### Historic Account and Underlying Factors of FDI Inflows to Sub-Saharan Africa: An OLI Theory Approach

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#### **Abstract**

This study examines how FDI is evolving in recent times in Sub-Saharan Africa (SSA) and other developing countries by employing the Dunnings Ownership, Location and Internalization (OLI) theory. The questions of importance as per the study are; how FDI inflow started; its effect on the SSA region and what to expect in the future. The paper starts with the operations of FDI in Africa from the 1960s. It then skews to the OLI theory and how its motives (seekers) influence three variables (technology transfer, economic reforms, and environmental degradation). The direct content analysis is adopted and to be precise the thematic approach to answer the questions raised by the researchers. A total of 212 preliminary literature is gathered and by forward and backward review, as well as in-duplication methods, a final 49 papers are arrived carefully selected to steer the research. The study revealed that technology transfer is possible through the "local content" policy in developing countries. Also, infrastructure and labour reforms have been influenced by market-seeking, efficiency-seeking, the resource-seeking, and the strategic asset FDIs. In addition, natural

resource-seeking FDI which concentrates on mining is the greatest source of environmental pollution in developing countries.

### **Keywords**

Thematic approach, OLI theory, Technology transfer, Economic and Business reforms, Environmental degradation, and Sub-Saharan Africa (SSA).

### 1. Introduction

Foreign direct investment is envisaged as the manner in which an investing economy exercises de facto or de jure power of 10 percent at least or more interest in an enterprise voting rights (Jhingan, 2012). It is sometimes also seen as an investment that involves a long-term relationship, interest and management influenced by a resident of one economy (foreign direct investor or parent enterprise) in an enterprise resident in an economy other than that of the foreign direct investor (FDI enterprise or affiliate enterprise or foreign affiliate) (Nyoni and OECD).

The current research on FDI focuses on environmental factors like carbon emissions and energy efficiency (Xu, Zhao, et al. 2021 and JinRu & Qamruzzaman 2022, Boohene & Darkwah, 2023a; Boohene & Darkwah, 2023b; Asante Darkwah et al. 2023). With new and modern models more analyses around the topic are becoming more possible than it has been in the earlier days of research (Agbokah et al. 2022; Agrawal et al., 2018). Again, because it's basically a subject that touches on behavioural finance, it's important to note that outputs from recent data may not tally with that of old data because human behaviour and response is not static (Bolton et al. 2020 and Hutchison 2018). A case that will sway people to the left in the 60s will do vice versa in our today's world.

Owing to this, FDI has also been going through some changes in the form of FDI regulations, adjustments in FDI regulatory framework and environmental laws which have been empirically stated (Borga & Caliandro 2018; Gokmenoglu et al. 2019 and da Motta Veiga & Rios 2019). These changes could be gearing toward a better environmental concern practices which never was on the table for their earlier operations (da Motta Veiga & Rios 2019). Again, some of these variables to guesstimate causal effects of foreign investment in the region is either inadequate or absolutely unavailable, making them immeasurable as compared to other regions (Nhemachena et al. 2018; Dinku 2019 and Kephe et al. 2021). To this end, it is important to investigate how FDI has evolved in recent times using past and present research articles done in the SSA and other developing countries.

The questions of importance include the origin of FDI in the region, thus, how it started; its effect on the region and what to expect in the future? To achieve this, the authors set out three variables with scanty research on the region (technology transfer, economic reforms, and environmental degradation). The authors dive into the literature on how FDI has impacted these variables in other developing countries and predict what the future holds for SSA. With this background, it is believed that it will open doors for further studies on the topic and will ignite more versatile analysis in the future.

### 1.1 FDI into Africa (1970-2000)

Data availability on FDI inflow stock to Africa pinpoints to the early 70s although it might have started earlier than that. Data from IMF databases and UNCTAD indicates the operations on African soil started from 1970. However, the accumulation of foreign direct investment unto the African continent augmented notably amid 1980 and 2000, raising from a little above thirty-two million dollars in 1980 to over a hundred and forty-eight million dollars in the year 2000 (Table 1).

**Table 1:- FDI Inward Stock by Host Region** 

FDI Inward Stock by Host Region, 1980-2000 (Millions of US \$)						
Region	1980	1985	1990	1995	1999	2000
World	615,805	893,567	1,888,672	2,937,539	5,196,046	6,314,271
Developed countries						
1/	358,449	537,257	1,388,762	2,036,723	3,301,924	4,157,640
Developing						
countries 2/	257,357	356,262	496,915	864,392	1,792,154	2,031,916
Africa	32,714	33,854	48,648	75,914	1,40,548	148,035
Latin America and						
the Caribbean	49,990	79,673	116,678	201,616	520,282	606,907
Developing Europe	156	286	1,131	3,262	9,455	11,461
Asia	193,347	241,266	328,232	580,697	1,118,416	1,261,776
The Pacific	1,180	1,183	2,226	2,903	3,453	3,737
Central and Eastern						
Europe	0	0	2,996	36,424	101,968	124,715

Source:- World Investment Report (WIR), 2001

FDI inflows to the African region gained impetus in the second part of the 90s. In 1999, the inflow of foreign investment augmented to a record of US\$10.5 billion, and decreased the subsequent year to US\$9.1 billion (Table 2). These dimensions correspond to a momentous raise comparatively to the inflows that averaged about US\$3 billion per year at the start of the decade.

Although the region recorded astonishing increments in the inflow, data mining from share of global foreign direct inflow suggest the increase was at a decreasing rate, thus from 2 percent in the late 80s, it decreased to 1.7 percent in 1996 but raised a bit to 2.3 percent in 1997 and dwindled again to 0.7 percent in the year 2000 (Tab.2).

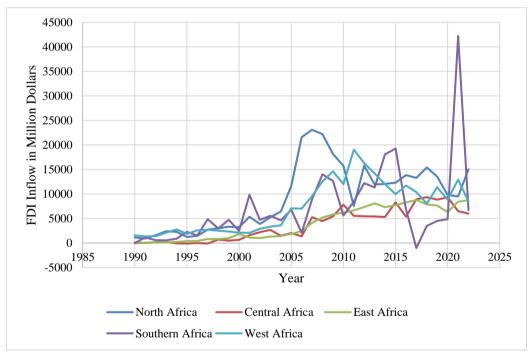
**Table 2:- FDI inflows by Host Region** 

FDI Inflow by Host Region, 1989-2000 (Millions of US \$)							
Average for period							
Region	1989-94	1995	1996	1997	1998	1999	2000
World	200,145	331,068	384,910	477,918	692,544	1,075,049	1,270,764
Developed countries 1/	137,064	202,221	218,870	267,561	482,604	828,316	1,004,301
Developing countries 2/	59,638	114,580	153,310	191,168	188,933	223,511	241,045
Africa	4,012	5,935	6,440	10,970	8,274	10,473	9,075
Of which least developed							
countries	890	1,659	1,657	2,170	3,207	4,774	3,894
Latin America and the							
Caribbean	17,506	32,311	51,279	71,152	83,200	110,285	86,172
Developing Europe	232	477	1,085	1,699	1,608	2,723	2,035
Asia	37,659	75,293	94,351	107,205	95,599	99,728	143,479
The Pacific	229	564	155	142	252	302	284
Central and Eastern							
Europe	3,444	14,268	12,730	19,188	21,006	23,222	25,419
Share of Country groups i	n world (%)	)					
Developed countries 1/	68.50	61.10	56.90	56.00	69.70	77.00	79.00
Developing countries 2/	29.80	34.60	39.80	40.00	27.30	20.80	19.00
Africa	2.00	1.80	1.70	2.30	1.20	1.00	0.70
Of which least developed							
countries	0.40	0.50	0.40	0.50	0.50	0.40	0.30
Latin and the Caribbean	8.70	9.80	13.30	14.90	12.00	10.30	6.80
Developing Europe	0.10	0.10	0.30	0.40	0.20	0.30	0.20
Asia	18.80	22.70	24.50	22.40	13.80	9.30	11.30
The Pacific	0.10	0.20	0.00	0.00	0.00	0.00	0.00
Central and Eastern		·	·				
Europe	1.70	4.30	3.30	4.00	3.00	2.20	2.00

Source:- World Investment Report (WIR), 2001

Earlier forms of foreign direct investment recorded before the 90s in Africa were predominantly in two main regions, the northern and the western parts of Africa, with South Africa joining in the late 80s. This could be as a result of the civil unrest which was a result of the "The apartheid Legislation" and the fight led by Nelson Mandela for equal rights for all in the early part of the 70s. Also, these foreign investments were mostly drawn in by the endowments of natural resources in these areas, predominantly crude oil. North Africa, and West Africa (Nigeria), and Gabon from earlier days have been most important producers of oil, and with more countries from the region joining recently (Angola, Chad, Equatorial Guinea, and Sudan);

undeniably, oil reserves on the African continent are believed to exceed that of other countries outside the Middle East by far (on Trade & Development, 2002). Until recently, the highest foreign direct investment into Africa was recorded in 2008 and it went to the Northern part of the continent. As it stands now, Southern Africa is the leading region of FDI inflow unto the African continent. However, in a critical look at the share of country groups in the world, Africa by far recorded the least inflows throughout the period. The problems inhibiting the inflow of FDI to the continent cannot be exhausted; from civil unrest, to anti-colonialism and these two could be in a few countries on the continent but have rendered the whole continent as a hostile place for investment or simply an unfriendly environment for doing business (Odenthal et al., 1999). If there is a headway, some of these misconceptions should be dealt with and by also stressing on the fact that Africa is a continent and not a country and each country on the continent has sovereign power over its jurisdiction.



Source:- UNCTAD World Investment Report 2023

Figure 1:- FDI Inflow into Africa by Regions (1990-2022)

#### 1.2 FDI into Sub-Saharan Africa (1970-2003)

World's highest inflow of FDI from 1970 to 2003 was recorded in the year 2000. Meanwhile, world foreign direct investment inflow for the period of 1970 to 1979 recorded a little 24 billion dollars of which the developed countries, Africa and Sub-Saharan Africa managed 6 billion, 1 billion, and 160 million dollars respectively (Tab.3). The inflow however quadrupled in the subsequent periods (1980-1989 and 1990 -1999) for world FDI and FDI inflow to developed countries but not for Africa or Sub-Saharan Africa for that matter; Africa and Sub-Saharan Africa only managed to double their inflows in the second period but tripled their figures in the third averaged period. (Table 3).

Out of the 1 billion dollars inflow unto the African continent, the SSA region received a chunk of it (\$906m) in the first averaged period. This trend continued through the second and third average periods and up to 2003. The highest inflow of foreign investment in the sub region was recorded in the year 2001 (\$6.2b), and it dwindled through to 2003 (Table 3). This is astonishing because the world highest inflow was in the year 2000 and not 2001 as it was in Africa and the SSA. This drop in World investment in 2001 could possibly be as the result of the terrorist attacks on the Twin Towers in the United States in the year 2001 popularly known as "9/11 attack". Investors reacted swiftly, losing interest in investments in the USA which was the major recipient of FDI in the developed countries. For some of the investors who still wanted a place to send their investment, Africa became a safe place comparably for that year until the bubble settled.

Sub-Saharan Africa's share of the world FDI for the period (1970-2003) dwindled throughout and so was the region's share in total developing countries. It starts off at a staggering 3.8 percent of the Words FDI inflow and 14.8 percent in the share of total developing countries in the first averaged period but continued to reduce throughout the period under discussion (Table 3). The FDI inflow per capita however showed an impressive run looking at a persistent increase throughout the study period. It starts off at 2.8 percent in the first averaged period and increases continuously to 15 percent in the year 2003 (Table 3). This is a good account on FDI inflow into the Sub-region because a positive value of FDI per capita normally translates into an inflow of foreign investment in a countrie economy distributed among its residents, whilst a negative figure indicates withdrawn investments.

Table 3:- FDI Inflows and Shares to Developing Regions, 1970-2003 (Millions of Dollars)

Average for Period							
Category	1970 - 1979	1980 - 1989	1990 – 1999	2000	2001	2002	2003
World	24,124	93,887	401,028	1,387,953	817,574	678,751	560,115
Developed	6,109	21,356	121,769	252,459	219,721	157,612	172,033
countries	0,109	21,330	121,709	232,439	219,721	137,012	172,033
Africa	1,066	2,162	6,187	8,728	19,616	11,780	15,033
North Africa	160	889	1,864	2,525	4,916	2,918	4,434
Sub-Saharan	906	1,273	4,323	6,202	14700	8,862	10,599
Africa (SSA)	900	1,273	4,323	0,202	14700	0,002	10,399
SSA less South	813	1,259	3,472	5,314	7,911	8,105	9,836
Africa	013	1,239	3,472	3,314	7,911	6,103	9,030
Latin America and	3,269	7,438	44,432	97,537	88,139	51,358	49,722
the Caribbean	3,209	7,436	44,432	91,331	00,139	31,336	49,722
Asia and the	1,774	11,756	71,150	146,195	111,966	94,474	107,278
Pacific	1,//4	11,730	/1,130	140,193	111,900	94,474	107,278
Share of Country g	nounc in world	(9/.)					
Developed	25.30	22.70	30.40	18.20	26.90	23.20	30.70
Countries	25.30	22.70	30.40	18.20	20.90	23.20	30.70
Africa	4.40	2.30	1.50	0.60	2.40	1.70	2.70
North Africa	0.70	0.90					
	3.80		0.50	0.60 0.40	0.60	0.40	0.60 1.90
Sub-Saharan	3.80	1.40	1.10	0.40	1.80	1.30	1.90
Africa (SSA)	2.40	1.20	0.00	0.40	1.00	1.20	1.00
SSA less South	3.40	1.30	0.90	0.40	1.00	1.20	1.80
Africa	12.60	7.00	11.10	7.00	10.00	7.60	0.00
Latin America and	13.60	7.90	11.10	7.00	10.80	7.60	8.90
the Caribbean	7.40	12.50	17.70	10.50	12.70	12.00	10.20
Asia and the	7.40	12.50	17.70	10.50	13.70	13.90	19.20
Pacific		• (0/)					
Share in Total Deve		les (%)	5.10	2.50	0.00	7.50	0.70
Africa	17.40	10.10	5.10	3.50	8.90	7.50	8.70
North Africa	2.60	4.20	1.50	1.00	2.20	1.90	2.60
Sub-Saharan	14.80	6.00	3.50	2.50	6.70	5.60	6.20
Africa (SSA)	12.20		2.00	2.10	2.50		
SSA less South	13.30	5.90	2.90	2.10	3.60	5.10	5.70
Africa	52.50	24.00	2 5 70	20.50	10.10	22.50	20.00
Latin America and	53.50	34.80	36.50	38.60	40.10	32.60	28.90
the Caribbean	20.00	55.00	50.40	57.00	51.00	50.00	62.40
Asia and the	29.00	55.00	58.40	57.90	51.00	59.90	62.40
Pacific  FDI Inflow per Capita (US \$)							
		1.00	0.0	11.00	24.1	110	10.0
Africa	2.6	4.00	8.8	11.00	24.1	14.2	17.7
North Africa	2.1	8.9	14.9	18.3	35.1	20.5	30.6
Sub-Saharan	2.8	2.9	7.5	9.4	21.8	12.8	15.00
Africa (SSA)				0.5	10 -	10 -	
SSA less South	2.7	3.1	6.5	8.6	12.6	12.6	14.9
Africa							
Latin America and	10.4	18.9	94.5	190.7	169.9	97.6	93.1
the Caribbean							
Asia and the	0.7	4.2	21.7	41.4	31.3	26.1	29.2
Pacific							

**Source:-** UNCTAD secretariat computations based on UNCTAD FDI/TNC database and World Bank online data.

#### 1.3 FDI into Sub-Saharan Africa: The Past Two Decades

World FDI has been increasing at an alarming rate in the past two decades, data from IMF indicates that FDI world stock has more than quadrupled from the year 2000 to the year 2020 (Tab.4). The world FDI flows in 2015 augmented by 2 percent to USD 1.7 trillion, attaining their utmost level from the time when the global financial crisis began in 2007; A fraction of this boost was the consequence of financial and corporate reformations and not of new, industrious investments (OECD, 2016). With this, the investment inflow from businesses to other businesses in Africa has been projected to reach US \$66.3 billion (Signé, 2018). Still, African remains the least recipient of global FDI throughout the past two decades. The region managed 2.07 percent of world share of FDI stock in the year 2000, 3.13 percent in 2010 and 2.25 in 2020 whilst Europe managed 33 percent in 2000, 42.39 in 2010 and 36.18 in 2020 (Tab.4). Although, most of the FDI stock inflow into Africa has been recorded in the Sub-Saharan Africa, there's still much to do if the region intends to increase the foreign investment inflows.

Table 4:- FDI Stock, by region, 2000, 2010 and 2021 (Millions of dollars)

FDI Inward Stock							
Region 2000 2010 2020							
Developed economies	5 860 038	13 846 108	33 119 269				
World	7 377 201	19 907 143	45 448 812				
Europe	2 491 244	8 439 157	16 441 775				
North America	3 108 255	4 406 182	15 056 860				
Other developed economies	260 539	1 000 769	1 620 634				
Developing economies	1 517 163	6 061 035	12 329 543				
Asia	1 023 690	3 872 409	9 130 113				
Africa	153 062	623 756	1 026 320				
West Africa	33 010	109 968	208 446				
Central Africa	5 053	39 227	118 702				
East Africa	7 202	38 085	96 547				
Southern Africa	62 208	235 365	276 534				

Source: UNCTAD, FDI/MNE database 2021

Several reasons accounted for the minimum inflow of FDI in Africa, notably the protection of sovereignty (Bezuidenhout & Kleynhans, 2015) and again they needed to protect the infant industries (Tomohara & Takii, 2011); as this is in line with the classical theory of international trade which elaborates that infant industries need protection from international competitors until they become more stable and mature to compete. This therefore inhibited the inflow of FDI to the region because it was seen as a hostile environment. Again, there was the need to protect the African environment, as documented by Abdouli & Hammami (2017) that FDI operations in Africa negatively affects the environment. These among others made the leadership of the region to enact laws and rules that seemed hostile for foreign entrants. In recent times, however, policies have been put in place to attract more FDI into the region as it augments economic growth (Zekarias et al. 2016 and Masipa 2018), reduces poverty (Fauzel et al. 2016; Nedumaran & Manida 2019) and augments technology transfer (W. Liu et al. 2016; Hao et al. 2020 and HOANG et al. 2021). The region is also getting a lot of attention because of its market size (Shan et al., 2018), the avenue for tourism (Bezuidenhout & Grater, 2016), trade policy openness (Cantah et al., 2018), substantial economic reforms (Masipa, 2018) and so on. The future looks elegant for the region as it begins to position itself to compete or rub shoulder-to-shoulder with the developed countries for world FDI stock share.

#### 1.4 Dunning's OLI Theory

The eclectic theory of FDI was theorized by Dunning in 1977, popularly, the theory has ground to be known as the OLI theory, thus, Ownership, location and internalization. Narayanan & Bhat (2011) explains that Dunnings eclectic or the OLI framework postulates that foreign investment survive and develop owing to the location (L) recompense, a makeup of production variables such as infrastructure, transportation, and natural and human capital accessible in the host nations; ownership (O) recompense consisting of the substantial and insubstantial assets of the corporation; and internalization (I) compensation owing to the firm's competitive advantage in producing internally rather than selling or licensing technologies to others. It is no doubt that this theory has come under a lot of criticisms (Laanti et al., 2009), nevertheless, although propounded based on the movements of factors of production and MNCs in the mid-1950s, it's still applicable to the everchanging business environment and the operations of the MNC and remains an efficient and robust tool for analysing related specific theories of foreign

direct investment and international production (Dunning 2001 and Dunning & Lundan 2008b). In theory and practice, international firms will relocate to areas where there exist ownership advantage (Perri & Peruffo 2016; Ross 2019 and Joghee et al. 2020); location advantage; Jones & Temouri 2016 and Joghee et al. 2020); and internalization advantage (Abdurakhmanova & Rustamov, 2020). However, is it more appealing for FDI location decisions when all three advantages come together at a given location (Kurtishi-Kastrati 2013 and Abdurakhmanova & Rustamov 2020).

### 1.4.1 "Seeker" Theory of FDI

Many theories apart from the Heckscher-Ohlin theory tries to explain the motives and determinants of FDI from different regions. Conventional trade theorists like Helpman & Krugman in 1985 and the extended version of Krugman & Obstfeld in 1994 emphasizes that the route and enormity of capital flows is as a result of disparities in factor proportions between economies, which is beyond the scope of international trade. This theory posits that dissimilarity in factor proportion kindles an alteration of real exchange rates among economies and as a result support economies with profuse capital and labor deficiencies to put FDI in operation in economies in the contrary circumstances. There exist other factors that could explain capital movement across the globe. For example, if capital movement on the form of FDI was as sole result of capital inadequacy or the absence of it then, developing countries should be having the greater share of it and not the developed countries but that's not the case, according to WDI data, the USA still remains the best region which attracts more FDI stock than any another country in the world. It's with this background that the seeker theory becomes relevant. The seeker theory distinguishes between four main motives for the movement of capital in the form of FDI through various mediums like the MNCs and the TNCs (Dunning & Lundan, 2008b). The four main categories are; (1) Market Seeker (2) Resource Seeker (3) Efficiency Seeker and (4) Strategic Asset Seeker. Dunning & Lundan stress that market seekers have larger market access and are trying to gain a bigger market share and take advantage of economies of scale. As such, some MNCs are interested in high population dense area with the notion that it will translate to high demand. The Resource seekers on the other hand are interested in regions with a high concentration of natural resources which could be attained at the lowest cost possible. The two types of resource seekers in developing countries in Asia and Africa the natural resources and cheap labor resources. Again the quantum or size of the natural resources matters most and not just the type of natural resources (Asiedu & Lien, 2011). The third seeker is the efficiency seeker. Dunning & Lundan explains that the purpose of the efficiency seeker MNC confines its production locality to a few advantageous regions and supplies to the surrounding markets. The intention isn't to enter every market with a production site but to situate at a cost advantageous. The last seeker is the strategic asset seekers; this MNC wants to acquire assets that will give them a competitive edge over their competitors, the industry, and the global marketplace at large.

### 2. Research Methodology

To analyse the underlying factors of foreign direct investment to the Sub-Saharan Africa region, we employ a qualitative approach. This is because of the limited nature of FDI variables with ample data in the region. There also exists inadequate data for quantitative research in the study area. Data available in the sub-region allows for only some variables to be analyzed statistically and as it stands now it looks overstretched, thus this study seek to use the literature available to infer possible outcomes in the region. The study of FDI is so dynamic in that it supports both quantitative; Nguyen et al. 2020 and Huy et al. 2021) and qualitative; Tocar et al. 2018 and Nguyen et al. 2019) approaches.

Even though this approach has restrictions, we take advantage of its explanatory characteristics of this theory and predict that future studies may perhaps investigate quantitatively when secondary data is presented. Many studies have engaged the underlying factors of FDI in different regions with the OLI and Seeker theories (Bezuidenhout et al. 2018; Tang et al. 2021; Luo 2021 and Affandi et al. 2021).

Although there exists some literature review of foreign direct investment and its underlying factors in some regions, they are very scanty when it comes to using literature to explore the theories. Furthermore, a theoretical review of this nature hasn't been done on the African region and SSA for that matter. This therefore presents a gap to fill with respect to FDI underlying factors in the region and to explore what literature can tell where data fails. Again, the sub-region has a lot of data deficiencies making it difficult to explore more underlying variables in relation to the region. To this end, we present a distinctive approach to

understanding and analyzing the underlying factors of FDI in the Sub-Saharan region.

Given the over-exploring of the few available data and the unavailability and incomplete of secondary data in the region, we center our attention on the existing and accessible literature to offer answers to the research question - what are the underlying factors of foreign direct investment in the Sub-Saharan Region?

Snyder (2019) iterates that gathering literature as data is possible in three main ways; integrative review, semi-systematic review, or systematic review. Whereas the systematic review is fitting for gathering and scrutinizing empirical results, integrative review and semi-systematic review are applicable when tracking the evolution of research. The researchers therefore adopt the integrative and semi-systematic review to the fore of the systematic review. This will help steer the selection of literature. The systematic review is proven to be the best method of analysing literature because it follows standardized rules and procedures (Snyder, 2019). Owing to the broad nature of this study, the rigidity of the systematic review will put a dent in the scope we could explore, for this reason, we choose the semi-systematic review. This approach is suitable since the process has been explored idiosyncratically by scholars. Again, the study's objective is not to cover all obtainable studies but to center our attention on precise ones. We therefore develop a semi-systematic review to analyse the underlying factor of FDI activities in the Sub-Saharan region.

### 2.1 Data Collection and Approach

To present meticulous scientific evidence, we place our exploration condition to embrace only peer-reviewed articles. In addition to this, we set our search terms to include, OLI and FDI seeker theory, underlying factors of FDI and developing countries, and FDI spillover effects'. Finally, we catalog in sequential order databases (Web of Science, Scopus, Science Direct, IEEE, and Google Scholar) to hunt for data. To begin with, we gathered a total of 212 papers from the above, listed databases. To avoid replications, we speed, read to eliminate identical papers collated from different sources. Subsequently, the data is spruced to 102. Additionally, by means of authors name, we underwent a backward review and gathered preceding articles connected to the replica-free data of 102. This procedure bought the tally to 116. Afterward, we employ the forward review to eliminate articles based on the number of citations. After this exercise, we eliminated a total of 59 papers because it lacked citations. The product is an

ultimate set of 57 papers. This sampling modus operandi foils the insertion of unbefitting articles and congregates quality data to shore up the study.

### 2.2 Direct Content Analysis

We espouse a thematic approach or analysis to unearth and validate the trends in our data as used by Snyder. This assists in the process of understanding the trends in the literature regarding the underlying factors of FDI and the possible effects on its host. The direct content approach has been employed as a research technique in scanty FDI papers in both developing and developed countries. None for what so ever has been employed in the sub-region with respect to FDI. In fact, the method is not new but its application in FDI and foreign investment papers have received minute attention (da Silva-Oliveira et al. 2021 and Wang et al. 2022). Subsequently, da Silva-Oliveira et al. employ content analysis in "Emerging Economy Inward and Outward Foreign Direct Investment" by reviewing literature in relation to the subject matter and drawing conclusions. Grounded on this, we adopt the approach and combine OLI attributes and the four-seeker concept of FDI to build up a linkage for evaluating the attributes and the underlying factors of FDI into developing countries, using SSA as the case study. Accordingly, the resulting framework is an intersection of three major parts. The first part centers on the OLI theory; Ownership advantage, Location advantage, and Internationalization advantage. The second part captures the seeker theory and the last part looks into the effect of these investments on the host. Adding the third part to the framework, which measures the effects of FDI operations, answers our question as to the contributions of FDI in developing countries and SSA, be it negative or positive. Again, including the OLI attributes and the four-seeker concept of FDI also helps to understand specific offerings of the concept of FDI inflow to the sub-region and to check whether the literature agree or disagree with these theories. Expressly, the characteristics of the theory are matched with the needs of the host and the spillover effects as depicted in the framework. Owing to this, we pose questions that will guide the analysis of the data gathered. This is adequately illustrated in Table 5 below.

Table 5:- Dunnings Perceived FDI Theory and Spillover Research Questions

	Spill-over Effect					
FDI Seeker	Technology	<b>Econ/Business Reforms</b>	Envr. Degradation			
Market (MS)	Does MS share its	Does MS influence	Can MS contribute			
	technical know-	economic and/or business	to the pollution of			
	how with host?	reforms of host?	host nation?			
Resource	Does RS make its	Can RS cause an	Does RS pollutes			
(RS)	tech available for	Economic and/or business	Environment of the			
	the host?	reforms of the host?	host?			
Efficiency	Is ES known for its	Does ES cause economic	Is there a link			
(ES)	sharing technology	and/or business reforms?	between ES and the			
	with the host?		pollution of host?			
Strategic	What is the effect of	Can SAS impact economic	Is the SAS blamed			
Asset(SAS)	SAS on the	and/or business reforms?	for pollution of host?			
	technology of host?					

Source:- Authors Construction, 2022

### 3. Results and Discussion

The basis for the analysis was Dunning & Lundan motives for foreign direct investment and the underlying factors from the Sub-Saharan perspective. The authors focus on factors with little or no research on the region and without ample secondary data like technology, economic reforms, and among others for empirical analysis. We therefore mine from literature on these variables and infer to the sub region. Table 6 unveils the data supporting our framework. The result of the research is expressed and discussed per the FDI seeker theory by Dunning & Lundan.

Table 6:- Results of Dunnings FDI Theory and Spillover Research Questions

Spill-over Effect						
FDI Seeker	Technology	<b>Econ/Business Reforms</b>	Envr. Degradation			
Market (MS)	Tülüce & Dog`an (2014)	Xu, Han, et al. (2021)	Jaiblai & Shenai			
			(2019)			
	De Beule & Van Den	Tan et al. (2019)	Dunning (1988)			
	Bulcke					
	Giroud & Mirza (2015)	Gabriel & David	Zhao et al. (2016)			
		(2021)				
	Jaiblai & Shenai (2019)	Sandler et al. (2019)	Bian et al. (2019)			
	He et al. (2015)	Pereira et al. (2019)	Edokpayi et al. (2017)			
	Cheng et al. 2007		Z. Liu et al. (2018)			

FDI Seeker	Technology	Econ/Business Reforms	Envr. Degradation
Resource (RS)	Tugendhat (2021)	Berry (2017)	González-Martínez et
			al.
	Rudy et al. (2016)	Shukurov (2016)	Y. Liu et al. (2021)
	Masipa (2018)	Skovoroda et al. (2019)	Zhu et al. (2018)
	Charaia et al. (2020)	Contractor et al. (2020)	Melina et al. (2016)
	Ayentimi et al. (2016)	Diprose & Azca (2020)	Zhu et al. (2018)
	Ross (2019)	Bottazzi et al. (2016)	
Ecc. ; (EC)	Ghebrihiwet (2016)	W 11 0 D 11	D (2020)
Efficiency (ES)	Driffield et al. (2021)	Wadhwa & Reddy (2011)	Pan et al. (2020)
	Wadhwa & Reddy (2011)	Dunning (1988)	Dunning & Lundan
	Alon et al. (2010)	Ross (2019)	Jaiblai & Shenai (2019)
	Guimón & Salazar-Elena	Kumar et al. (2007)	
	Dunning (1988)	Driffield et al. (2021)	
Strategic Asset (SAS)	Alfaro & Chen (2018)	Sutherland et al. (2020)	Zheng et al. (2016)
	Sutherland et al. (2020)	Dunning (1988)	Lu (2022)
	Peng et al. (2017)	(Yoo & Reimann (2017)	Y. Liu et al. (2021)
	Liang et al. (2021)	Anwar & Mughal (2017)	Lu (2022)
	Li & Shenkar (2018)	Rozen-Bakher (2017)	Dunning (1988)

Source:- Authors Construction, 2022

### 3.1 Technology Transfer

Technology transfer is among the most important reason why companies and economies opt for FDI (Blomstrom, 2014). This segments focal point is on how market, efficiency, resource and strategic asset seekers could affect the technology of the host through spill-over effects. It seeks to pen down how the host can benefit in terms of technology transfer from operations of FDI in developing countries around the world and then infer try to predict same for the sub-region.

# **3.1.1** Market Seeker- Does MS Share its Technical Know-how with Host?

The market seeker is more interested in demand, owing to this, they seek regions that are highly populated because all things being equal that will translate to demand (De Beule & Van Den Bulcke 2012;

Giroud & Mirza 2015 and Jaiblai & Shenai 2019). Their technology and distribution mechanisms are not at the blindside of the host since they mostly become industry players and take advantage of already established distribution channels of the host's industry as they obtain trading and distributing rights to operate (He et al., 2015). They however tend to augment it in situations where the host technology and procedure needs a face-lift (Cheng et al. 2007; Tülüce & Dog'an 2014 and He et al. 2015). This implies that the given the same chance, the SSA could benefit from the market seekers transfer of state of the art technology and distribution since it made easily available.

### 3.1.2 Resource Seeker- Does RS make its Technology Available for the Host?

The resource seeker is more likely to be driven to areas with ample natural resource at a lower cost and/or an area with a high density of cheap labour and other resources (Phung 2016; Ma et al. 2020 and Eissa & Elgammal 2020). Owing to this, they are mostly found in developing and underdeveloped countries because of their untapped natural resources or relaxed labour policies (Ross, 2019). Their technology and mode of operations are mostly spelled in their contract but most governments have initiated the local content policy which forces them to work with the locals and train them (Rudy et al. 2016; Masipa 2018 and Tugendhat 2021). Ghebrihiwet (2016) admonishes that in some cases, governments have include laws and regulations that ties the hands of the MNCs to employee and train local workers, purchase from local producers and suppliers and augment local research and development. Through this, on the job training and other mechanisms for operations are taught to the locals, to be more skilled and better managers. This inherently transfers skills and RD from the MNCs to the host (Ayentimi et al., 2016). The resource seeker mostly brings in their own technology to either mine or manage labour, and this mostly is easily picked by local producers by means of poaching and so on. Years of RD is made available for mimicking and adopting as MNCs who seek resources share the same grounds with local producers (Charaia et al., 2020). In situations where there exists no competition from local manufacturers, the spillover is felt in the training of the local employees and their exposure to hands-on experience in the field. SSA could benefit from

the resource seekers if attention is paid to their operations and a local content compulsory clause stated in their contracts. In this way, spillover effect is inevitable.

### 3.1.3 Efficiency Seeker- Is ES known for Sharing its Technology with Host?

The efficiency seeker is more interested in activities that will reduce cost of operations and maximize profits. They will move near the raw material or the area with the best distribution channels if that's what reduces the cost of operations, however in recent times, they are found to be swayed into regions with heavy tax havens (Driffield et al., 2021). Their aim is not to be found in every location but to be situated at an advantageous location where they can have new avenues of competitiveness, low cost of production, and economies of scope and specialization so as to distribute to the rest of the market (Wadhwa & Reddy, 2011). The spillover effect of the efficiency seeker is in their mode of operations. In Asia for example, they build factories and brands which mostly localized to appeal to the host and to supply developed countries like the USA (Alon et al., 2010). This and more are easily picked up by local producers to gain from such a highly organized way of doing business. The local entrepreneur may pick business ideas and modes of operations by mostly collaborating with the MNCs or poaching from these companies. This may include business founding options and distribution channels; collaborations that may inspire more global innovation networks (Guimón & Salazar-Elena, 2015). According to Fernández-Olmos & Ramírez-Alesón (2017), local producers and SME's stand a greater chance of surviving through collaboration. For SSA to gain from the efficiency seeker, market giants, and local entrepreneurs should seek collaboration rather than hostility and unhealthy competition.

# 3.1.4 Strategic Asset Seeker- What is the Effect of SAS on the Host Technology?

The strategic asset seeker is more interested in acquisitions and mergers that will give them a competitive urge over their counterparts in the industry.

They move to new areas to explore the advantages of that market and to better serve their international customers (Alfaro & Chen 2018 and Sutherland et al. 2020). They are not interested in starting a business from scratch but are ready to take over an existing business and make it theirs. The spillover effect can be both ways as the host learns from the MNC and the MNC from the host (Peng et al., 2017). However, one thing about the strategic asset seekers is they tend to bring their years of experience and technology to the host and the most revealing thing is they tend more to targeting firms in develop countries (Liang et al., 2021). This in the long run affects local business operations as their mode of operations or their presence is felt in the industry. Again, the spillover effect is that local businesses could adopt their modes of doing business to their advantage; things like customer relations, guarantees, and warranty, business operating software, architectural and business premises designs, among others (Li & Shenkar, 2018). SSA should move more towards mergers rather than acquisitions to experience the full impact of business knowledge and years of RD from the MNC's.

#### 3.2 Economic/Business Reforms

This segment's focal point is on how market, efficiency, resource, and strategic asset seekers could initiate economic and business reforms of the host nation and in this case Sub-Saharan Africa. These reforms mostly arise in what the businesses and the economy as a whole put in place in either to maintain its FDI inflow or to attract more (Kasasbeh et al. 2018 and Shen et al. 2020). This segment seeks to illustrate the FDI-induced reforms that occur in developing countries and infer to the Sub-Saharan region.

### **3.2.1** Market Seeker- Does MS Influence Economic /Business Reforms of Host?

Jaiblai & Shenai (2019) stipulates that the market seeker as it name sounds is more likely to be moved by regions with high population density and not just that but also with a high demand for goods and services. Although the general idea is that a high population tends to mean high demand, income also matters all things being equal. In economics, the willingness to buy and being able to buy makes the difference between demand and want. For the market to operate well and maximise profits, certain fundamental apparatus should be

present. The infrastructure (Ross 2019; Sabir et al. 2019 and Rahman & Samsul 2012 of the host in addition to a couple of factors like trade openness (Donghui et al. 2018 and Xu, Han, et al. 2021) and financial openness (Tan et al. 2019 and Gabriel & David 2021) comes into play. The market seeker will come with its technology but needs the grounds to be conducive so as to augment their part of the whole production process. One does not expect the market seeking FDI to come and build roads and other variables relevant to their operations but they are known to mostly build subsidiaries from the scratch (Sandler et al., 2019). Owing to these, business environments and economies that wish to attract the market seeking FDI undergoes some reforms like building roads and provision of adequate infrastructure to entice more MNCs to move in to do business and as well, maintain their level of FDI inflows. In recent years, tax havens have been penned down to attract more FDI into developing countries but the efficiency-seeking FDI is most influenced (Pereira et al., 2019). This implies that the SSA could benefit from the market seekers if the right infrastructure is put in place and at the right time, all things being equal. The region should not throw all their burden on the MNCs since that increases their cost of operations and this eats into their profits. If care is not taken, and the right infrastructure is not put in place by the government and relevant bodies, they might fold up and relocate elsewhere where these benefits will come easily or cheap.

### 3.2.2 Resource Seeker- What is the Role of RS in Economic and Business Reforms of Host?

Eissa & Elgammal (2020) iterates that the resource-seeking FDI is more interested in areas, predominantly, developing countries with ample and cheap natural resources. In addition, they tend to be swayed to areas with cheap and lose labour policies to take advantage of reduced labour cost (Rudy et al. 2016 and Elshamy 2017). The resource-seeking FDI is more likely to bring their own technology and resources to take advantage of the resources of the host but in that, they tend to influence reforms that may span from infrastructure, environmental concerns exploitation of local workers (Shukurov 2016 and Contractor et al. 2020). In some cases there have been strikes and law suites to bend the hand of the resource seeker to pay

compensation packages or to give some sort of incentives where the labour unions deem fit. This arises because of the dangers with the line of work especially with the miners and the unfair labour or exploitation of labour in host countries which translates into civil war, terrorism, and strikes (Skovoroda et al., 2019). To a large extent, some of the unfair labour policies in most developing countries and unfair labour treatment have led to more labour unions being formed at most MNCs in developing countries. These labour unions then make their own rules in accordance the law governing labour unions and this helps them to come together and fight for their rights in cases where the government rules governing labour fails. In the long run, however, the industry or the local government which has the jurisdiction authority makes reforms to check the operations of these resource-seeking multinational corporations and in so doing put measures and procedures in place to meet all needs of both the FDI and the locality (Contractor et al., 2020). The sub-region is not free from some of this chaos being discussed, in fact, there's are a lot of clashes with locals and foreign corporations in oil-rich nations and geographical areas where the government sells rights to the MNCs and the local or traditional authorities disapprove of the governments agreements. In some cases, gas pipelines are cut open and others just set fire to destroy company properties, a continuous clash with the locals and the foreign investors (Diprose & Azca, 2020). For the region to gain from the resource-seeking FDI, reforms should gear towards local content policies to involve the traditional owner of such rich lands so as to encourage working together and not disrupting the operations of the MNCs. This becomes relevant because land in most of Sub-Saharan Africa belongs to the traditional rulers and not the governments, although there are portions that are allotted to the governments which are normally called government lands (Bottazzi et al. 2016 and Berry 2017). In addition to this, tax havens should be exploited since they tends to sway FDIs into such regions.

### 3.2.3 Efficiency Seeker- Does ES Cause Economic/Business Reforms of Host?

Wadhwa & Reddy (2011) stresses that the mode of the operations of the efficiency-seeking FDI is not to be found in every geographical area but rather to be strategically positioned to take advantage of low cost of production and economies of scope. They intend to build closer to the raw material or access to a more efficient distribution channel if that's what is cost-efficient and then distribute to the other surrounding markets (Dunning & Lundan, 2008b). The efficiencyseeking FDI is more likely to influence businesses and economic reforms especially for economies and industries that wish to attract them; this is simply because they are attracted to areas with efficient allocation of resources and conducive working environments (Ross, 2019). In India for instance, the efficiency-seeking FDI influenced the regional trade agreements (RTA) between the country and its FDI counterparts (Kumar et al., 2007). With this said, it is not out of place to think of how these efficiency seeking FDI could initiate reforms and regulatory framework of FDI in the Sub-Saharan region. To attract more efficiency seeking FDI, the government and industry players should engage in activities and programs that tend to remove barriers of trade and make the business environment more conducive and efficient; tax haven is an added advantage (Driffield et al., 2021). Investment in infrastructure will also go a long way to induce efficiency seeking FDI into the region since they seek to move to areas that augment or cuts down the cost of production. Good roads and well-demarcated regions with state-of-the-art addressing systems are the bases on which good distribution channels thrive. Governments and the relevant government agencies should therefore make efforts to put in place a good and well-cataloged addressing systems among others if the efficiency-seeking FDI is the target.

# **3.2.4** Strategic Asset Seeker- Can SAS Impact Economic/Business Reforms of Host?

Sutherland et al. (2020) explain that the strategic asset-seeking FDI is mostly interested in mergers and acquisition and not a fan of starting a business from scratch. They tend to move into the acquisitions industry giants in developing countries mostly to acquire parts of control of the company in the form of mergers and buys the company out outright (Yoo & Reimann 2017 and Anwar & Mughal 2017). Strategic asset seeking FDI is mostly in the service industries, especially in IT and telecommunications, in the banking sector, in building and construction, just to mention a few. Strategic asset seeking FDIs are more induced by tax haven economies and a

relatively peaceful nation free from civil and political unrest. This is mainly because their investment is mostly in huge sums and therefore they expect the continuity of business operations so to break even and reap profit through their operations; free from political instability and civil unrest (Anwar & Mughal 2017). Countries that seek strategic asset seeking FDI reform their company and business laws to relax the rules on entry and exit into industries (Rozen Bakher 2017). The other reforms that come into play may include infrastructural facelifts and more foreign-friendly business environment. For SSA to attract more strategic asset seeking FDI, the anti-colonialism movements, and hostility to foreigners should be kept under country and embrace all manner of culture and ideas irrespective of background and especially of race.

### 3.3 Environmental Degradation

This segment pinpoints how market, efficiency, resource, and strategic asset seekers could affect the environment of the host through their day-to-day activities. It seeks to bring to light how the host can benefit or be left worse-off in terms of environmental friendly or hazards from the operations of FDI in developing countries around the world and then try to relate it to the subregion of Africa. Although some studies indicate that FDI through spillovers and their diffusion of a variety of environmental knowledge, they bring onboard an overall positive environmental knowledge externalities (Ning & Wang, 2018). To a large extent, their operations in developing countries are believed to cause more harm to the host environment than the its prose to the locality (Hanh et al., 2020). Although a lot of factors comes into play when discussing the forever deteriorating environment in which we live, majority of the degradation have been attributed to trade openness and industrialization, financial development, energy consumption, and among others (Burki & Tahir, 2022).

# 3.3.1 Market Seeker-What is the Link Between MS and Environmental Pollution of Host?

The market-seeking FDI may be among the major environmental degrading FDI, although it might be a far-fetched theory or gradually gathering momentum. Their aim is to increase their market share or presence in markets; so basically they sort for a large markets so they can produce on large scales (Jaiblai & Shenai, 2019). Their effect on

the environment stems from their mode of operations, thus their technology for production and distribution channels. Producing on large scale to take advantage of economies of scale mostly translates into burning more fuel or using more energy (Zhao et al., 2016). Again, their distribution channels and mode of distribution alongside their market segmentation may be adding to the burning of fossil fuel or coal in the economy since they mostly resort to road transport and not other environmental friendly modes like railways (Bian et al., 2019). Owing to the fact that environmental laws are relaxed in Africa and in most developing countries, they tend to turn a blind eye on that and resort to cheap mechanism which are not environmental friendly (Edokpayi et al. 2017 and Z. Liu et al. 2018). It's obvious they cannot show up in a region and start investing int railway technology if they already don't exist in the locality, but their operations increases energy consumption in the host, and steps should be taken to reduce this menace. Although Africa generates less carbon emissions among other environmental degrading substances year in and year out, governments in the region should put stiff measures in place so as not to deteriorate the drift which is being led by the MNCs operations on the continent. Greener ways of doing business should be explored and much attention should be given to greener forms of energy production like hydro, solar, just to mention a few.

### 3.3.2 Resource Seeker- How does RS Impact Environmental Pollution of Host?

Perhaps the FDI with the most blame according to scholars on the degradation of the environment is the type of resource-seeking FDI that concentrates on natural resource exploration, with mining and agriculture causing more harm to water bodies than good (Y. Liu et al., 2021). This in the long run will affect portable drinking water and the quality of life at large. The resource seeker actually enters markets to exploit and take advantage of the host natural resources and it has been documented that mining is perhaps the most significant source of environmental degradation (Zhu et al., 2018). Natural resource FDIs are about the most FDI forms that move into Africa and most developing countries because they sit on ample and untapped natural resources (Melina et al., 2016). Again, their methods of operations are what add to the pile of environmental pollution of the host. Mining

takes the form of different modes and technology to search for minerals that are mostly hidden in rocks, seabed's, and deep underground (Zhu et al., 2018). There's being adverse effects of mining not only on its employees or land but also in the water bodies and the sea as a whole, affecting aquatic life; lives have been lost to cave-ins on mining grounds and oil spillage affecting and other activities including commercial farming affecting water bodies (González-Martínez et al. 2019 and Y. Liu et al. 2021). River and surface mining has also resulted in rendering farms land poisonous and rivers and lakes inhabitable for aqua-life and undrinkable for human and animals; in a nutshell it's posing a threat on farming which if not curbed will affect the future supply of farm products. Although most mining MNCs do engage in some sort of corporate social responsibilities, their impact on the environments outwit the benefits the host receives. There's the need for the sub-regions policymakers to sit up and not think of just today when inviting these explorers in to mine but they should think of tomorrow.

### 3.3.3 Efficiency Seeker- Is there a Link between ES and Pollution of Host?

In some parts of the world, the efficiency-seeking FDI has impacted positively on the use of clean energy sources and forms and tends to augment the environmental friendly procedures put in place in areas they operate (Pan et al., 2020). Their mode of operation alerts them to seek areas and regions that they can produce at a lower cost per unit and as efficient as possible so as to increase presence in neighbouring markets and to maximize profits (Dunning & Lundan, 2008b). The efficiency-seeking FDI may cut corners and resort to activities that pollute the environment when policies in the host country gives room for that but they mostly bring in-efficient technologies and capital to limit their cost of operation (Jaiblai & Shenai, 2019). Jaiblai & Shenai (2019) iterates that it is because efficient-seekers are cost conscious and will do anything to reduce the cost of production and maximize profits. Regulatory frameworks in the region should be tightened enough to curb corruption-related issues that cause public offices to turn a blind eye on efficiencyseekers who engage in hazardous production processes.

#### 3.3.4 Strategic Asset Seeker- Is SAS Blamed for Pollution of Host?

The strategic asset-seeking FDI enters into different markets through mergers and acquisitions (Zheng et al., 2016). They mostly inherit the corporate image and business practices of the corporation they are merging with or acquiring. The Majority of these strategic assetseeking FDIs happen in developing countries where MNC's simply wants to take advantage of new and emerging markets or just because they see an opportunity to expand and maximize their customer base and profits in the long run. The strategic asset-seeking FDI impact on the environment stems from the type of industry they find themselves in. In China for instance, through the influence of international green trade barriers, selling overseas scale of China's profoundly polluting corporations is reduced (Lu, 2022; Darkwah & Boohene, 2023). It must be said however that in the service industry may be more friendly to the environment than the mining sector (Y. Liu et al., 2021). The strategic asset seeker will adhere to rules and regulations like any normal business, therefore it's up to the government and the requisite agencies in the sub region to enact laws to keep the operations of these foreign investors in check; just like China's international green trade barriers and how its positively impact the environment by reducing the amount of pollution from the Chinese enterprises (Lu, 2022).

#### 4. Conclusion

There exist literature pertaining to how FDI, be it a market-seeking, resource-seeking, strategic asset seeking or and efficiency-seeking's influence on the three subjects of discussion under the underlying factors (Technology, economic reforms, and environmental degradation). These literatures are predominantly in Asia and Latin America but not Africa or SSA to begin with. There exist some country-level analyses which cannot be generalized on the region. This research becomes important in that it highlights the need for the region to record data pertaining to all activities to enable statistical research in all spheres of the region and again it forms the basis on which other papers can be built. This study documents conclusively that foreign direct investment influences economic reforms, augments technological transfers and impacts environmental degradation in developing countries. The other highlights of this paper are that resource-seeking FDI, and particularly the natural resource seeker has a greater impact on environmental pollution than the remaining seekers in developing

countries. Inferring from this therefore, we can state categorically that the mining sectors in the sub region may be one of the major sources of pollution in the region and also project that the region's economic reforms and technological advancements can be attributed to the operations of FDI.

The study predicts the future reforms in the region to aim at efficiency seeking FDI move into regions that give them a reduced cost of operation in either to maximize profits. These reforms could also be in the area of building a strong transports system and building ample infrastructure to attract market-seeking FDIs since the region can boost of its high-density population status. Tax havens and other similar enactments could also engineer a lot of FDI inflows.

The study also envisages the region learning from other leading developing countries like China on building eco-friendly policies in the industries and the mining regions to reduce the amount of energy usage and as well the carbon emission levels. This is achievable by building enough infrastructure and providing a conducive environment for foreign investors and local producers to work together and tab from modern methods of doing businesses that are environmentally friendly.

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