Determinants of Foreign Direct Investment (FDI) In an Emerging Market Economy: The Case of South Sudan

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Abstract

The purpose of this study was to assess the determinants of Foreign Direct Investment (FDI) in South Sudan as an emerging market. The specific objectives of the study were: to determine the impact of economic growth on inflows of Foreign Direct Investment (FDI) in South Sudan; to examine the effect of exchange rate valuations with the inflows of foreign direct investment in South Sudan; and to assess the impact of interest rate valuations in terms of the inflows of foreign direct investment in South Sudan. The study targeted a population of 150 foreign firms which was determined to a sample of 109 correspondents, particularly to senior managers in foreign firms. The study chose purposive and cluster samplings for successful collection of data. Each foreign firm was issued one questionnaire to fill and was collected by the researchers. The collected data was analyzed using descriptive statistics with the help of SPSS. The statistical reliability of this study indicated that all combined variables have a Conbach Alpha of 0.656 which was evaluated as very good and has acceptable reliability level. The study obtained a response rate of 100%, thus it was valid and appropriate for analysis. The results indicate that economic growth has significant positive impact on FDI inflows in South Sudan; relative weaker exchange rate is expected to increase FDI inflows into South Sudan; and relative high interest rate is expected to increase FDI inflows into South Sudan. The study recommends that South Sudan government should strengthen economic, fiscal and monitory policies. The Bank of South Sudan should adopt fixed relative weak exchange rate and should keep interest rate relatively high.

Keywords: Determinants, Foreign Direct Investment (FDI), Emerging Market.

1.1 Introduction

South Sudan Investment Promotion Act, 2009 defines Foreign Direct Investment (FDI) as an investment where the investor is not a national as defined in the Act and has majority shares, financing, managerial, administrative and technical personnel in an enterprise (Investment-Promotion-Act, 2009). Foreign Direct Investment therefore refers to a cross border investment undertaken by a resident in one economy and in an enterprise in another economy with aim of establishing a long-term interest in the economy of other country. Literature review shows that many firms undertake FDI to circumvent trade barriers and high transportation costs by moving production facilities to foreign states to take advantage of low labour costs from foreign states by moving to workers in foreign countries in order to benefit from underpriced labour services. This is also to move to countries where inputs of production are located so as to secure supply of inputs at relatively stable prices. Besides, to avoid misappropriation of intangible assets especially by firms that possess special intangible assets such as managerial, technological, marketing know-how, powerful brand name and superior Research and Development (R&D) capabilities by establishing subsidiaries in foreign markets.

Host countries as well have their own interests, which must coincide with interest of the investing firms for FDI to take place. FDI comes with benefits. One of the benefits is resource transfer effects of capital, technology and managerial skills that stimulate the host country's economic growth. Secondly, a foreign firm creates direct and indirect employments in the host country. Direct employment occurs when a foreign firm employs a number of citizens in the host country. Indirect employment effects arise from jobs created in local suppliers and increased local spending as a result of FDI in the receiving country. The third benefit is the balance of payment effects on the host country. FDI is not only a substitute for imports of goods or services, whose effects can be improving host country's balance of payments. However, FDI also uses a foreign subsidiary to export goods and services to other countries. In addition, FDI increases the number of businesses in the host country's market and this in turn increases consumer choices hence subsequent reduction of prices in host country's market.

To attract FDI, the host countries encourage foreign firms to invest in their countries, by offering incentives. The incentives can be fiscal incentives which include special depreciation allowances, tax credits or rebates, special deductions for capital expenditures, tax holidays and the reduction of tax burdens on the investor. The incentives can also be financial which include offering funding for investor through provision of loans, loan guarantees and land or building. Incentives can as well be non-financial such as guaranteed government purchases, special protection through tariffs, import quotas, local content requirements and investments in infrastructure facilities.

South Sudan has vast untapped natural resources as uncovered by geological studies and prospecting. The natural resources include fertile land, forests, rivers, fish, petroleum as well as minerals such as gold, iron, uranium, copper, limestone, marble, granite, chromium, zinc, tungsten, mica and magnetite (South Sudan Investment Forum, 2013). These natural resources combined with favourable FDI policies can encourage significant FDI inflow into South Sudan. This study focused on how economic growth, exchange rate valuation and interest rate valuation have influenced Foreign Direct Investment inflows into South Sudan.

1.2. The Problem Statement

Foreign Direct Investment (FDI) is scarce in South Sudan. The inflows of Foreign Direct Investment in South Sudan have been handicapped by fluctuation of exchange rates, low valuation of interest rates and other general determinants of Foreign Direct Investment in South Sudan. This is the real problem. With this problem, this research therefore argues that there is enormous need of foreign investors to come and invest in South Sudan so as to stimulate economic growth and enhance transfer of technology needed to increase development in South Sudan. Moreover, there are huge investment opportunities in South Sudan that should encourage FDI. In this context, Government policies to attract FDI are an added advantage for private sector development necessary to provide and create employment of youth and women. Scholars such as Benti (2009), studied determinants of FDI theoretically, Grosse and Trevino (1996), studied determinants of FDI in the United States, Meyer (2005) studied determinants of FDI in emerging economies and Wakyereza (2017), studied determinants of FDI in Uganda. However, none of these scholars studied determinants of FDI in the context of South Sudan. Inspired by this pedagogy gap, the study is going to fill this gap of knowledge.

1.3. Objectives of the research

The general objective is to find out the determinants of inflows of Foreign Direct Investment into South Sudan.

The specific objectives are:

a. To determine the impact of economic growth on the basis of inflows of FDI in South Sudan.
b. To examine the effect of exchange rate valuations in relation to the inflows of FDI in South Sudan.
c. To assess the impact of interest rate valuations in terms of the inflows of Foreign Direct Investment in South Sudan.

1.4. Hypotheses

This research focuses on the determinants of Foreign Direct Investment in South Sudan as emerging market economy. The research is divided into dependent variable and independent variables. The dependent variable is foreign direct investment and the independent variables are H1 (Economic Growth), H2 (Exchange Rate) and H3 (Interest Rate). The hypotheses to be tested are stated as follows:

There is no significant positive impact of economic growth on the basis of inflows of Foreign Direct Investment in South Sudan as the host country.

HI: Economic growth has positive impact on the basis of inflows of Foreign Direct Investment in South Sudan as the host country.
H02: A relative weaker exchange rate has no effect in relation to the inflows of Foreign Direct Investment in South Sudan as the host country.
H2: A relative weaker exchange rate is expected to increase Foreign Direct Investment inflows to South Sudan as firms take advantage of relative low prices in host markets to purchase facilities.
H03: A relative high interest rate has no impact on inflows of Foreign Direct Investment to South Sudan as the host country.
H3: A relative high interest rate has positive impact on inflows of Foreign Direct Investment in South Sudan as the host country.

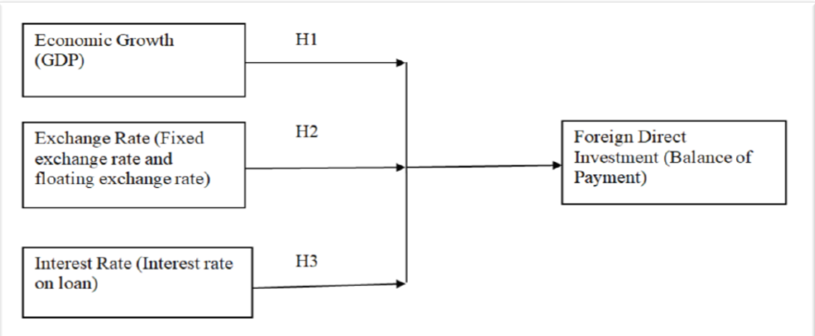
1.5. Significance of the Study

The findings of this research will be used as guidelines in making policies related to Foreign Direct Investment in South Sudan by policymakers. The research has made policy recommendations which are beneficial to foreign and local investors. Favourable FDI policies attract inflows of FDI into the country which will bring transfer of capital, technology and new managerial skills. This in turn benefits local investors through entrepreneurial development arising from FDI spill-over effects. The research finding shall be useful to academics and researchers as it contributes to the existing literature about Foreign Direct Investment.

1.6. Conceptual Framework

Conceptual framework is a road map which provides information about how the research will be carried out. The concept represents the actions needed to be taken by the researcher to achieve the objectives of the research. This research uses a model with three independent variables and one dependent variable. In the following Figure 1.1 model, H1, H2, and H3 are independent variables while Foreign Direct Investment is the dependent variable.

Figure:1.1 Model for determinants of Foreign Direct Investment in South Sudan



Source: Authors

1.6.1. Economic growth (GDP)

A host country with larger economic potential is associated with higher FDI due larger potential demand. Similarly, larger transitional economies tend to attract more FDI inflows. FDI is generally seen as a catalyst for economic growth in developing countries because it stimulates domestic investment, strengthens human capacity through transfer of skills and technology to the host country. Literature review argues Gross Domestic Product (GDP) as the market value of ultimate goods and services produced by a country during a specific period of time, usually one year.

Table 1.1. South Sudan GDP growth rate from 2011 to 2022, Juba

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
GDP	1.5	-51.3	29.8	28.0	6.9	-6.6	-3.5	3.8	11.4	3.1	1.0	1.0
Non-oil GDP	4.8	-5.5	7.6	17.7	10.2	-2.9	-1.8	3.3	11.7	1.1	1.0	1.0
Dummy Variables	10	10	10	10	10	10	10	10	10	10	10	11

Source: Bank of South Sudan, Juba, 2022

Reliable national accounts statistics provide foreign investors, private sector and public sector with data necessary for making informed decisions in running their businesses. Gross National Income (GNI) for South Sudan shows total income received by residents of South Sudan. GNI estimates are used in determining access to South Sudan's borrowing at concessional rates under the World Bank at International Development Association (IDA) window (National-Bureau-of-Statistics, 2019).

From Table 1.1 and figure 1.2 above, South Sudan GDP growth rate dropped to -50.3% in 2012. This decline was due to shutdown of oil production in the country in 2012 over dispute with Sudan on oil transit fees. The oil production resumed in 2013 raising GDP growth rate to 29.8%. However, the GDP growth rate declined steadily from 2014 to 2017 and rose steadily again to 11.4% in 2019 as the country experienced relative peace again after the warring parties signed revitalized peace agreement in 2018. However, GDP declined again to 3.1 in 2020. This decline could be attributed to impact of Covid19 on the economy in South Sudan.

1.6.2. Exchange rate valuation

Exchange rate is the price of one currency in terms of another currency. It is the rate at which one currency is converted into another. Exchange rates are determined in foreign exchange markets. Exchange rates affect the relative prices of domestic and foreign goods and services. Thus, an important goal of monetary policy is to stabilize extreme movements of exchange rate in foreign exchange markets. When a country's currency rises in value (appreciates) relative to other currencies, the country's goods abroad become more expensive and foreign goods in that country become cheaper. Conversely, when a country's currency falls in value (depreciates) its goods abroad become cheaper and foreign goods in that country become more expensive. If a country exchange rate is weaker, it is expected to increase FDI inflows as firms take advantage of relative low prices in host markets to purchase facilities.

However, South Sudan exchange rate underwent both fixed exchange rate from 2011 to 2014 and floating exchange rate from 2015 to 2022. The official exchange rate also called indicate rate by Bank of South Sudan (BSS), is the rate at which banks trade USD with SSP. Parallel rate is the rate offered on black market which is surveyed by Bank of South Sudan each morning. In practice, after South Sudan floated exchange rate, a substantial gap opened up between the official exchange rate and parallel market as depicted by the following table 1.2 below:

Table 1.2. South Sudan SSP/USD exchange rate 2011 – 2020, Juba

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Exchange rate SSP/USD Official	2.83	2.95	2.95	2.95	3.63	46.71	113.65	141.39	157.17	163.26
Exchange rate SSP/USD parallel market	3.55	4.45	4.27	4.66	12.26	55.30	155.97	244.81	294.31	396.95

Sources: Bank of South Sudan, Juba, 2020

1.6.3. Interest rate valuation

Interest rate is the amount a lender charges for the use of its money. It is the cost of borrowing. According to Gross and Trevino (Grosse and Trevino, 1996) a relative high interest rate in a host country has positive impact on inward FDI. Indeed, interest rates determine both the cost and availability of credit for companies operating in a country. When an interest rate is low, it stimulates investment by making credit available easily and cheaply. Lower cost of finance for companies assures higher profitability. However, when the interest rate is high, it results in higher cost of production which may eventually lead to lower profitability.

Interest rates and trends of money supply are determined by the monetary policy of the government in an organized financial sector of the economy. Thus, the interest rates are controlled and only vary within certain ranges. On the other hand, the interest rate in unorganized financial sector of the economy is not controlled, thus it may fluctuate widely depending on the trends of money supply in the market.

Empirical data shows that fluctuation in interest rate creates uncertainty in the economy thus making it harder to plan for the future. Fluctuation also creates great uncertainty for financial institutions because an increase in interest rate produces large capital loss on long-term bonds and mortgages which can cause failure of the financial institutions holding them.

Table 1.3. South Sudan interest rate from Government Loans and Bonds, Juba, 2020

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Interest rate on Loan	3%	3%	3%	3%	3%	8%	8%	8%	8%	8%
Interest rate on Treasury Bond	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%

Source: Bank of South Sudan, Juba, 2020

1.6.4. Balance of Payment (BoP) Accounts

The Balance of Payment (BoP) is a detailed record of the composition of the current account balance and of the many transactions that finance it (Krugman, 2012). OECD defines the current account of payments as a record of a country's international transactions with the rest of the world (OECD, 2020). The balance of account of a country keeps of both its payments and receipts from foreigners. Every transaction resulting in a receipt from foreigners is entered at credit side of the balance of payments accounts and every transaction resulting in a payment to foreigners is entered at debit side of the balance of payments accounts.

Below is the contribution of Foreign Direct Investment to South Sudan GDP growth according to World Bank:

Table 1.4 Net inward FDI in South Sudan from 2012 to 2020

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Net inward FDI in USD (million)	-	161	-793	1.035	0.15	-7.85	1.42	60.14	-2.21	17.5

Source: World Bank 2020

2. Literature Review

2.1. The Concept of Foreign Direct Investment

Foreign Direct Investment (FDI) is defined as a kind of investment in which a firm invests directly in facilities of a foreign country to produce or market a product. The Organization for Economic Co-operation and Development (OECD) defines Foreign Direct Investment as establishment of a lasting interest by a resident enterprise in one country in an enterprise that is resident in an economy other than that of the direct investor. Marandu and Ditshwe defines Foreign Direct Investment as an investment made directly by a firm based in one country into a firm based in another country (Marandu and Ditshweu, 2018). To be sure, a firm entering a host country in form of FDI always has long term perspective as its aim is to acquire an enduring interest and effective voice in the management or control of a foreign company. Foreign Direct Investment can also be classified into vertical direct investment, horizontal direct investment and conglomerate direct investment. In vertical direct investment, an investor adds foreign activities to an existing business by acquiring an operation that either acts as a supplier or distributor while horizontal direct investment is a kind of investment whereby a business already existing in one country merely establishes the same business operation in a foreign country. Conglomerate direct investment is a business where an existing company in one country adds an unrelated business operation in a foreign country.

2.1.1. Forms of Foreign Direct Investment

There are four main forms of Foreign Direct Investment.

2.1.1.1. Greenfield investment

Greenfield investment involves the establishment of a new operation in a foreign country. Greenfield occurs when a foreign firm chooses to build a foreign subsidiary from scratch to suit their needs (Benti, 2019). Firms which involve in Greenfield investments do so to avoid having to deal with existing managements and facilities built for other purposes and to as well be able to start afresh in markets with their own technologies, management styles and corporate culture. Greenfield investments also give parent companies complete control of development and market strategies of subsidiaries.

Firms are more like to take Greenfield investment if they possess technologies and don't wish to jeopardy intellectual property crime that can occur with acquisition, merging or joint venture. Firms with global strong brands and reputations which they can leverage into the local market without the need of help from local firms may also take Greenfield investment.

2.1.1.2. Merging

Merging takes place when two separate business entities combine into a single new legal entity. For merging to occur, it requires two firms to consolidate into a legal new entity with complete new ownership and management structure drawn from members of each firm (Meyer, 2005).

2.1.1.3. Acquisitions

This is when a foreign firm purchases the local firm in the host country. It involves taking over all of operational management decisions of another company and it also requires large amounts of cash. Acquisition is divided into three namely minority, majority and outright stake acquisitions. In minority acquisition, a foreign firm takes 10 percent to 49 percent interest in the firm's voting stock, while in a majority acquisition; a foreign firm takes 50 percent to 99 percent (Grosse and Trevino, 1996). In full outright acquisition, a foreign firm takes 100 percent interest in the firm voting stock (Hill, 2008).

2.1.1.4. Joint venture

Joint venture refers to a partnership or conglomerate of companies with mutual interest to implement a particular business idea and share the profits, risks or expertise (Chaudhuri and Mukhopadhyay, 2014). The parties which create the entity contribute equity and share the control, expenses and the revenues generated by the entity. The parties under joint ventures retain their distinct identities. Other forms of FDI include non-equity forms such as franchising, licensing and turnkey agreement (Marandu and Ditshweu, 2018). A franchising is a business arrangement under which one party (the franchisor) allows another party (the franchisee) to operate an enterprise using its trademark, logo, product line and methods of operation in return for a fee (Hill, 2008). Although a franchising is similar to licensing it however involves longer term commitments than licensing. Licensing involves granting a foreign firm the right to produce and sell the firm's products in return for a royalty fee on every unit sold (Hill, 2008). A turnkey agreement on the other hand is an agreement in which a contracted firm assumes total responsibility from design through completion of the project.

2.2. Theoretical Framework

This study explores three theoretical frameworks namely Eclectic Paradigm (1993/2000), New Trade Theory (1960s), and National Competitive Advantage theory (1990).

2.2.1. An Eclectic Paradigm Theory by John Dunning, 1979 (HILL, 2008) as well is a model known by location, ownership and internationalization (OLI) model which is used by companies to determine if they can pursue Foreign Direct Investment in a given country. Ownership advantage is the proprietorship's uniqueness and valuable resource that cannot be easily imitated by a potential foreign competitor such as firm's technological, marketing and managerial capabilities. The location-specific advantages arise from resource endowments or assets that are tied to a particular foreign location. The resource endowments include natural resources such as oil and other minerals as well as low cost, highly skilled human resources. Internalization advantage considers whether a company gets the value chain activities performed locally with their own staff or outsources it to a foreign country. Generally, the advantages of outsourcing from foreign countries include lower costs and better knowledge of the local markets.

Dunning therefore argues that it requires a firm to establish production facilities where those foreign assets or resource endowments are located. The firm taking advantage of location-specific resources also consider the ease for which a firm can operate in a foreign country, the political stability of the host country, the transport costs facing both finished products and raw materials, import restriction, and the profitability gained from combining unique ownership capabilities with factor endowments.

Eclectic paradigm theory talks of ownership advantage such company's uniqueness and valuable resources and on the other hand, it talks about location specific advantages such as resource endowments like oil and other minerals which are usually tied to a particular location. It is imperative that many companies operating in South Sudan particularly in oil sector were motivated by the national resources in South Sudan. This theory is relevant in the situation of South Sudan.

2.2.2. New Trade Theory. According to Paul Krugman's New Trade Theory 1970s (HILL, 2008), some countries specialize in the production and export of particular products not because of factor endowments but because of first-mover advantage. Such industries which enter the market first are able to build a competitive advantage that becomes its core value which is subsequently difficult to challenge. Firms with first-mover advantage also capture scale economies ahead of the later entrants due to strategic and economic advantages that increase to early entrants into the industry. Thus, some countries may dominate in the export of certain goods because firms located in those countries were the first to enter the industries which enable them capture scale economies because of first –mover advantage.

The theory emphasizes the importance of first-mover advantage for firms in international trade. Firms which enter the market first are able to build a competitive advantage and as well as economy of scales ahead of later entrants which is subsequently difficult to challenge. It is therefore expected that firms which enter South Sudan market build competitive advantages ahead of later entrants. Thus, the theory is applicable in the case of South Sudan.

2.2.3. National Competitive Advantage Theory. Michael Porter of the Harvard Business School in 1990 (HILL, 2008,) published the results of his research which attempted to determine the reasons behind as to why some nation-states succeed while others fail in international competition. According to Porter, factor endowment attribute shapes the environment in which local firms compete. Factor endowment refers to a nation's position in factors of production. Porter divided the factor endowment in two hierarchy namely basic factors and advanced factors. Basic factors include natural resources, climate, location, and demographics while advanced factors are communication infrastructure, research facilities, sophisticated and skilled labour, and technological know-how. According Porter, advanced factors are the most significant for competitive advantage unlike the naturally endowed basic factors because they are products of investments by individuals, companies and governments. Porter thus concluded that, government can upgrade advanced factors of the country by investing in basic and higher institutions and improving general skills and knowledge level of the population of the country. Michael Porter's National Competitive Advantage Theory is the most elaborate theory as it covers broad attribute of factor endowments. This theory is as well applicable in the situation of South Sudan.

2.3. Empirical Review

According to Muhammed Benli (Benli, 2019), in his research on Determinants of Foreign Direct Investment in Emerging Economies, argues that there are six factors which contribute toward inward FDI. These factors include market size and economic growth potential, openness, national endowments, infrastructure, financial development, and micro-economic stability. The size of host country market together with its economic growth is significantly associated with higher inflows of FDI. A host country with relatively large market size and economic growth tends to attract investors as they will benefit from more efficient resource utilization, greater potential demand, and lower costs due to economies of scale. The market size is proxied by Gross Domestic Product (GDP) while economic growth potential is measured by GDP growth or GDP per capita growth. A country's degree of receptivity to international trade is viewed as a key driver of FDI. South Sudan has high economic growth potential, open market economy, and huge national endowments. However, the country has poor infrastructure and weak financial institutions. Nevertheless, the country can attract significant FDI into the country.

Erdaland Tatoglu and Erdal and Tatoglu, (2002) argue that, when investments are market-seeking, a low degree of openness of the host country has a positive effect on FDI as multinational firms may find it more attractive to set up subsidiaries in the host market because of the high costs of trade barriers. The host country endowed with valuable natural resources is a significant determinant of resource seeking inward FDI. High quality infrastructure contributes to the attractiveness of host country for inward FDI. This is because high quality infrastructure minimizes the cost of doing business and maximizes the rate of return on investments. Infrastructure is often measured by electric power consumption, electric power transmission and telephone subscriptions. Financial development level plays a key part on inward FDI. The host countries with well-developed financial markets offer a guarantee for investors that rely on domestic environment for their investment. Investors are attracted by the host country which can offer a less financially risky environment. A host country with macroeconomic stability is considered to be another necessary condition for investors. Investors seek to invest in less volatile economic environment. The argument of Erdal and Tatogluthata country endowed with valuable natural resources significantly attracts FDI is true. South Sudan with its huge endowed natural resources can attract significant FDI into the country. However, we don't agree with the argument of Erdal and Tatoglu which states that a low degree of receptivity of the host market has a positive effect on FDI for market-seeking investments. This is because trade barriers generally discourage foreign investors and cannot be used as incentives to attract FDI.

According to the study findings of Rebecca Mbithe Mutua (Mutua, 2016) in her research entitled "Factors Influencing Foreign Direct Investment in Construction Sector in Kenya", she found out that a weaker real exchange rate in the country is expected to increase vertical FDI as firms take advantage of relatively low prices in host markets. From 2015 to 2020, South Sudan has a weaker real exchange rate brought about by high inflation coupled with economic crisis and conflict (2013-2018) in the country. However, the weaker real exchange rate in the country didn't attract FDI into the country as argued by Mutua. A weaker real exchange rate might attract FDI in a stable economy.

Walsh and Yu (2000) in their research on Determinants of Foreign Direct Investment, stated that a more independent judiciary and better infrastructure appear to attract more FDI to both developing and developed countries (Walsh and Yu, 2010). South Sudan has a poor infrastructure and weak judiciary system. However, the government of South Sudan is making effort through the revitalized government of national unity to strengthen judiciary system and improve infrastructure. Barnabas Kiiza and Eric Seguya in their research on FDI and Economic Growth in the East Africa Community Bloc: Panel Co-integration Evidence, found out in their results that FDI attraction in East Africa Community Bloc is positively influenced by the size of the economy, financial sector depth, and degree of trade openness but negatively influenced by political instability and high external debt burden (Seguya, 2015). South Sudan as one of the members of East Africa Community can attract inward FDI into the country through trade openness. The country could not attract adequate FDI into the country during the conflict from 2013 to 2018. Nevertheless, the warring parties signed a peace deal 2018. It is therefore hoped that the unity government will provide adequate incentives to attract more FDI into the country.

Ronald K. S. Wakyereza in research on the Impact of Foreign Direct Investment on Economic Growth, Employment and Poverty Reduction in Uganda, stipulates that when the Ugandan government adopted market openness as a tool for economic liberalization in strategic sectors such as ICT, investment and international trade, to increase FDI and tourism, the total trade increased from USD 1012.79 million in 1985 to USD 13,907.97 million in 2014 (Wakyereza, 2017). It is true that when a country adopts trade openness, it can attract significant FDI into the country. South Sudan adopted trade openness and thus it is expected to positively influence inward FDI into the country. On the other hand, Todaro, Michael, and Smith, Stephen, Economic Development (2015) states that only valid general conclusion is that private foreign investment can be an important stimulus to economic and social development as long as the interests of Multinational Companies (MNCs) and host-country governments coincide (Todaro and Smith, 2015). The argument of Todaro and Smith is plausible because host country often has interests such as level of ownerships, levels of dividends that can be repatriated, number of jobs which must be created, technology transfer and managerial skills which will spillover to the citizens of host country while MNCs have interest of maximum profits they hope to obtain from their investment. After negotiation, if the interests of the two parties coincide, then MNCs obtain permission to invest in the host country.

Moreover, Simplice Asongu, Uduak S. Akpan and Salisu R. Isihak (2018) in their study of Determinants of Foreign Direct Investment in Fast-growing Economies: Evidence from BRICS (Brazil, Russia, India and South Africa) and MINT (Mexico, Indonesia, Nigeria and Turkey) Countries observed that market size, infrastructure availability, and trade openness play the most significant roles in attracting FDI to BRICS and MINT countries (Asongu et al., 2018). We agree with this argument because a host country with large market size, improved infrastructure and trade openness has significantly attracted FDI into the country.

Fernando Mistura and Caroline Roulet (Mistura and Roulet, 2019) in their study on The Determinants of Foreign Direct Investment: Do Statutory Restrictions Matter? found out in their research results that even incomplete restraints can have a strong impact on foreign direct investment and that barriers to FDI have had larger deterring effects on foreign direct investments in services sector than elsewhere in the economy. Regulatory restrictions of inward FDI was also found to negatively affect FDI in manufacturing sectors. The research results of Mistura and Roulet is supported by most literature. It is true that trade restrictions can deter foreign investors not only in service and manufacturing sectors but in all sectors of the economy. Additionally, Fuat Erdal (Erdal and Tatoglu, 2002), in the research on Locational Determinants of Foreign Direct Investment in an Emerging Market Economy, found in his research that trade and investment regime, the openness of the host country, and adequate basic infrastructure are some of the most important host country specific determinants of FDI. We too agree with this research result because openness of the host country and availability of adequate basic infrastructure can attract inflows FDI into the host country.

The working paper 417 of Yurendra Basnett and James Alic Garang published by Oversea Development Institute (2015) argues that the prevalence of a parallel market exchange rate to the official one has inhibited trade and reduced investments in South Sudan (Basnett and Garang, 2015). At South Sudan independence in 2011, the official exchange rate was pinned at 2.96 SSP to the US dollar while parallel market fluctuated between 4.5 SSP to 7 SSP per US dollar. A peak exchange rate spoils trade competitiveness as it makes South Sudanese exports relatively expensive (Basnett and Garang, 2015). South Sudan adopted floating exchange rate in 2015 in an attempt to control parallel market exchange rate. This however resulted in high inflation and South Sudan Pounds substantially lost value against US Dollars. Although South Sudanese Pounds greatly depreciated against US dollars, the general economic crisis coupled with insecurity deterred many investors from investing in South Sudan. Therefore, fixed exchange rate with stability in prices is an incentive that could stimulate FDI in the host county.

3. Methodology

3.1. Research Design

Research design constitutes the blueprint for collection, measurement and analysis of data (Cooper et al., 2006). According to Khawaja et al., research design sets the scope of the study specifying whether it needs to be descriptive, explanatory or predictive (Khawaja et al., 2012). Research design offers collection of relevant evidence with minimal expenditure of effort, time and money (Kothari, 2004). A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure (Kothari, 2004).

This research adopted a descriptive research design which involves collection of quantitative data related to three independent variables namely economic growth (H1), exchange rate (H2) and interest rate (H3) and dependent variable called foreign direct investment (Y). In quantitative research design, the focus is to explain and predict phenomena, use probability sampling and rely on larger sample size (Khawaja et al., 2012).

3.2. Research Population

Research population refers to all people or items that one wishes to understand (Rahi, 2017). Samar Rahi further argues that collected data through structured questionnaire can be enumeration of a selected population and that a small population has capacity to make an inference about a large population (Rahi, 2017). Accordingly, it is not possible for the researcher to study the whole population of interest. The searcher thus uses a sample to draw inferences about the population (Khawaja et al., 2012). Population is also defined as the full set of elements about which one wishes to make some inferences (Cooper et al., 2006). This research targets a population of 150 foreign firms from which a sample of 109 correspondents get questionnaires particularly senior managers of foreign firms which are doing business in South Sudan. The researchers collected data from South Sudan Bureau of Statistics, National Ministry of Investment, National Ministry of Trade and Industry, National Ministry of Finance and Economic Planning and the Bank of South Sudan.

3.3. Sampling size

Sampling is defined as the process of selecting a particular segment of a society from the population for investigation (Rahi, 2017). Indeed, sample size refers to the number of items selected from the population to constitute sample (Krejcie and Morgan, 1970). The findings from a sample of the whole group provide an estimate of the findings for the group as a whole. The size of the sample should be large enough and should represent the group as a whole. The good sample is one that has the characteristics of representation, reliability, efficiency and flexibility (Kothari, 2004). The study sample size was determined using Taro Yamane (1967) formula from estimated population of 150 foreign firms, with confidence level of 95% and margin of error +_5%. According to Yamane, sample size is calculated as $n= N/ (1+N (e^2)$

Where, n = is the sample size

N = population size (finite population)

e = error term

$n = 150/ (1+150 (0.05^2)$; $n=150/ (1+150*0.0025)$

$n=150/1.375$.

n =<u>109</u>

3.4. Sample Type

The study used purposive and cluster sampling. The respondents were targeted based on their knowledge, character and experiences. They were clustered in Central Equatoria state, Western Bahr El-Ghazal state, Warrap state, Northern Bahr El-Ghazal state and Upper state.

3.5. Data Collection Methods

Data collection is defined as the procedure of collecting, measuring and analyzing accurate insights for research using standard validated techniques. There are two types of data namely primary data and secondary data. Primary data are those which are collected afresh for the first time while secondary data are those which have already been collected by someone else and have been passed through statistical process (Kothari, 2004). This research uses the variety of data collection methods which include questionnaire, interview, observation and conversations.

3.5.1. Questionnaire

This research used questionnaires as the major instruments in collecting data. The questionnaires comprised of open and closed questions. The questionnaires which consist of number of questions printed on set of forms were given to individuals with the request to answer them and to return the questionnaires.

3.5.2. Data Collection

This research obtained its data from both primary and secondary sources

3.5.2.1. Primary data

The main sources of primary data were obtained from our data collection visits to five locations namely Central Equatoria State, Northern Bahr El Ghazal State, Upper Nile state, Warrap state and Western Bahr El Ghazal state.

Central Equatoria state

We were able to collect credible data with the help of some of my colleagues in Juba particularly Majok Malueth Wieu known as Mawaan Malueth who was working for UNICEF as logistician, Wol Muor Wol who was doing business near Juba International Airport, Majok Majok Wieu (Mawou) who was working for one of oil companies in South Sudan, Advocate Paul Baak and Advocate Kiir Mangong. All these colleagues connected me with foreign companies some of which were their clients in Juba to collect reliable data from them.

Western Bahr El Ghazal state

The reliable data was collected in Wau municipality, Western Bahr El Ghazal State in July 2022. Each correspondent was as well given each questionnaire to fill in the presence of the researcher and this helped in making clarifications for a respondent where necessary.

Warrap state

In August 2022, we collected data from foreign companies which were doing business in Kuajok Municipality. The credible data was collected with the help of my colleague Ustaz Peter Pathuon who has knowledge of the foreign companies in Kuajok. He identified foreign companies for me and thereafter, collected credible data from them.

Northern Bahr El Ghazal state

We also collected reliable data from Aweil, Northern Bahr El Ghazal state in August 2022 with the help of Majok Majok Wieu (Majok Jr) who was working as Logistician for World Food Program (WFP) in Aweil. He used his vast knowledge of foreign companies in Aweil to connect me with them to get quality data.

Upper Nile state

Because of limited resources, We did not manage to personally go to Upper Nile State. However, we sent questionnaires to our colleague Luka Thiik Thiik who was working for one of oil companies in Paloch, Upper Nile state. We trained him on the content of the questionnaires and the requirement to issue one questionnaire to one company only mainly senior managers of foreign companies to fill accordingly. Luka Thiik Thiik collected reliable data from foreign companies operating their businesses in Paloch, Upper Nile State and sent them to us by email.

3.5.2.2. Secondary data

Secondary data refers to available information which have already been collected by someone else as well as having passed through statistical process (Kothari, 2004). The secondary data for this research was derived from various literature reviews about determinants of foreign direct investment in an emerging market economy and South Sudan government institutions, laws and policies which include Bank of South Sudan, National Ministry of Investment , National Ministry of Trade and Industry, South Sudan National Bureau of Statistics, Investment Promotion ACT 2009, South Sudan Investment Authority, South Sudan One Stop Shop Investment Centre (OSSIC) 2012, and South Sudan Trade Policy Framework, 2020.

3.6. Data analysis methods

The study used analytical, comparative and evaluative approaches to analyze the data collected for this research. According to Kothari, data analysis refers to computation of certain measures along with searching for patterns of relationship that exist among data group (Kothari, 2004). Data analysis is the arrangement of data and application of various descriptive statistics to explain the data and draw conclusions (Khawaja et al., 2012). This research was analyzed using descriptive statistics with the aid of the Statistical Package for Social Sciences (SPSS Version 16). Descriptive statistics is applied in describing features of a population or a sample by investigating the distribution of scores for each variable and determining whether the scores on different variables are related to each other (Cooper et al., 2006). Descriptive analysis for this research included percentage, frequencies, means, pie charts and standard deviations on the research.

3.7. Ethical considerations

The researchers adhered to ethical guidelines by obtaining a letter of introduction from the University of Juba that permitted the researchers to do the study, seeking clearance from all the institutions sampled for data collection and assured the respondents that the data obtained from them would be presented as a group rather than individual. The respondents are also assured of the confidentiality of data obtained and that the data would be used for academic purposes only.

4.0. Results and Discussions

4.1. Introduction

This covers data analysis of the results obtained from primary data that were collected from the respondents of the questionnaires, which were distributed to and duly filled by senior managers of foreign companies operating businesses in South Sudan.

4.2. Results and Findings

The results of data analysis were done in line with objectives of the research as well as in accordance to the methodology. The results are structured into the demographic analysis, descriptive analysis with the help of the Statistical Packages for Social Sciences (SPSS Version 16) and qualitative analysis. Descriptive analysis included percentages, frequencies, means and standard deviation on the research variables. Pie charts were also used during the analysis.

4.2.1. Analysis of Scales Reliability and Validity

The study has covered five (5) Likert scale format which was used for data collection. The respondents from companies doing foreign direct investment in South Sudan were asked on questionnaires to make decisions related to foreign direct investments in South Sudan. Some of the level of five Likert used were: strongly disagree, disagree, moderately agree, agree and strongly agree.

4.2.1.1. Analysis of Scales Reliability

Table 4.1 Scales Reliability Statistics, 2023

Scales Reliability Statistics	
Cronbach's Alpha	N of Items
0.656	26

Source: Authors’ compilation, 2023

Reliability is the degree to which a measure is free from random error (Marko and Erik, 2014). Analysis of scales reliability coefficient is always used to measure a scale of multi-questions frequency and measure the degree of compliance between 0 and 1. As the coefficient draws nearer to 1 Cronbach’s alpha is assumed to be very high. Generally, the following evaluations are made on the Cronbach alpha coefficient of researches in the social sciences:

0.0 <alpha< 0.40 the scale has no reliability. (Weak).
0.41 < alpha < 0.60 the scale’s reliability is low. (Good).
0.61 < alpha < 0.80 the scale has acceptable reliability level. (Very good).

The above table shows the statistic reliability of the study and it is evaluated as very good because it ranges between 0.61 < alpha < 0.80 the scale has acceptable reliability level. (Very good).

4.2.1.2. Analysis of Scales Validity

Table 4.2 Scales’ validity, 2023

Scales validity			
		N	%
Cases	Valid	109	100.0
	Excluded[a]	0	.0
	Total	109	100.0
a. List wise deletion based on all variables in the procedure.			

Source: Authors’ compilation, 2023

Good measures of scales validity are those that measure what they are supposed to measure and do so consistently (Marko and Erik, 2014). The study was able to obtain a response rate of 100% (N=109) hence the response rate of 100% was valid and deemed appropriate for analysis.

4.2.2. General Information

4.2.2.1. Gender of the respondents

The results show male respondents got 81% while Female respondents got 19%.

The majority of the respondents were therefore males and this shows there is still gender disparity in work places in South Sudan.

4.2.2.2. Age of the respondents

The study intended to establish the age distribution among the personnel of foreign firms that are operating FDI businesses in South Sudan. The findings indicate that 36% of the respondents ranges between 21-30 years, 46% were between 31-40 years, 12% were between 41-50 years, 6% were between 51-60 years, 0% were between 61 and above. This means that most of the respondents who participated effectively were the group between two 21-30 years and 31-40 years which was made up 82%. This confirmed that South Sudan is a youthful country whereby the youths can provide more effective labour to support vibrant economy.

4.2.2.3. Education level of the respondents

The results reveal details about education status where secondary Level got 7%, Diploma Level got 23%, Bachelor degree got 53%, post graduate got 15% and others got 2%. The results showed that 91% of the respondents attained Diploma (23%), Bachelor Degree (53%) and Post Graduate (15%). The findings indicate that most respondents who participated in this study were academically competent and were aware about the information that they gave for this study.

4.2.3. Descriptive Statistics on the analysis of Economic Growth, Exchange rate and interest rates

This section of the study sought to determine the impact of economic growth, the effect of exchange rate valuation and the impact of interest rate valuation, on inward flow of foreign direct investment in South Sudan. The data collected on the variables were analyzed using descriptive statistics with the help of Statistical Package of Social Sciences (SPSS Version 16). The descriptive analysis used for this research includes percentages, frequencies, means, standard deviations and pie charts. The data for study was collected in five states in South Sudan such as: Central Equatoria state, Northern Bahr El Ghazal state, Upper Nile state, Warrap state and Western Bahr El Ghazal state.

4.2.3.1. The impact of economic growth on the basis of inflows of FDI in South Sudan

The first objective of the research sought to determine the impact of economic growth on inward flow of Foreign Direct Investment in South Sudan.

The responses indicated that many foreign companies agreed 'moderately to strongly' by 89% that Economic Growth has significant positive impact on FDI in South Sudan compared to 11% who disagreed to the assertion. The results of the study further indicate strong agreement among respondents that 'Economic Growth has significant positive impact on FDI in South Sudan' as shown by a mean of 3.80 and a deviation of 1.09 showing moderate variance in the responses.

4.2.3.2. A relative weaker exchange rate is expected to increase FDI inflows into South Sudan

The second objective of the research was to examine the effect of exchange rate valuations on inward flow of Foreign Direct Investment in South Sudan. The responses showed that many participants from many foreign companies moderately to strongly agreed by 81% that relative weaker exchange rate is expected to increase FDI inflows into South Sudan compared to 19% who disagreed in their responses.

The results of this study as well indicate strong agreement among respondents that a relative weaker exchange rate is expected to increase FDI inflows into South Sudan as shown by table 4.10 with a mean of 3.55 and a little deviation in responses by standard deviation of 1.11.

4.2.3.3. A relative high interest rate is expected to increase FDI inflows into South Sudan

The third objective of the research intended to access the impact of interest rate valuations on inward flow of FDI in South Sudan. The response shows that many foreign companies agreed moderately to strongly by 75% that relative high interest rate is expected to increase FDI inflows into South Sudan compared to 25% who disagreed in their responses. The findings indicate strong agreement among respondents that a relative high interest rate is expected to increase FDI inflows into South Sudan as shown by a mean of 3.48 and standard deviation of 1.21 showing moderate deviation.

4.2.4. Descriptive Statistics on general findings on determinants of inward flows of FDI

The study aimed to find out general determinants of inward flows of Foreign Direct Investment in South Sudan. The study was conducted in five states in South Sudan namely, Central Equatoria state, Northern Bahr El Ghazal state, Upper Nile state, Warrap state and Western Bahr El Ghazal state. This research used descriptive analysis such as percentages, frequencies, means, standard deviations and pie charts to analyze the data collected for the research.

4.2.4.1. The actual year a foreign company was established in South Sudan

The study sought to obtain data on the actual years in which foreign companies were established in South Sudan in order to determine the frequency of inflows of FDI into South Sudan and to investigate the effect of South Sudan conflict on inward flows of FDI into South Sudan. The results indicated that 32% of foreign companies were established in between 2011 to 2013. This coincided with the two years of relative peace from 2011 to 2013 indicating significant flows of inward foreign direct investment into South Sudan compared with 16% of foreign companies which were established, between 2014 to 2016 and another 16% of foreign companies which were established between 2017 to 2019.

4.2.4.2. Number of weeks it took a foreign company to register in South Sudan

The study in this section intended to obtain data on how long it took a company to register in South Sudan and compare it with stipulated time-frame on South Sudan Investment Promotion Act 2009. South Sudan Investment Promotion Act 2009 stipulates that a registration of foreign company in South Sudan takes two weeks. The results indicated that 60% of respondents took three weeks to more than four weeks to register their companies in South Sudan.

4.2.4.3. Classification of form of investment for foreign companies in South Sudan

The research intended to find out the forms of investment in which foreign firms operated in South Sudan. The results indicate that Greenfield got 42%, Acquisition got 17%, Merging got 9%, Joint venture got 28% and others got 4%.

4.2.4.4. Foreign firms' satisfaction with the size of South Sudan market

The research intended to find out how satisfied foreign companies are with the size of South Sudan market. The results show that 54% of respondents indicated 'satisfied to strongly satisfied' with the size of South Sudan market while 43% of the respondents indicated strongly not satisfied to not satisfied with the size of South Sudan market.

4.2.4.5. Evaluation of openness of South Sudan market economy by foreign companies

The research was carried out to evaluate the openness of South Sudan market. The outcome shows that 77% of the respondents indicated that South Sudan market economy is open.

4.2.4.6. Protection of patents and intellectual property rights in South Sudan

The study aimed to find out from foreign companies if their patents and intellectual property rights are being protected and enforced according to international conversions to which South Sudan is a party as stipulated in South Sudan Investment Promotion Act 2009. The results indicated that 52% of respondents believed that patents and intellectual property rights are not very protected (17%) to not protected (35%)) in South Sudan compared with 36% of respondents who believed that patents and intellectual property rights are protected (32%) to very protected (4%), in South Sudan.

4.2.4.7. Description of economic sector conditions in South Sudan by foreign companies

The aim of the study was to obtain the views from foreign companies about economic sector conditions in South Sudan. The results indicated that 59% of respondents described economic sector conditions in South Sudan as growing.

4.2.4.8. Description of social conditions in South Sudan by foreign companies

The research sought to find out the views from foreign companies about social conditions in South Sudan. The results indicate that 61% of respondents described the social conditions in South Sudan as good to very good while 37% described the social conditions in South Sudan as bad to very bad.

4.2.4.9. Description of infrastructure conditions in South Sudan by foreign companies

The study ought to find out the views about the description of infrastructure conditions in South Sudan by foreign companies. The results illustrate 64% of the respondents described the infrastructure conditions in South Sudan as bad to very bad while 29% of respondents described the infrastructure conditions in South Sudan as good to very good.

4.2.4.10. Factors that determined decisions of foreign companies to invest in South Sudan

This research intended to inquire factors that determined decisions of foreign companies to invest in South Sudan from raw material availability, cheap labour, market potential, investment incentives and economic growth potentials. The results raw materials got 17%, cheap labour got 9%, market potential got 43%, investment incentives got 18% and economic growth performance got 13%. From the results above, 43% of respondents said they invested in South Sudan because of its market potential.

4.2.4.11. Foreign companies' views about skills of local manpower in South Sudan

The study aimed to collect views from foreign companies about the skills of local manpower market in South Sudan compared with manpower skills of the country of origin of their mother firms or manpower skills in the region. The results for this research indicated that 51% of respondents viewed the skills of local manpower in South Sudan as skilled to highly skilled while 44% viewed the skills of local manpower in South Sudan as unskilled to highly unskilled.

4.2.4.12. Foreign firms' views on the ease of doing business in South Sudan

The section of this study collected data from foreign firms pertaining to their views on the ease of doing business in South Sudan. The results of this research indicated that 63% of the respondents from foreign companies felt that it was difficult to very difficult doing business in South Sudan. When the respondents were further asked to mention some of the things that make it more difficult to do business in South Sudan than other countries in the region, the respondents mentioned some of the following such insecurity, poor infrastructure such as roads, high taxation, high costs of materials, inflation, fluctuation in foreign exchange among others.

4.2.4.13. Total revenues (%) of foreign companies coming from operations in South Sudan

The goal of this section of the research was to assess the total revenues (%) of foreign companies coming from operations in South Sudan. The results indicated that 36% of respondents from foreign companies got 50% and above of their revenues from operations in South Sudan. This implies that foreign companies are getting substantial amounts of revenues from operations in South Sudan.

4.2.4.14. The risk of profits conversion and repatriation from South Sudan

This section of the research sought to inquire from foreign companies if they felt the risk of profits conversion and repatriation from South Sudan to mother firms in their home countries. The results above show that 56% of respondents had a view of neutral, low risk to very low risk while 44% of respondents had a view of high risk to very high risk of profits conversion and repatriation from South Sudan to mother firms in their home countries.

4.2.4.15. Foreign firms' views on the level of taxes they pay South Sudan

The research aimed to inquire the views of foreign firms operating in South Sudan about the level of taxes they pay to the government. The results illustrated above show that 54% of respondents viewed that taxes are high level to very high level while 46% of respondents viewed that taxes are very low level to acceptable level.

4.2.4.16. South Sudan openness to international trade as relevant factor for inflows of FDI

This research in this section tried to find out from foreign companies if the country's degree of openness to international trade should be a relevant factor in the decision for FDI inflows into South Sudan. The results show that 82% of respondents moderately to strongly agreed that the country's degree of openness to international trade should be a relevant factor in the decision for FDI inflows into South Sudan.

4.2.4.17. Some foreign firms moved production facilities to South Sudan to circumvent trade barriers and high transportation costs

This section of the research tried to find out from foreign companies their agreement to the statement that 'some foreign firms moved production facilities to South Sudan to circumvent trade barriers and high transportation costs'. The results indicated above show 77% of respondents from foreign companies moderately to strongly agreed that 'some foreign firms moved production facilities to South Sudan to circumvent trade barriers and high transportation costs'

4.2.4.18. Some foreign firms moved production facilities to South Sudan to benefit from cheap labour services

The section of the research looked into the views of foreign companies operating in South Sudan if some foreign companies moved production facilities to South Sudan to benefit from cheap labour services. The results indicated that 78% of respondents from foreign companies moderately to strongly agreed that some foreign firms moved production facilities to South Sudan to set up production sites so as to benefit from cheap labour while 22% of respondents disagreed or strongly disagreed.

4.2.4.19. Some foreign firms moved production facilities to South Sudan to secure supply of inputs at relatively stable prices

The research intended to find out from foreign companies of some foreign firms who moved production facilities to South Sudan to secure supply of inputs at low relatively prices. The results indicated that 79% from participants of foreign companies moderately to strongly agreed that some foreign firms moved their production facilities into South Sudan to set up production sites so as to secure supply of inputs or nature resources at relatively stable prices compared to 21% who disagreed in their responses.

4.2.5 Qualitative Analysis

This section of the research used qualitative analysis to obtain in-depth information from the respondents about the determinants of inward FDI in South Sudan. The questionnaires with open-ended questions were distributed to the respondents in five states of South Sudan that include Central Equatoria state, Northern Bahr El Ghazal state, Upper Nile state, Warrap state and Western Bahr El Ghazal state. The researchers then analyzed the data by teasing out all relevant information related to the determinants of FDI in South Sudan.

4.2.5.1. Difficulties encountered by foreign companies when entering South Sudan Market

The researchers asked respondents from foreign companies if they faced any difficulties when entering South Sudan market. The respondents narrated some of the difficulties which they faced when entering South Sudan market. The difficulties include high level of taxes on goods and services, inadequate skilled labour, high interest rate, processing work certificate and operating license take long time than expected, conflicts which involved looting of assets, dependence on imports of products due to low scale local production, cultural barriers, bribery and illegal collection of money on highways, inflation, double taxation in which one good is taxed at national level and taxed again when it reaches state level, political instability, high cost of rents, inadequate storage facilities, inadequate advertising agents, many customers being low income earners and difficulty in getting land to set up businesses.

4.2.5.2. Technical skills most difficult to find by foreign companies in South Sudan

The respondents from foreign companies were asked to list technical skills related to their businesses which were most difficult to find in South Sudan. The respondents listed some of the following which include software developers, graphics design skills, experienced ITs, ATM (Automatic Teller Machine) technicians, finding people to manage global distribution system (GDS) at airports, mechanical technicians, professional qualification in ACCA (Association of Chartered Certified Accounts), CPA (Certified Public Accountants) and Bank management, electrician skills, oil and gas production skills, safety and environmental management skills, cyber-security skills, water technicians, exploration and operating exports, down-hole, surface and safety site technical team, agricultural extension skills, tourist travel guide skills, chef skills and online business skills.

4.2.5.3. Things that make it more difficult to do business in South Sudan

The respondents were asked to narrate things that make it more difficult to do business in South Sudan than other countries in the region. The respondents narrated insecurity, poor infrastructure such as roads, high taxation, lack of electricity in many parts of the country, no good online business, poor network, severe droughts and floods, poor health care system, high costs of materials, low rates of skilled manpower, lack of skilled software engineers, inflation, fluctuation in foreign exchange rate, low incomes of customers, high costs for drilling equipment, high cost of importing heavy equipment into land lock South Sudan, economic instability, lack of common language for South Sudanese and no stock exchange established.

4.2.5.4. Types of skills and training liked by foreign companies to expanded in South Sudan

The respondents from foreign companies were as well asked to list the types of skills and training related to their businesses they would like to see expanded in South Sudan. The types of skills and training listed include graphics and design skills, art and craft skills, risk management skills, computerized accounting packages skills, mechanic skills, system analysis and data analysis kills, network engineering, electrician skills, fabrication and welding of metals, organizational planning skills, down-hole, surface and safety site skills, training medical doctors, emotional intelligence skills, vocational training skills, oil industry training, innovation and creativity training, hotel management, petroleum business skills training, agricultural extension skills, automobile industry skills, architecture skills tax control system monitoring, evaluation and analytical skills, management and risk mitigation skills, management of cooperative societies skills, skills on business startup for women, aviation management and aircraft maintenance skills, technical skills found with geoscientists, petroleum engineers, drilling engineers, reservoirs engineers, petrophysicists and geophysicists, entertainment sector skills, ethic compliance skills, oil and gas management skills, safety and environmental management skills, anti-money laundering prevention skills and cyber-security skills.

4.3. Hypothesis Test using Regression Analysis

This research study assumes linearity between independent variables and dependent variable. In order to test the hypothesis of this study, the researcher utilized regression modeling and ANOVA summary to reject or accept the research hypotheses. The formula for testing hypothesis is stated below:

$Y=a + bX + e$

Where Y = Dependent variable

X = Independent variable

a = Intercept parameter because it gives the value of Y at the point where the regression line crosses the Y-axis.

b =slope parameter because it measures the change in Y per unit change in X.

e = error term also called random error because it acquires the effects of all the minor, unforeseen factors that cannot reasonably include in the model as independent variables.

4.3.1. Regression modeling for the impact of economic growth based on inflows of FDI in South Sudan

The first hypothesis of the study was:

H01: There is no significant positive impact of economic growth based on inflows of Foreign Direct Investment in South Sudan as the host country.

The results in table 4.51 below show that Economic Growth measured by GDP has a positive effect on FDI. From the R2 = .061, Economic Growth (GDP) can explain 6.1% of the variations.

From the ANOVA model the study found out that F- = .453, sig = .523b indicating that the research model was statistically significant in determining there is a positive relationship between GDP and FDI.

Table 4.1 Impact of economic growth on the basis of inflows of Foreign Direct Investment in South Sudan as the host country, 2023

Model Summary									
					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.247[a]	.061	-.073	289.28371	.061	.453	1	7	.523
a. Predictors: (Constant), GDP									
b. Dependent Variable: FDI									

Source: Authors' compilation, 2023

Table 4.2 Anova Model for the impact of economic growth based on inflows of Foreign Direct Investment in South Sudan as the host country, 2023

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	37897.183	1	37897.183	.453	.523[b]
	Residual	585795.461	7	83685.066		
	Total	623692.644	8			
a. Dependent Variable: FDI						
b. Predictors: (Constant), GDP						

Source: Authors' compilation, 2023

Table 4.3 Regression Coefficients for impact of economic growth on the basis of inflows of Foreign Direct Investment in South Sudan as the host country, 2023

Coefficients[a]								
		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
Model		B	Std. Error	Beta	T	Sig.	Lower Bound	Upper Bound
1	(Constant)	-478.693	626.050		-.765	.469	-1959.067	1001.681
	GDP	.020	.030	.247	.673	.523	-.051	.091
a. Dependent Variable: Foreign Direct Investment (FDI)								

Source: Authors' compilation, 2023

The resultant regression for GDP and FDI is shown below;
FDI = -478.693+ .020GDP + .030

The beta value is (β) = .020 is significantly different from 0. This demonstrates that there is a statistically significant positive effect of GDP on FDI. A unit change in GDP is expected to result in a 020-unit change in inflows of Foreign Direct Investment in South Sudan.The result for hypothesis test of GDP and FDI was influenced by events that happened between 2011 to 2020. South Sudan GDP growth rate dropped to -50.3% in 2012. This decline was due to shutdown of oil production in the country in 2012 over dispute with Sudan on oil transit fees. The oil production resumed in 2013 raising, GDP growth rate to 29.8%. However, the GDP growth rate declined steadily from 2014 to 2017 due to internal conflict that broke out in South Sudan from 2013 to 2018. GDP rose steadily again to 11.4% in 2019 as the country experienced relative peace again after the warring parties signed revitalized peace agreement in 2018. However, GDP declined again to 3.1 in 2020. This decline could be attributed to impact of Covid 19 on the economy in South Sudan.

4.3.2 Regression modelling for impact of relative weaker exchange rate in relation to the inflows of Foreign Direct Investment in South Sudan as the host country

The second hypothesis of the study was:

H02: A relative weaker exchange rate has no effect in relation to the inflows of Foreign Direct Investment in South Sudan as the host country.

The results in table 4.54indicate that a relative weaker exchange rate has a positive effect on FDI. From the R2 = .091, relative weaker Exchange Rate (ER) can explain 9.1% of the variations. From the ANOVA model the study found out that F- = .698, sig = .431 indicating that the research model was statistically significant in determining there is a positive relationship between Exchange Rate and FDI.

Table 4.4 Impact of relative weaker exchange rate in relation to the inflows of Foreign Direct Investment in South Sudan as the host country, 2023

Model Summary									
					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.301ᵃ	.091	-.039	284.64878	.091	.698	1	7	.431
a. Predictors: (Constant), Exchange Rate									
b. Dependent variable: FDI									

Source: Author's compilation, 2023

Table 4.5 Anova Model for Impact of relative weaker exchange rate in relation to the inflows of Foreign Direct Investment in South Sudan as the host country, 2023

ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	56518.165	1	56518.165	.698	.431[b]
	Residual	567174.479	7	81024.926		
	Total	623692.644	8			
a. Dependent Variable: FDI						
b. Predictors: (Constant), Exchange Rate						

Source: Authors' compilation, 2023

Table 4.6 Regression Coefficients for Impact of relative weaker exchange rate in relation to the inflows of FDI in South Sudan as the host country, 2023

Coefficients[a]								
		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B	
Model		B	Std. Error	Beta	T	Sig.	Lower Bound	Upper Bound
1	(Constant)	-144.490	136.595		-1.058	.325	-467.485	178.505
	Exchange Rate	1.164	1.393	.301	.835	.431	-2.131	4.459
a. Dependent Variable: FDI								

Source: Authors' compilation, 2023

The resultant regression for GDP and FDI is shown below;

FDI = -144.490+ 1.164ER + 1.393

The beta value is (β) = 1.164 is significantly different from 0. This indicates that there is a statistically significant positive effect of Exchange Rate valuation on FDI. A unit change in Exchange Rate is expected to result in a 1.164-unit change in inflows of Foreign Direct Investment in South Sudan.

4.3.3 Regression modelling for impact of relative high interest rate on inflows of Foreign Direct Investment to South Sudan as the host country

The third hypothesis of the study was:

H03: A relative high interest rate has no impact on inflows of Foreign Direct Investment to South Sudan as the host country.

Table 4.7 Impact of relative high interest rate on inflows of Foreign Direct Investment to South Sudan as the host country, 2023

Model Summary									
					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.324ᵃ	.105	-.023	282.42071	.105	.819	1	7	.395
a. Predictors: (Constant), Interest Rate									
b. Dependent Variable: FDI									

Source: Authors' compilation, 2023

Table 4.8 ANOVA Model for impact of relative high interest rate on inflows of Foreign Direct Investment to South Sudan as the host country, 2023

ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	65362.461	1	65362.461	.819	.395[b]
	Residual	558330.183	7	79761.455		
	Total	623692.644	8			
a. Dependent Variable: FDI						
b. Predictors: (Constant), Interest Rate						

Source: Authors' compilation, 2023

Table 4.9 Regression Coefficients for impact of relative high interest rate on inflows of Foreign Direct Investment to South Sudan as the host country, 2023

Coefficients[a]								
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	-260.604	238.307		-1.094	.310	-824.110	302.902
	Interest Rate	34.301	37.891	.324	.905	.395	-55.297	123.898
a. Dependent Variable: FDI								

Source: Authors' compilation, 2023

The results in table 4.57indicate that a relative high Interest Rate has a positive effect on FDI. From the R2 = .091, relative high Interest Rate (IR) can explain 10.5% of the variations.

The resultant regression for GDP and FDI is shown below;

FDI = -260.604+ 34.301IR + 37.891

The beta value is (β) = 34.301 is significantly different from 0. This indicates that there is a statistically significant positive impact of relative high Interest Rate valuation on inflows of FDI. A unit change in Interest Rate is expected to result in a 34.301-unit change in inflows of Foreign Direct Investment in South Sudan.

5.0. Conclusions

5.1. Analysis of Economic Growth, Exchange rate and interest rates

As discussed, the study sought to determine the impact of economic growth, the effect of exchange rate valuation and the impact of interest rate valuation, on inflow of foreign direct investment in South Sudan. The results indicate that 89% from foreign companies generally agreed that Economic Growth has significant positive impact on FDI inflows in South Sudan, 81% of participants from foreign companies agreed moderately to strongly that relative weaker exchange rate is expected to increase FDI inflows into South Sudan and 75% of respondents agreed moderately to strongly that relative high interest rate is expected to increase FDI inflows into South Sudan. Economic growth, relative weak exchange rate and relative high interest rates are therefore vital determinants of foreign direct investment into South Sudan. Although South Sudan has a weaker real exchange rate, it has not significantly attracted foreign investors because the country is also affected by high inflation, and weak economy as a whole which deterred foreign investors who would take advantage of relative low prices in South Sudan to purchase facilities. The Bank of South Sudan increased interest rate from 3% in 2015 to 8% in 2016. The increase of interest rate was done at a time when internal conflict engulfed the Republic of South Sudan from 2013 to 2018 thus the conflict negatively affected economic performance at that time. South Sudan government should strengthen economic, fiscal and monitory policies as they are key factors to economic growth which attract inward foreign direct investment. The Bank of South Sudan should abolish floating exchange rate but instead adopt fixed relative weak exchange rate. The Bank of South Sudan should as well keep interest rate relatively high to attract foreign investors. Doing so will attract foreign investors into the country especially when the general economic situation improves as a whole.

5.2.2. Analysis of general findings on determinants of inward flows of FDI

The study aimed at finding out the general determinants of inward flows of Foreign Direct Investment in South Sudan. The results show that South Sudan conflict of Dec 2013 to Sept 2018 has significantly reduced the inflows of FDI into South Sudan by 50% every two years. The conflict is therefore inversely related with inflows of foreign direct investment into South Sudan thus, the government should maintain peace and improve on internal security.

Processing work permit applications should therefore adjust their processes of processing registration to enable foreign companies register in two weeks as mentioned in the South Sudan Investment Promotion Act 2009. Ministry of Investment should incentivize other forms of foreign direct investments such as acquisition, merging and joint venture in order to diversify the forms of foreign direct investment in the country. The government of South Sudan should as well strengthen protection of patents and intellectual property rights to avoid deterring competent foreign investors away from the country. South Sudan government is required to make significant effort to invest on basic infrastructures in the country. It should also invest more on factors that support market potentials such as robust legal systems, good infrastructure, remove market entry barriers and provide favourable political and internal environments. South Sudan government should also invest heavily on availability of cheap skilled labour, raw materials, and more attractive investment incentives so as to widen factors that attract foreign direct investment into the country. South Sudan government additionally needs to invest more on education to improve skills of labourers in the country. This will boost confidence of foreign companies that seek cheap skilled labour in the country. South Sudan government should revise tax policies and remove factors that contribute to high taxes in the country. Acceptable level of corporate tax level will eventually contribute to factors that attract inflows of FDI into the country.

5.2.3. Qualitative Analysis

This was used to obtain in-depth information from the respondents about the determinants of inward FDI in South Sudan.

Many foreign companies encountered difficulties in South Sudan market which include high level of taxes on goods and services, inadequate skilled labour, high interest rate, processing work certificate and operating license take long time than expected, conflicts which involved looting of assets, dependence on imports of products due to low scale local production, cultural barriers, bribery and illegal collection of money on highways, inflation, double taxation in which one good is taxed at national level and taxed again when it reaches state level, political instability, high cost of rents, inadequate storage facilities, inadequate advertising agents, many customers being low income earners and difficulty in getting land to set up businesses. South Sudan government should therefore devise ways of minimizing the above difficulties.

Some technical skills were found to be inadequate in South Sudan and these include software developers, graphics design skills, experienced ITs, ATM (Automatic Teller Machine) technicians, finding people to manage global distribution system (GDS) at airports, mechanical technicians, professional qualification in ACCA (Association of Chartered Certified Accounts), CPA (Certified Public Accountants), oil and gas production skills, safety and environmental management skills, cyber-security skills, water technicians, exploration and operating exports, down-hole, surface and safety site technical team,, tourist travel guide skills, online business skills, graphics and design skills, art and craft skills,computerized accounting packages skills, system analysis and data analysis kills, network engineering, down-hole, surface and safety site skills, vocational training skills, oil industry training, innovation and creativity training, hotel management, petroleum business skills training, automobile industry skills, architecture skills, tax control system monitoring, evaluation and analytical skills, management and risk mitigation skills, management of cooperative societies skills, skills on business startup for women, aviation management and aircraft maintenance skills, technical skills found with geoscientists, petroleum engineers, drilling engineers, reservoirs engineers, petrophysicists and geophysicists, entertainment sector skills, ethic compliance skills, oil and gas management skills, safety and environmental management skills, anti-money laundering prevention skills and cyber-security skills. South Sudan government should invest in capacity buildings particularly in skills mentioned above by foreign companies as most difficult to find in South Sudan. This shall enhance the inflows of FDI to South Sudan.

6.0. Recommendations

6.1. Recommendation for policy improvements

The study recommends to all stakeholders to make policy improvements to boost inward flows of foreign direct investment in South Sudan. The stakeholders include Ministry of Investment to improve on investment policies, Ministry of Trade and Industry to improve on multilateral trade, Bank of South Sudan to improve on monetary policies, and One Stop Shop Centre to improve its liaison with, Ministry of Justice, Business Registry Department for processing of applications for registration of companies, Ministry of Interior for processing travel permit and residence applications, Ministry of Finance and Economic planning pertaining to fiscal incentives and to provide assistance in obtaining necessary exemptions and Ministry of Labour for processing work permit applications.

6.1.1. Recommendations on analysis of Economic Growth, Exchange rate and interest rates

The results of this study indicate that Economic growth, weak real exchange rate and relative high interest rates are vital determinants of foreign direct investment into the country. South Sudan government should strengthen economic, fiscal and monitory policies as they are key factors to economic growth which attract inflows of foreign direct investment. The Central Bank of South Sudan should abolish floating exchange rate but instead adopt fixed relative weak exchange rate. The Central Bank of South Sudan should as well keep interest rate relatively high to attract foreign investors.

6.2 Recommendation for further Research

The results of the study indicate that relative weak exchange rate and relative high interest rates are some of the vital determinants of foreign direct investment into South Sudan. Although South Sudan has a weaker real exchange rate, it has not significantly attracted foreign investors because the country is also affected by high inflation, and weak economy as a whole which deterred foreign investors who would take advantage of relative low prices in South Sudan to purchase facilities. The Central Bank of South Sudan increased interest rate from 3% in 2015 to 8% in 2016. The increase of interest rate did not attract significant number of foreign investors because of volatile economic situation of the country which was brought about by internal conflict that broke out in Dec 2013.

The researchers therefore noted that internal conflict of December 2013 and high inflation might have influenced monetary policies in the country. The study therefore recommends further studies on the impact of relative weak exchange rate and relative high interest rate on inward flow of foreign direct investment into South Sudan particularly when the general economic stability is realized in the country.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this paper.

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