI, so that suitable policies could be set-up to address these issues in the region.

Several studies have been conducted to determine factors which influence the flow of FDI in Sub-Sahara Africa. Some of the studies include those of Borros-Torsticca, 1999; Sahoo, 2010; and Moosa, 2016. However, most of these studies considered the transition economies like the Eastern Europe and the Asian countries. Given the absence of consensus in "theoretical and empirical literature on the determinants of FDI inflow" into the Sub-West African region, it therefore becomes imperative to launch a research to determine factors which influence the inflow of FDI into the Sub-West African region. Empirical determinations of these factors will go a long way in reducing factors which have negative influence in attracting foreign investors. It is in this context; the study seeks to interrogate the literature on the holistic factors which determine flows of FDI into the Sub-West Africa region for the period 1990 to 2019.

OBJECTIVES OF THE STUDY

The main objective for this study is to examine factors that determine inflows of Foreign Direct Investment in six West African nations. The study specifically examined the impact of:

1. market size on FDI inflow to the six selected West African nations,
2. infrastructural development on FDI inflow in selected West African nations,
3. trade or business openness on FDI inflow to selected West African nations, and

4. natural resource rent on FDI inflow to selected West African nations

RESEARCH HYPOTHESES

1. Market size has no significant impact on FDI inflow to West African nations.
2. Infrastructure development has no significant impact on FDI inflow to West African nations.
3. Trading or business openness has no significant impact on FDI inflow to West African countries.
4. Natural resource rent has not significantly influenced the inflow of Foreign Direct to West African countries.

LITERATURE REVIEW

CONCEPTUAL CLARIFICATIONS ON FOREIGN DIRECT INVESTMENT

It is important to note that when presenting definition for "Foreign Direct Investment (FDI)", it is crucial to differentiate between the two main forms of funding inflows across nations which are "Foreign Direct Investments (FDIs) and Foreign Portfolio Investments (FPIs)". The World Bank (2014) defines "Foreign Direct Investments as net inflows injected by an investor to acquire a 10 percent or more lasting management interest in a company that operates in an economy other than that of the investor" (Almfraji & Almsafir, 2014, p.3). The term "lasting interest" means long time association between these FDI and investee firms, and this 10% requirement necessitates appreciable influence that could be impacted by this oversea investor on these firms or businesses (UN, 1999). These features are the main disparity or distinguishing features between FDI and FPI.

Foreign Direct Investment is the process whereby citizens of one country (usually called the source country) gain ownership of assets located in another country (traditionally called the host country) to control production, distribution and other activities of a business in that country (Ghahroudi et al., 2018; Yoo and Reimann, 2017). With FDI, the investor, who is usually not a resident of the host country, aims at acquiring a lasting interest and control in an industry (Ajide et al., 2022). When FDI involves transferring the capital from a source country to a host country, the transfer should control substantial equity shareholdings (Areneke et al., 2022), and some assets should be shifted into the host country (Padmanabhan et al., 2020). FDI can be classified into different types depending on the investor/the source country or the host country's perspectives (Yoo and Reimann, 2017). The International Monetary Fund (IMF, 1993) defines Foreign Direct Investment as an international investment

made by a resident entity in one economy (direct investors) with the objective of establishing a lasting interest in an enterprise resident in an economy other than that of the investor (direct investment enterprise).

FDI inflows includes summation of funds, reinvested earnings, other long-time funding and also short time funding as revealed in their balance of payment (World Bank, 2014) Foreign Portfolio Investments (FPI), on another hand, is concerned with funds invested by any person or firm residing in one nation into another firm residing in another nation with the main aim of procurement fund gains but not unavoidably initiating long time association (UN, (1999). FPI is usually concerned with purchasing bonds, shares, notes and other instruments in money market that are traded on stock exchange of their receiving nation (Sornarahej, 2010).

DETERMINANTS OF FOREIGN DIRECT INVESTMENT

Several empirical studies have been carried out on the determinants of FDI flows and their impact on monetary increment of receiving nations. Some of these researchers used Dunning Eclectic parameter as a framework in capturing and analysing why Multi-National Corporations (MNCs) invest overseas (Kinda, 2010). This concept is termed OLI concept and it maintains that companies invest overseas due to location, ownership and global advantages (Kinda, 2010). There are several monetary and institution-based factors that affects FDI such as market size, fiscal and monetary policies and natural resources (Chang, 2013). Findings from works by BRICS nations uncovered that monetary factors are crucial than institution and politic-based factors (Jadhav, 2012). These FDI determinants as enunciated by Chang (2013) are; (i.) Governance and Political Risk (ii.) Market Size and Demand Conditions (iii.) Trade Openness (iv.) Natural Resources (v.) Exchange Rate Considerations (vi.) Trade Incentives Barricades and Agreements (vii.) Human Capital (viii.) Infrastructure Considerations. For the purpose of achieving the objectives of this study we will look at four of these determinants as reflected in our Research Questions and Hypothesis. These four determinants are discussed as follows;

(i.) **Market Size**: This parameter concerns receiving nation's market size and market depth in considering their increment potential monetarily (Luiz, 2009). A work done by Castro (2013) on FDI determinants in Brazil from 1990 down to 2010 uncovered that alteration in GDP exerted massive effect on FDI. Furthermore, he uncovered that most oversea investors in Brazil possess certain market-seeking techniques that was based on GDP size (Castro, 2013). Chang (2013) also confirmed positive connections

between FDI and market size as huge markets allow MNCs to compel edge of economies of scale. Luiz (2009) also maintain that sometimes market size is never enough factor. Some firms need buyers with certain revenue verge, not minding market size of their receiving nations. In the same vein, a study carried out by Kazeem et al (2023) on FDIs determinants in Nigeria but with insights relevant to West Africa identified market size and economic openness as major determinants of FDIs inflows in that region. There is common understanding among several researchers that inferred that GDP of any nation has appreciable positive impact on FDI flow (Asiedu, 2006; Chakrabarti, 2001).

(ii.) **Infrastructure Considerations:** Infrastructure comprises of telecommunication systems, roads, ports, sanitation, water, electricity, railways, and airports and they are beneficial in aiding and stimulating trade. Good, sustainable, and flexible infrastructure motivates FDI flows because it minimizes operation expenses for oversea investors. For instance, for oversea investors that works on funding services, presence of current IT and telecom infrastructure is notably and critically crucial to serving their customers maximally (Luiz, 2009). Chukwu and Uwaezuoke (2024) revealed in their study in Nigeria that infrastructural development had a statistical insignificant negative impact on FDIs during the study period. Several literatures are available on connections between FDI and its determinants like in Owusu-Manu et al (2019) in study in Ghana showed that there is a significant relationship between FDI and infrastructure. At the same time, several empirical evidences have clearly shown possible impacts of infrastructural advancement on FDI. This current work aim at making its own contribution in this regard.

(iii.) **Trade or Business Openness:** Chang (2013) evaluated business openness as proportion of entire trade which is summing imports/exports compared to GDP. Based on research by Chakrabarti (2001) which was conducted cross 135 nations, indicated that a nation's openness to trade is the most appreciable factor and correlation for FDI when compared to any other monetary parameter investigated in their analysis and it revealed positive connections. Abubakar et al (2023) revealed in their study that the quality of governance significantly affect the attraction of FDIs and trade facilitation, suggesting that improved regulatory framework are essential for economic performance. This means that appreciably, more business-

opened nations are likely to compel oversea investors (Babatunde,2011). He equally explored connections between trade-openness and infrastructure and conclude that impacts of trading on FDI improves when infrastructure is improved or increases.

Agosin (2007) equally confirmed positive connections between FDI and business-openness but observed that explanatory capacity of the latter is low. He therefore, considered domestic benefits as more crucial factors. Castro (2013) worked on FDI flow into Brazil and Mexico from 1990 down to 2010, and uncovered positive appreciable connections between business-openness and FDI inflows.

(iv.) **Natural Resources:** Asiedu (2006) stated that even though endowment with natural resources plays an important role in encouraging Foreign Direct Investment for a host country, Foreign Direct Investment can still be attracted to countries that lack natural resources if their institutional and political environments have been improved. Research on determinants and factors of FDI into Africa from 1980 to 2007 indicated that most FDI inflows to Africa were seeking for natural resources and revealed that from 1998 to 2009 most inflows were targeted at oil, gas and mining based ventures (Anwanwu, 2011).

THEORETICAL FRAMEWORK FOR FOREIGN DIRECT INVESTMENT

The theoretical framework for "Foreign Direct Investment" is usually explored based on three concepts namely, Macro-level Theory, Micro-level Theory and Development Theory,

(a.) **Macro-Level Theories of Foreign Direct Investment:** These includes;

(i.) **Capital Market Theory** (Markowitz, 1959), applied to FDI to assess and manage risks and construct diversified portfolios that balance risks and returns in the context of international investments.

(ii.) **Exchange Rate Theory** (Froot & Stein, 1991; Cushman, 1985) provides insights into the factors influencing exchange rates, which have implications for Foreign Direct Investment. Factors such as purchasing power parity, interest rate differentials, and investor sentiment affect exchange rates, which, in turn, impact the attractiveness and risks profile of FDI opportunities

(iii.) **Institutional Analysis Theory** developed by Wilchems & Wilfer (1998). Macro- monetary theory sees FDI as a form of funding flow among

nations globally and tries to explain motivations and determinants of FDI in macro-economic context.

(b.) Micro Level Theories of Foreign Direct Investment:

The Micro level theories of FDI includes;

(i.) **Firm Specific Benefit Theory:** This theory which was first presented by Hymer in 1976 maintains that FDI flows abroad because of certain benefits like access to needed raw materials, economies of scale cost for transportation cost, etc.

(ii.) **Oligopolistic theory:** This theory was developed by Knickerbocker (1973). The theory was based on market imperfections. It has been asserted in the economic literature that there are two important motives for choosing a particular country as a location for setting up a new facility: (a) firms seek increased access to the host country's market; and (b) firms want to utilize the relatively abundant factors available in that country.

(iii.) **Internationalization Theory**: was first presented by Rugman in 1981 and Buckley and Casson in 1985, and stated that companies invest overseas with single reason of internalizing their costs. Buckley and Casson analysed MNCs within a broad-based framework. Their theory came to be known as internalization theory as they stressed this fact with regard to the creation of MNCs. They articulated their theory based on three postulates; (i.) Firms maximize profits in a market that is imperfect. (ii.) When markets in intermediate products are imperfect, there is an incentive to bypass them by creating internal markets. (iii.) Internalization of markets across the world leads to MNCs.

(iv.) **The Eclectic Paradigm Theory**: In his path breaking work, Dunning (1977 and 1979) amalgamated the major imperfect market-based theories discussed above (the oligopolistic and internalization theories) and added a third dimension in the form of location theory to explain why a firm opens a foreign subsidiary. Location theory addresses the important questions of who produces what goods or services in which locations, and why? Location theory has also been frequently applied by researchers in attempting to understand the factors that influence locations of MNC units.

(v.) Development Theories of Foreign Direct Investment (Mixed Theories): There are two prominent theories in this category as discussed below:

(i) Product life cycle theory (PLC theory): Product Life cycle theory (Vernon 1966, 1974) argues that the production location of labour saving - capital intensive goods changes during the whole product life in the market. Its production initially happened in the innovation countries (especially, the U.S), then move to developed countries, and end up in the developing countries (the classification is according to the technique level). The multinational firms service the global market through the strategy combination of trade and FDI based on the changes of market structure.

(ii) The Japanese theory: Kojima (1978) elaborated his theoretical exposition based on the well-known Heckscher-Ohlin theorem. He divided Japanese FDI into four major types: resource oriented, labor-oriented, market-oriented and oligopolistic investment. He argued that each type has a different motivation and impact on trade and on the host country economy. Ozawa's (1992) hypothesis supports the hypothesis of Kojima. Basically, it is an extension of the comparative advantage theory. He contends that the outflow of Japanese investment has been an integral part of its industrial restructuring at home and in fact, a crucial instrument for industrial upgrading in the Asian region; hence the path of Japanese overseas investment has been functionally related to the path of industrial structural changes at home.

FACTS ABOUT FDI INFLOWS TO SELECTED WEST AFRICAN ECONOMIES

Global FDI has made rapid increase in the last few decades. For example, global inward FDI flows rose from US$54.1billion in 1980, reaching US$207.7billion in 1990 to a peak of US$1.402trillion in 2000. A fall ensued from 2001 such that by 2003 it had dipped to US$565.7 billion before peaking again at US$2100 billion in 2007. Estimates for 2010 put the fall to US$1.409 trillion consequent upon the financial and economic crisis. There are a number of interesting and changing characteristics of FDI in Africa. One of them is that FDI inflows vary across Sub-regions as defined by the United

Nations. Between 1990 and 2018, the average FDI inflows by Sub-region was highest in North Africa (US$4.84 billion), followed by West Africa (US$3.64 billion), with the lowest average going to Central Africa (US $1.65 billion). North Africa dominated by a great margin between 2004 and 20S0 before West Africa took over from 2011, though this was short-lived. However, in terms of the average percentage of the total inflows to Africa, West Africa received the highest during the same period at 31.29 percent, followed by North Africa (29.67 percent), Central Africa (15.25 percent), Southern Africa (12.02 percent), and East Africa (11.77 percent). Between 1990 and 2018, the top five country recipients in West Africa were Nigeria (57.5 percent), Ghana (12.4 percent), Cote d'Ivoire (4.8percent), Liberia (4.7percent), and Mauritania (3.4percent), most of which are fossil fuel and metal producers and exporters and their collective inflows representing over 80 percent of the total inflows.

(a) **Foreign Direct Investment (FDI) in Nigeria:** Nigeria is among the most promising poles of growth in Africa and attracts numerous investors in the sector of hydrocarbon, energy, buildings, etc. The country undergoes the effects of the oil counter-shock. In 2019, FDI flows to Nigeria totalled to USD 3.3 billion, showing a 48.5% decrease compared to the previous year (USD 6,4 billion in 2018) under the effects of austerity measures. The total stock of FDI was estimated at USD 98.6 billion in 2019. Some of the main investing countries in Nigeria includes the USA, China, United Kingdom, the Netherlands and France. Nigeria intends to diversify its economy away from oil by building a competitive manufacturing sector, which should facilitate integration into global value chains and boost productivity. The recent merger of trade, industry and investment under the ambit of the Federal Ministry of Industry, Trade and Investment reflects Nigeria's intention to effectively co-ordinate between these three key areas to improve its trading and investment environment. Some of the country's main advantages are a partially privatized economy, an advantageous taxation system, significant natural resources and a low cost of labour. On the other hand, widespread corruption, political instability, lack of transparency and poor quality of infrastructure are limiting the country's FDI potential. In the World Bank's 2019 edition of Doing Business Report, Nigeria ranked 146th worldwide, for the ease of doing business. Nigeria appears as one of the top 10 improvers and has been attracting strong inflows from all parts of the world. In 1995, the Nigerian Investment Promotion Commission Act dismantled years of controls and limits on Foreign Direct Investment (FDI), opening nearly all sectors to foreign investment, allowing

for 100 percent foreign ownership in all sectors (with the exception of the petroleum sector, where FDI is limited to joint ventures or production sharing contracts), and creating the Nigerian Investment Promotion Commission (NIPC) with a mandate to encourage and assist investment in Nigeria. Foreign investors receive largely the same treatment as domestic investors in Nigeria, including tax incentives. However, without strong political and policy support and because of the unresolved challenges to investment and business in Nigeria, the ability of the NIPC to attract new investment has been limited.

(b) **Foreign Direct Investment (FDI) in Ghana:** FDI flows in Ghana decreased from USD 3 million to USD 2.3 million between 2018 and 2019. The FDI stock reached USD 38.5 million in 2019. Mining and oil exploration are the main sectors that attracted most of the FDI. The country hosts annual summits (Ghana Investment Summit) to position itself as a hub in West Africa for foreign investors. China has the highest number of investment projects registered with Ghanaian institutions, followed by India, the United Kingdom, South Africa, Turkey, Mauritania and France. The authorities in Ghana have been pursuing efforts to simplify the complex and lengthy procedures while also offering tax incentives. Additionally, Ghana is one of the most democratic countries in Africa, and it accounts for a large and inexpensive labour force, a substantial agricultural base, numerous natural resources and stable institutions. It is also one of the most open economies to foreign equity ownership in the region. However, the burdensome bureaucracy, weak productivity, costly and difficult access to financial services, under-developed transport infrastructure, ambiguous property laws, frequent power and water cuts and an unskilled labour force are the main factors that hinder FDI. Ghana is ranked 118th in 2019 worldwide for the ease of doing business, losing four positions compared to the previous year. In 2019, the government announced it would implement ten major reforms to secure more foreign investments. The measures include dematerializing tax, legal and business registration processes. Also, issuing of construction permits, operating permits etc. will be automated and digitalized. In addition to these reforms, a scheme to boost the performances of the power sector was initiated. In recent years, the country has poured substantial amounts into its oil and gas operations, and also in agriculture and industries. However, some challenges impairing investments include cumbersome administrative processes, corruption, weak productivity and unskilled labour, other major issues include insufficient water

and power supply. Access to electricity, the resolution of insolvency problems and the protection of investors are points on which the country has a large margin of progress.

(c) **Foreign Direct Investment (FDI) in Sierra Leone:** Following a steady growth until 2012, Foreign Direct Investment (FDI) was severely impacted by the Ebola outbreak in Sierra Leone. However, FDI flows picked up to reach USD 368 million in 2019, up from USD 218 million in 2018. Volatile FDI flows mostly attributable to the operations of mining multinational enterprises in Sierra Leone. FDI stocks increased significantly to USD 2 billion in 2019. Traditionally, Sierra Leone's main investors are Nigeria, Sweden, Mauritius, Belgium, Germany and the United States, but China has become a major investor. Foreign investors are engaged in energy (including renewables), infrastructure, agriculture, fisheries, tourism, and natural resources. The Covid-19 pandemic has negatively influenced investment inflows into the country.

Sierra Leone is trying to attract investments through public private partnerships (PPPs) to undertake major infrastructural projects, particularly in power, water, roads, ports, and telecommunications, etc. The country's substantial mining wealth, the absence of any arbitrary discrimination against foreign companies and restrictions on the repatriation of profits, as well as the sale of assets (guaranteed by the new investment code) make Sierra Leone attractive for FDI. However, the shortage in skilled labour, the lack of infrastructure, the slow legal system, the high level of corruption, political violence and serious social disorder due to socio-economic disparities are major obstacles to FDI. Sierra Leone ranked 163rd out of 190 countries in the World in 2019, at the same rank as in the previous classification. The country is currently financing a hospital, a hydroelectric dam, a rubber production project spanning several thousand hectares (worth USD 1.2 billion, financed by China Hainan Rubber Group), as well as rice cultivation (100,000 hectares), stadiums, roads, bridges, electrical project, and a fishing harbour project.

(d) **Foreign Direct Investment (FDI) in Senegal:** Senegal hosts a large stock of FDI compared to its neighbouring countries in the region. The government is leading an active policy to encourage FDI inflows. FDI in Senegal rose from USD 848 million in 2018 to a record level of USD 983 million in 2019 (+16%). The total stock of FDI stood at USD 6.4 billion at the end of 2019. Overall, the share of imports from EU countries has been declining, while those from Asian

countries have been increasing. Nonetheless, the Senegalese economy remains highly dependent on European growth.Since 2014, FDI inflows have been linked to the Emerging Senegal Plan for the development of infrastructure, electricity, agriculture, drinking water and health. France is the largest investor in Senegal, but recently there have been important investments from China, Turkey and the United Arab Emirates. Some other key investors are Morocco, Indonesia, and the United States.

As part of the program to improve the business climate and implement competitive reforms, visible improvements have been made in the process of business creation and contracts enforcement. The government welcomes foreign investment, but potential investors are facing obstacles, including non-transparent regulations and high factor costs. Senegal's strengths include competitive production costs, a skilled workforce, a strategic geographical location, good international and regional political relations, and a competitive economy. Some of the barriers that might impede investment are economic vulnerability, low activity diversity, underdeveloped infrastructure, inefficient regulations, bureaucracy, high factor costs, and lack of security. Senegal has been pursuing major investment deals with foreign partners. Some projects have been offered via public tenders and some have been negotiated privately. Foreign investors have recently secured contracts to exploit mineral resources, provide garbage services, and manage Dakar's maritime port.

(e) **Foreign Direct Investment (FDI) in The Gambia:** FDI inflows in The Gambia decreased slightly from USD 33 million to USD 32 million between 2018 and 2019. The total stock of FDI was estimated at USD 443 million in 2019. Agro-processing activities and tourism attract most of the FDI. The main investors are India, Lebanon, Mauritania, China and the United Kingdom. The global pandemic and related emergency measures have halted tourism (the mainstay of The Gambian economy), disrupted trade, and reduced remittances and private capital inflows. The Country is ranked 155th in 2019 worldwide in doing business, losing five places in the previous year. The Gambia offers tax incentives, transparent and simple procedures as well as a strong potential in the tourism and re-export sectors. Its limited size and its landlocked position can be impediments to investments. The country should improve the access to electricity and credits, simplify the tax system, better protect minority investors and resolve issues due to insolvency.

The government is working to attract more foreign investments in the country. These investments are mostly concentrated in the agro-food and tourism sectors. The government has identified several areas as 'priority sectors' that attract a Special Investment Certificate (SIC), which provides a range of incentives, including duty exemptions and tax holidays. There are no laws or practices in The Gambia that discriminate against foreign investors. Through the National Entrepreneurship Policy, the State promotes business creation in order to diversify the economy. Tax advantages, simple procedures and tourism's strong potential are some of the country's main assets.

(f) **Foreign Direct Investment (FDI) in Liberia:** FDI flows to Liberia accounted for USD 138 million in 2019, a decrease from USD 143 million in 2018. FDI stock also reached USD 8.9 billion in 2019. The country's mining resources, rubber and palm oil plantations attract most of the FDI. South Korea, Germany and Singapore are the main investing countries. Several foreign companies have shown an interest in the commercial exploitation of offshore crude oil deposits along Liberia's Atlantic Coast. Moreover, the EU-Africa Infrastructure Trust Fund granted EUR 27 million for technical assistance in engineering,poor infrastructure, bureaucratic red tape, high levels of corruption and unskilled labour still hamper Foreign Direct Investment. However, the government is currently trying to increase the transparency of public procedures for investors and the country benefits from various natural resources (rubber, iron, gold, diamonds and oil). Liberia ranked 175th out of 190 countries in the World in doing business, down one position from a year earlier.

METHODOLOGY

The research design chosen for this study is the correlational research design because it involves observing two variables in order to establish a statistically corresponding relationship between them (Tan, 2014). The aim of the correlational research is to identify variables that have some sort of relationship to the extent that a change in one creates some change in the other.

The model of Specification for this study is based on John Dunning (1981) Eclectic Macroeconomic Foreign Direct Investment Structure. The framework considers expanded issues in determining the flow of Foreign Direct Investment. Following Dunning (1981) and Oscar (2007), a model of the determinants of FDI flow to West African countries could be expressed as:

…….

Where

FDI is the dependent variable and represents foreign direct investment

GDP is market size

INFR is the level of infrastructure development

OT is the openness to trade

RR is the natural resources rent

The functional model specified above can be expressed in econometric model as:

…… (3.2)

$\beta_1..\beta_4$ are coefficient of the independent variable

e is the error term

The data for this study were of secondarily sources and it consist of annual time series of the following variables in the six West African Countries under investigation from the period between 1990 to 2019

(i) Market Size proxy Income level-real GDP per capita (RGDPc),
(ii) Natural Resources Rent (RR),
(iii) Level of infrastructure development (INFR),
(iv) Trade Openness (OT), and,
(v) Foreign Direct Investment (FDI)

Variables in the Model are;

(a) Independent Variables

(i) Market Size:
(ii) Natural Resources Rent:
(iii) Trade Openness:
(iv.) Level of Infrastructural Development

(b.) Dependent Variable

(i) Foreign Direct Investment: FDI is taken to represent the inflow of a bundle of capital, technology and managerial know how across international boundaries in search of profits (Gbosi, 2005). Here, it is measured based on Dollars. It is the yearly flow of FDI in the respective countries.

The data was analyzed using E-view statistical analysis. Specifically, the Classical Linear Regression approach was adopted. This approach is simple and the estimates have desirable statistical properties. The data analysis will proceed as follows:

i. **Descriptive statistical analysis:** The descriptive statistical properties of the data variables would be evaluated. Important descriptive properties of interest are the mean, median, skewedness, kurtosis and standard deviation of the variables.

ii. **Correlation Matrix: Multicollinearity Test**

This test examines the variables for near perfect multicollinearity among the variables. If there is multicollinearity among the variables, the model adjusts follows. Some of the variables may be changed or removed from the model.

iii. **Panel Unit Root Test:** It is also important to examine time series data for unit root to avoid spurious regression.

DATA ANALYSIS AND EMPIRICAL RESULTS

DescriptiveStatistics

The descriptive statistic shows the statistical properties of the variables in the model. It is very important to analyse the descriptive statistics of these variables so that the researcher will have preview of the behaviour of the variables before applying them to regression model.

Table 1: Descriptive Statistics for Variables in the Model

	FDI	GDP	INFR	TOP	RR
Mean	4.75E+08	5.39E+10	1.10E+10	84.08887	13.15041
Median	1.37E+08	6.02E+09	8.47E+08	53.10773	10.06015
Maximum	3.49E+09	4.77E+11	7.82E+10	433.9148	61.69977
Minimum	-1.32E+08	0.000000	-20612328	-3.403622	0.000000
Std. Dev.	8.18E+08	1.13E+11	2.12E+10	97.88469	12.96475
Skew	2.308186	2.524575	1.821718	2.230567	1.552055
Kurt.	7.481649	8.418061	4.626180	7.140131	5.643565
JB test	310.4705	411.3697	118.7299	277.8180	124.6795
Pro.	0.000000	0.000000	0.000000	0.000000	0.000000
Sum	8.56E+10	9.71E+12	1.97E+12	15136.00	2367.073
Sum Sq. Dev.	1.20E+20	2.27E+24	7.98E+22	1715073.	30087.18
Observations	180	180	180	180	180

Source: E-view Computer output

From Table 1, there are 180 observations for each variable for the six nations thirty (30) years for the six counties is $475 million. The maximum level of FDI was $ 3.49

billion; while the minimum level for the period under review is $130 million. The mean of the Gross Domestic Product (GDP) for the period under review was $539 billion; the maximum value is $477 billion and the minimum value is $0.0000. The mean of infrastructure investment from 1990 to 2019 in the six countries was $11 billion. The maximum value was $78 billion; while the minimum value recorded during the period is -$20,612,328 million. The mean value of trade openness index was 84, while the maximum and minimum indexes are 433 and -3.40 respectively. The minimum values of natural resource rent for the six countries during the period under study was 0.0000%. The maximum value was 62%.

All the variables skewness value greater than 0.0000 and are therefore positively skewed. That is, they tend to have positive momentum, which is, increasing tendency. The kurtosis values for all the variables are greater than 3.00. That is, they have excess kurtosis and are leptokurtic. It implies that they have more peak top than the normal distribution. The p-values of Jaque-Bera statistics value for all the variables are greater than 0.05. Hence, the variables do not have normal distributions.

Multicollinearity Test

In multiple regression model such as the one employed for this analysis, it is important to examine the model for any sign of multicollinearity among the variables. Multicollinearity lead to the problem of indeterminate parameters. The multicollinearity test approach adopted in the model is the correlation matrix test approach. The correlation matrix test examines the pair-wise correlation coefficients of the variables to see if any is greater than 0.9 to indicate perfect collinearity and point out the problem of multicollinearity among variables. The results of this test are presented in Table 4.2. below.

Table 2: PW Correlation Matrix for the Variables in the Model

	FDI	GDP	INFR	TOP	RR
FDI	1.000000				
GDP	0.285166	1.000000			
INFR	0.249293	0.837899	1.000000		
TOP	-0.038558	-0.185754	-0.199996	1.000000	
RR	0.601193	0.056221	0.109720	-0.062061	1.000000

Source: E-view computer output

From the results presented in Table 2, none of the pair-wise correlation coefficients are greater than 0.9. Hence, there is no reason to suspect the problem of

multicollinearity in the model. The variables can be combined in a multi-regression model without any fear of multicollinearity in the model.

Panel Unit Root Test Result

The variables in the model were examined for stationarity (Unit root). The panel unit root test employed include the Levin, et al, (2002) Im, et al, (2003) ADF- Fisher and PP- Fisher) approaches at 0.05 levels of significance. The results are presented in Table 4.3 below

Table 3: Panel Unit Root Test Result Level

		LL	IPS	ADF-Fisher	PP-Fisher
	Variable	**t-statistics**	**t-statistics**	**Chi-square**	**Chi-square**
	FDI	1.08888	1.8308	7.93732	8.2502
		(-0.8619)	(-0.8413)	(0.7900)	(0.7653)
	GDP	0.3863	2.4722	7.52812	7.0160
		(-0.6489)	(-0.9933)	(-0.8208)	(-0.8565)
	INFR	1.51936	0.61482	24.5927	21.4465
		(-0.9357)	(0.7307)	(-0.0169)	(-0.0442)
	TOP	0.6217	-3.2849	45.1547	37.6468
		(0.7329)	(-0.0005) *	(0.0000) *	(-0.0002) *
	RR	0.69652	0.08542	14.2521	13.553
		(-0.7569)	(-0.4660)	(-0.2849)	(-0.3302)
First Difference					
	FDI	5.0894	8.4706	77.6039	110.493
		(0.000) *	(0.000) *	(0.000) *	(0.000) *
	GDP	6.2748	4.6467	45.2517	58.8414
		(0.000) *	(0.000) *	(0.000) *	(0.000) *
	INFR	9.1622	7.5690	-	-
		(0.0017) *	(0.000) *	-	-
	TOP	7.9969	-	-	-
		(0.000) *	-	-	-
	RR	6.2620	8.60322	81.1554	200.115
		(0.000) *	(0.000) *	(0.000) *	(0.000) *

Source: E-view Computer output *indicates significance at 5% level.

The LL result of the panel unit root test presented above indicated that entire variables are non-stationary at level. The IPS result shows that only business-openness

index is stationary at any level, others are not stationary at any level. In case of DF-Fisher and PP-Fisher tests, the results show that both Trade Openness (TOP) and Infrastructure (INFR) are stationary at level. Others like FDI, GDP, and RR are non-stationary at level. However, FDI, GDP and RR became stationary at 5% level after first differencing.

TEST OF HYPOTHESES

The hypotheses were all stated in the null form and were tested using T-test statistic at 0.05 levels of significance. The results of the test are summarised and presented in Table 4 below:

Table 4: Summarized Results of Hypotheses Test

S/N	Hypotheses	Variable	t-value	p-value	Remarks
H_{01} :	Market size has no significant influence on FDI inflows	GDP	9.748032	0.0002	Rejected
H_{02} :	Infrastructure development has no significant influence on FDI inflows	INFR	6.220854	0.0000	Rejected
H_{03} :	Trade openness has no significant influence on FDI inflows	TOP	0.689416	0.4915	Accepted
H_{04} :	Natural Resources rent has no significant influence on FDI inflows	RR	8.951737	0.0000	Rejected

Source: Researcher Compilation from Panel Regression Test Result

H_{01} H_{01} ***: Market size has no notable influence on FDI inflows.*** This hypothesis was disregarded at 0.05SL and alternative hypothesis incorporated. The empirical t-value is great compare to cri-t-value (2.042) at 0.05SL. Thus, hypothesis was rejected which implies that market size has notable impact on FDI flows to these six West Africa nations reviewed.

H_{02} H_{02} **: *Infrastructure advancement has no notable influence on FDI inflows.*** This hypothesis was disregarded at 0.05SL and alternative hypothesis recognized. The empirical t-value (6.2208) is great compared to cri-t-value (2.042) at 0.05 level. Thus, hypothesis was disregarded, which implies that infrastructure advancement appreciably impacts on FDI flows to these six West Africa nations reviewed.

H_{03} H_{03} **: *Trade-openness has no notable influence on FDI inflows.*** This hypothesis was maintained at 0.05SL because empirical t-value (0.689416) is low compared to cri-t-value (2.042) at 0.05SL. Thus, the null hypothesis was sustained or

maintained which implies that trade-openness has no notable impact on FDI flows to these six West Africa nations reviewed

H_{04} ***Natural Resources has no notable influence on FDI inflows.*** This hypothesis was disregarded at 0.05SL and an alternative hypothesis was recognized. The empirical t-value (8.95812) is greater compared to cri-t-value (2.042) at 0.05 level. Thus, hypothesis was disregarded which implies that natural resource appreciably impact on FDI flows to these six West Africa nations reviewed

SUMMARY OF FINDINGS.

From the test of hypotheses and results presented above, it is clear that only market size, infrastructure development, and natural resource rent contributed significantly to the inflows of FDI to the six West African countries during the period under review. Trade openness has no notable effects on FDI flow during this research time preview.

CONCLUSION

Based on the finding revealed in the study, the following conclusions are made:

i. Market size has a notable influence on FDI inflows to the six West African Countries
ii. Infrastructure advancement has a notable influence and impacts positively on FDI inflows to the six West African Countries chosen for the study.
iii. Trade-openness has no notable influence on FDI flows to these six West Africa nations reviewed.
iv. Natural resource has a notable influence and appreciably impact positively on FDI flows to the six West Africa nations reviewed

RECOMMENDATIONS

In line with the conclusions above, the researcher therefore recommends that:

(a) There should be a deliberate policy across all the six West African States, aimed at developing a robust market size that will continue to attract more FDI to these countries,

(b.) The authorities in these West African countries under study should invest more in developing infrastructure to attract more FDI to their countries

(c) Trade openness policies should be strategic enough to protect critical infant industries and other industries such as manufacturing, chemical and pharmaceuticals, food and beverages, and electrical/electronics.

This is necessary to protect the industries, promote industrialization, create jobs, and encourage self-reliance.

(d) Policy measures should also be put in place in the area of natural resources and extractive industries and it should be streamlined and fashioned to reduce corruption in the sector so that the host economies will benefit from it.

(e) Most importantly, economic policies should be directed at reducing the unfavourable influence of FDI and other international trades in these West African Countries.

REFERENCES

Abubakar, S., Ibrahim, D.M., & Eleojo, J.E., (2023) Foreign Direct Investment, Trade Openess, and Economic Performance in Nigeria: Does Governance Quality Matter? *African Journal of Economic Review*. 11(3): 91-100

Almfraji, M. A. &Almsafir, M. K. (2014) Foreign Direct Investment and Economic Growth Literature Review from 1994 to 2012. *Procedia-Social and Behavioral Sciences*, 129, 1040-1045.

Anyanwu, J.C. (2011). Determinants of foreign direct investment inflows to Africa, 1980-2007. *African Development Bank Group*. Tunis, Tunisia.

Areneke, G., Adegbite, E. and Tunyi, A. (2022), "Transfer of corporate governance practices into weak emerging market environments by foreign institutional investors", International Business Review, pp. 1-21, doi: 10.1016/j.ibusrev.2022.101978

Asiedu, E (2006) Foreign Direct Investment in Africa: The Role of Natural Resources, Market size, Government Policy, Institutions and Political Instability. *The World Economy*, 29(1), 63-77.

Asiedu, E. & A. Villamil (2000) Discount factors and thresholds: Foreign investment when enforcement is imperfect. Macroeconomic Dynamics 4, 1–21.

Asongu, S. A. (2014). Financial development dynamic thresholds of financial globalization: Evidence from Africa. *Journal of Economic Studies*, 41(2), 166-195

Ajide, F.M., Dada, J.T. and Olowookere, J.K. (2022), "Shadow economy and foreign direct investment in Nigerian manufacturing industry", International Journal of Economics and Business Research, Vol. 23 No. 2, pp. 156-180.

Babatunde, A. (2011) Trade Openness, Infrastructure, FDI and Growth in Sub-Saharan African Countries. *Journal of Management Policy and Practice,* Vol. 12, Iss. 7, pp. 27 – 36

Chakrabarti, A. (2001) The Determinants of Foreign Direct Investments: Sensitivity Analyses of Cross-Country Regressions. Kyklos, 54(1), 89–114.

Chukwu, K. & Uwaezuoke, D. (2024) The Effect of Infrastructure Development on Nigeria's Foreign Direct Investment Using Data- Driven Algorithms. International Journal of Management and Allied Research, Vol.15, No 12 pp. 1-17

Dunning, J. H. (1981) International Production and Multinational Enterprises, George Allen and Unwin, London, 1981.

Dupasquier C. &Osakwe P. N. (2006) "Foreign direct investment in Africa: Performance, challenges, and responsibilities", *Journal of Asian Economics*, 17, 241–260

Ghahroudi, M.R., Hoshino, Y. and Turnbull, S.J. (2018), Foreign Direct Investment: Ownership Advantages, Firm Specific Factors, Survival and Performance, World Scientific, Singapore.

Azeez, O. K., Pei Yu, Azeez, O.A. (2023) the Determinants of Foreign Direct Investment in Nigeria: An empirical study. *International journal of Science and management Studies,* 5(3): 67-81

Luiz, J. M., &Charalambous, H. (2009) Factors influencing foreign direct of South African financial services firms in Sub-Saharan Africa. *International Business Review,* 18(3): 305-317

Maddala, G.S. & S. Wu (1999) A Comparative Study of Unit Root Tests with Panel Data and a New Simple Test. *Oxford Bulletin of Economics and Statistics* 61(S1), 631-652

Moosa, I. A. (2016) Foreign Direct Investment: Theory, Evidence and Practice. *Palgrave, New York*,

Osabuohien E, Obiekwe E, Urhie E, Osabohien R (2018) Inflation rate, exchange rate volatility and exchange rate pass-through nexus: the Nigerian experience. *Journal for Applied Economics* Vol XIII, Spring 2(56):574–585

Owusu-Manu,D. G., Edwards, D. J., Mohammed, A., Thwala, W. D., and Birch, T. (2019). Short Run Relationship Between Foreign Direct Investment (FDI) and Infrastructural Development. Journal of Engineering, Design and Technology. Vol. 17, No. 6, pp 1202 -1221

Ozawa, T. (1984) Micro and Macro Economic Models of Foreign Direct Investment: Towards a Synthesis. *Hitotsubashi Journal of Economics*, 25: 2:1-20

Patterson, R., Montanjees, N., Motala, S., &Cardillo, C. (2004). Foreign direct investment: A comprehensive analysis. Journal of International Business Studies, 38(4), 589-607.

Padmanabhan, P., Wang, C.H. and Huang, C.H. (2020), "Did the 2008 global financial crisis influence the host country corruption and inward foreign direct investments relationship? An empirical examination", The Journal of International Trade and Economic Development, Vol. 29 No. 5, pp. 566-603.

Sahoo, P (2006) Foreign Direct Investment in South Asia: Policy, Trends, Impact and Determinants, *ADB Institute Discussion paper No*. 56.

Sornarajah, M. (2010) The International Law on Foreign Investment. *Cambridge University Press*

Tan, L. (2014) Correlational study, in W. F. Thompson (Ed.), Music in the Social and Behavioral Sciences: An Encyclopedia (pp. 269-271). Thousand Oaks: SAGE Publications.

UN (1999). Comprehensive Study of the Interrelationship between Foreign Direct Investment and Foreign Portfolio Investment. UN: USA. Available from http;//UN.org/en/Docs/pogdsdfsbd5.pdf

UNESCAP. (2000). *Foreign Direct Investments in Latin America: Current Trends and Future Prospects*. Retrieved December 11, 2013, from United Nations Economic and Social Commission for Asia and the Pacific: http://www.unescap.org/tid/publication/tipub2069.pdf

UNCTAD (2011 & 2012, 2015) World Investment Report. Geneva: United Nations Conference on Trade and Development.

UNCTAD (2018) World investment report 2018 Global Investment Prospect and Trend, New York, NY–Geneva

UNCTAD. (2019). World investment report. Special Economic Zones, United Nations.

Yoo, D. and Reimann, F. (2017), "Internationalization of developing country firms into developed countries: the role of host country knowledge-based assets and IPR protection in FDI location choice", Journal of International Management, Vol. 23 No. 3, pp. 242-254.