

# ANALYZING FOREIGN DIRECT INVESTMENT DISPARITIES IN AFRICA: A REGIONAL PERSPECTIVE

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## Abstract

*Africa has enormous unexplored markets, a young and expanding population, and immense natural resources, all of which are being used by several African governments to enhance the business climate and attract international investors. Africa has seen both positive and negative trends in Foreign Direct Investment (FDI) in the recent decades, with some nations witnessing higher flows while others struggling to attract large international investments. FDI is majorly concentrated in industries such as natural resources, telecommunications, and infrastructure, but there is significant interest in sectors like agriculture, renewable energy, and technology as well. This research discusses patterns of inward FDI in Africa from 1990-2024 highlighting a persistent challenge despite notable economic and institutional advancements on the continent: inadequacy and inconsistency in inward FDI. This shortfall poses a hurdle for emerging economies reliant on steady FDI streams to foster private sector growth and advance SDGs. The extant literature studies Africa as a whole and undermines the significance of its regional diversity. This paper thus looks at the regional heterogeneity of North, East, West, Southern, and Central Africa.*

**Keywords:** Foreign Direct Investment (FDI), Sustainable Development Goals (SDGs), time-series, United Nations Conference on Trade and Development (UNCTAD), Africa.

## Section I: Introduction

Foreign direct investment basically means the acquisition of a stake in a foreign company or project by a foreign investor, corporation, or government. It is an essential component of international economic integration since it fosters solid, long-term economic links. FDI can be done by acquiring a long-term interest or by expanding one's business into another nation in forms of mergers/ acquisitions/ facility development/ reinvesting international income/ intra-company loans etc. Stock of FDI can be calculated as the net cumulative FDI (outgoing minus incoming). It has the potential to generate/ maintain economic growth in both recipient as well as the investor nation as it supports new

infrastructure and provides jobs for local residents in the recipient nation and helps in expanding the global presence of investors. Direct investment, however, does not include investment through the acquisition of shares (where the investor owns less than 50% of the firm). Now, let's look at the types of Foreign Direct Investments:

### **1. Horizontal FDI**

Horizontal FDI entails a company engaging in the same commercial activity in a host nation as it conducts in its home nation. Horizontal FDI provides various benefits to multinational firms and host nations, including access to wider markets, reduced trade barriers, cheaper operational costs, and economic growth. Multinational corporations can widen their consumer base, improve revenues, and strengthen their worldwide footprint by investing in the same company activities in another country which can help with import limits and other limitations. Foreign investment is also beneficial for the host countries as it adds to economic growth, new employment opportunities, leads to transfer of talent and technology, which in turn helps to raise the standard of living and operational capacities of industries. It is important to consider the hurdles also which may include political instability, regulatory variances, and cultural differences. Also, foreign enterprises pose greater competition in the host nation, resulting in the closure of local businesses and other macroeconomic effects. Furthermore, the host economy may become unduly reliant on foreign firms, making it harder to support its own growth. Overall, businesses and host governments, both benefit greatly from knowing the dynamics that drive horizontal FDI.

### **2. Vertical FDI**

Vertical FDI happens when a corporation buys a complementing enterprise in another country, such as a US company buying a share in a foreign company that supplies raw resources to it. It contrasts from horizontal FDI, which includes corporations replicating activities in many nations. Vertical FDI encompasses several stages of corporate operations and manufacturing, such as purchasing or starting a new firm abroad to provide inputs or sell finished goods. This transfer of power strengthens a company's competitive advantage by capitalizing on foreign efficiencies such as lower labour costs or particular raw resources. Vertical FDI may offer both benefits and problems to home and host nations, depending on each country's unique circumstances. Vertical FDI is further divided into: backward vertical FDI including a business gaining ownership of its inputs and placing production in a

foreign country, and forward vertical FDI entailing distributing or selling products in a foreign country.

### **3. Conglomerate FDI**

Conglomerate FDI occurs when a corporation invests in a foreign firm that is unrelated to its principal business, typically through a joint venture. The purpose of conglomerate FDI is to grow into new markets and pursue new commercial possibilities. This method enables the investor to diversify their portfolio, decreasing the risks associated with reliance on a particular industry while profiting on a variety of business prospects. In this case, FDI is not directly related to the foreign investor's company. Conglomerate FDI does not appeal to everyone. An investor may find it difficult to engage in wholly new businesses in a foreign country. When operating in a foreign country, most businesses want to stay in the same industry. Setting up a completely new firm or acquiring a foreign company in an unrelated area might be difficult. Conglomerate FDI is carried out by companies and investors with considerable cash and experience. For example, an automotive company may opt to invest in pharmaceuticals. The investor is making overseas company investments that are utterly unrelated to their home firm. This kind is extremely unusual since the difficulties of starting a firm in a new nation is exacerbated by the difficulty of breaking into a new market or sector.

## **Section II: Literature Review**

Munjal, et al. (2022) talked about the Inward FDI via India and China into Africa from 2008 to 2018, highlighting the unique characteristics of FDI from India. They observed that FDI from India is focused in nations with good governance, controlled corruption and strong accountability principles, as contrast to FDI from China, which focuses on regional economic dominance and is immune to their governance. According to the paper, "Commonwealth membership" from India is crucial for its African investments as compared to the "China's Belt and Road Initiative".

Majority of Indian FDI outflows to Africa between 2008 and 2016 flowed to Mauritius, a tax haven (Chakrabarty, 2018). Energy security is the primary driver of public-sector investment in Africa, whereas India's private sector has invested in non-energy areas such as manufacturing. However, India's investments do not align with its development cooperation activities. The study advises formation of an institutional organization to assist development-friendly Indian investments in Africa.

Incentives lead to increased contributions from China, the United States, India, and South Africa into Ghana especially in the agricultural, industrial, construction and service sectors (Boakye-Gyasi, and Li, 2017). The study also revealed that domestic employment outnumbers expatriate employment in the analyzed countries as Ghana has a strict policy where investors have to hire 10 locals for every new foreign employee hired by them if they have a minimum capital of \$350,000.

Krishnakumar, et al. (2014) researched Indian enterprises' Foreign FDI in Africa between 2002 and 2010. They found that Africa accounted for just 6% of Indian firms' total foreign agreements. According to the report, Indian enterprises have several investment options in Africa due to high income potential and market access. The authors recommend that the governments of both countries promote economic cooperation to facilitate trade and agreements between Indian firms and African countries especially Sudan, Côte d'Ivoire, Senegal and Ethiopia.

Chakrabarti, S., and Ghosh, I. (2014) investigate the involvement of India and China in Africa's FDI during the last decade. While FDI promotes economic growth, worries regarding resource exploitation persist. The study tries to discover parallels and contrasts in the two Asian giants' development cooperation practices. It implies that India and China are fighting for strategic space in Africa, despite their governments rejecting this. Both nations' engagement with Africa is motivated by gaining power in the international political system. China's major purpose is to secure support for its "One China" policy, whereas India's economic diplomacy involves development aid and investment.

Indian FDI to Africa is mostly focused on oil, gas, mining (for commodities sectors) and automotive and pharmaceutical companies (for manufacturing sections). African governments prefer investments in greenfield projects and joint ventures as they help to create new production capacity, jobs, and knowledge transfer (Paul, 2013). Paul mentioned that various factors like social and cultural influence, policies of host nations, treaties regarding regional integration and bilateral investment, growth of GDP and the presence of Diaspora influence Indian investors' decisions. India and Africa have a strong international relationship owing to their shared voice in the United Nations General Assembly.

Samuel Adams (2009) conducted research on the relationship between the FDI and economic growth in the region of Sub-Saharan Africa (SSA), concluding that FDI has both positive and negative effects on the

host nation. It increases local capital and efficiency by transferring new technology, skills related to marketing and management and innovation. Its influence is governed by nation-specific elements and policy contexts, such as diversification capacity, absorption capacity, FDI targeting, and the possibility of FDI-to-domestic investment links.

Kaplinsky, and Morris, (2009) studied the China's FDI into SSA in the sector of resources and infrastructure. They highlighted the unique characteristics of these large-scale Chinese investors, who usually combine their investments with assistance and trade. According to the study, SSA nations should grab the opportunity provided by their resource base by responding to investors who wish to harness the natural resources of SSA in a similarly integrated and concentrated way.

The emergence of large investors like China or India opens up significant opportunities for African economies to shift the focus from raw commodities to goods and services requiring labor-intensive approaches (Broadman, H. G., 2008). This participation may assist African businesses by exposing them to competition, technological advancements, and current labor skills. It may also lead to deeper integration of African governments both globally and inside the continent. African countries are taught three lessons: implement strong tariff and trade policies, reform key domestic economies, encourage investment and trade flows, and ensure a clear division of labor among various players for various communities like African/ Chinese/ Indian etc.

Incoming FDI to South Africa is majorly dependent on its openness, currency rate, and financial expansion (Tatonga Gardner Rusike, 2007). Depreciation discourages FDI, but expanded openness and financial development attracts it. Market size is a short-term driver of FDI, but its impact diminishes over time. FDI, imports, and currency rates all have a major impact on prediction error fluctuations, with market size having less influence over time.

Geda (2006) analyzed the FDI inflows into Africa from 1980 to 2004 and concluded that contribution of Africa to global FDI is very low. In late 1990s, Africa's FDI in GDP was falling, with investments primarily coming from newly found resource nations. 11 nations received about 90% of total flows (1991-96), with Nigeria receiving 1/3rd. The vast majority of flows originated in France, UK, Germany and US. Extractive industries of oil, gas, metals, and others were among the most popular receivers.

Jenkins, & Edwards, (2006) investigated economic impact of Chinese and Indian FDI on 21 SSA nations. They observed that Asian drivers' trade with Africa has increased considerably since 1990, and they are now sources of FDI. African exports to Asian drivers, imports from Asian regions of China and India, competition in markets & FDI effects are some of the outcomes. These repercussions are expected to become more relevant for several African countries. The channels of influence vary per country, with some being large exporters and others being significant importers. China competes for Lesotho's exports.

There are significant differences in FDI characteristics across different nations as some might work towards market-seeking motive, some may be looking at the strategic assets while others may be interested in resource-seeking (Meyer et al., 2005). However, the influence of liberalization measures on the characteristics of inbound investment varied between countries. The paper recommends more research to better understand the link between institutional frameworks, particularly informal institutions, and admission tactics. It also indicates that policymakers must understand how institutional arrangements assist both home and host economy, as well as how mode selection influences corporate performance and determines externalities that benefit the local economy.

Salisu, (2004) research on FDI in impoverished countries, particularly Nigeria, revealed that FDI is significantly affected by factors like inflation, debt load, and currency rate. The suggestions were that government should implement fiscal and monetary policies to increase FDI, boost domestic output, enhance infrastructure, and alleviate social discontent. Despite its relevance, the research found that there was little influence of FDI on Nigeria's growth, emphasizing need for more effective policies and infrastructure development.

### **Section III: Data and Methodology**

The study incorporates descriptive and quantitative analysis using the data collected from secondary sources, mainly, UNCTAD from 1990-2024 which was analyzed by software R. The data was first cleaned manually, then the missing values were handled through Kalman Smoothing (via *imputeTS*) and lastly a Log Transformation was used to normalize the data. Descriptive statistics was calculated to understand the overall trends of different regions in Africa. After that, Cross-Sectional Dependence was checked using Pesaran's Cross-Sectional Dependence test indicating strong cross-sectional dependence. Despite

this dependence, Im-Pesaran-Shin Unit Root Test showed that the data is overall stationary. Then, the Breusch-Pagan Test was conducted which indicated presence of heteroscedasticity across regions and Breusch-Pagan test was used to check for panel serial correlation which also confirmed significant heteroskedasticity. Based on the diagnostic results, a standard OLS or Random Effects approach would yield biased standard errors. Though Hausman test yielded a p-value of 1.00 which showed that random effects are technically consistent, all fixed effects regressions were estimated with cluster-robust standard errors to correct for serial correlation, heteroskedasticity, and cross-sectional dependence. Thus, a fixed effects model was estimated with log\_FDI as the dependent variable and Year as the independent variable was conducted. The empirical model is specified as follows:

$$\ln(FDI)_{it} = \alpha_i + \beta \text{Year}_t + \varepsilon_{it}$$

Where  $\ln(FDI)_{it}$  represents the log-transformed FDI inflows for region  $i$  in year  $t$ ,  $\alpha_i$  represents the region-specific fixed effects, and  $\varepsilon_{it}$  is the idiosyncratic error term.

#### **Section IV: Inward Foreign Direct Investment in Africa**

Historically, FDI to Africa has been centered on the extractives sector, while it is gradually growing into the manufacturing and services sectors. Africa's FDI was as low as 2845.2 million dollars in 1990. Resource extraction, coal processing and petroleum were more than 50% of greenfield projects between 2006-10. Logistics, communications and information technology services, and renewable energy received significant new investment on the continent. As a result, in the future, Africa must capitalize on these tendencies.

However, the trends have changed as new sources of investment and growing sectors have arisen. A more thorough analysis of the opportunities afforded by this shift should be a key focus for African governments and businesses looking to invest in the continent. The African Continental Free Trade Agreement (AfCFTA) has provided much-needed stimulus and certainty for African trade and investment positively impacting the intra-African trade which in-turn is expected to boost investment in Greenfield projects. The proposed approval of the Sustainable Investment Protocol by the AfCFTA may increase long-term FDI flows to and within Africa. FDI rose significantly with slight hiccups and peaked at 97032.3 million dollars in 2024. Let's look at the year-wise data of FDI in all 5 regions:

**Table 1: FDI inflows in Africa (Region-wise) from 1990-2024**

Region	North Africa	Central Africa	East Africa	Southern Africa	West Africa
1990	1155.5	- 1.2	132.9	4.6	1553.4
1991	914.1	22.2	92.1	1148.0	1367.2
1992	1595.8	161.6	98.9	582.4	1401.3
1993	2411.7	217.6	133.3	559.6	2121.6
1994	2277.4	- 59.4	218.8	880.4	2787.4
1995	1228.2	- 103.8	401.0	2278.9	1860.8
1996	1468.2	0.6	419.9	1544.1	2615.1
1997	2746.9	- 103.3	808.5	4859.9	2718.1
1998	2993.2	723.4	811.3	2956.9	2507.1
1999	3347.9	487.6	971.0	4749.2	2338.0
2000	3250.1	670.4	1854.6	2475.6	2131.1
2001	5357.6	1591.0	1122.5	9826.7	2075.0
2002	3871.6	2221.3	1022.7	4732.5	2913.3
2003	5265.6	2678.6	1312.2	5557.8	3342.8
2004	6443.9	1514.4	1419.5	4645.5	3623.3
2005	11613.4	2032.3	1868.3	6798.0	7096.1
2006	21594.5	1388.3	2266.4	2096.0	7047.5
2007	23096.9	5274.0	4552.5	8901.3	9527.9
2008	22205.5	4469.3	6023.7	14023.3	12444.5
2009	18141.5	5457.0	6531.1	12661.5	14598.7
2010	15745.9	7799.2	6894.9	5605.2	11865.1
2011	7548.3	5551.9	7158.4	8454.5	18885.2
2012	15759.0	5460.7	8263.4	12223.9	16239.3
2013	11964.4	5427.2	8112.5	11345.8	14216.8
2014	12038.8	5351.3	7308.0	18105.1	11965.8
2015	12326.7	9371.2	7716.8	19273.1	9756.7
2016	13841.2	7166.5	8301.8	6899.3	11535.2
2017	13274.6	9180.5	8798.1	-1022.5	10366.7
2018	15406.6	8821.7	7913.4	3194.5	8035.3
2019	13550.1	9267.1	7687.6	4513.5	11645.0
2020	9797.3	8913.3	7477.4	4870.9	9885.1
2021	9508.8	6601.5	10089.5	42372.7	13629.0
2022	15323.4	7078.1	11682.3	7454.7	13028.7
2023	13425.0	7016.7	11337.9	7304.7	16330.1
2024	50675.3	7906.7	12714.6	10521.2	15214.4

Source: UNCTAD

\*Figures in million \$

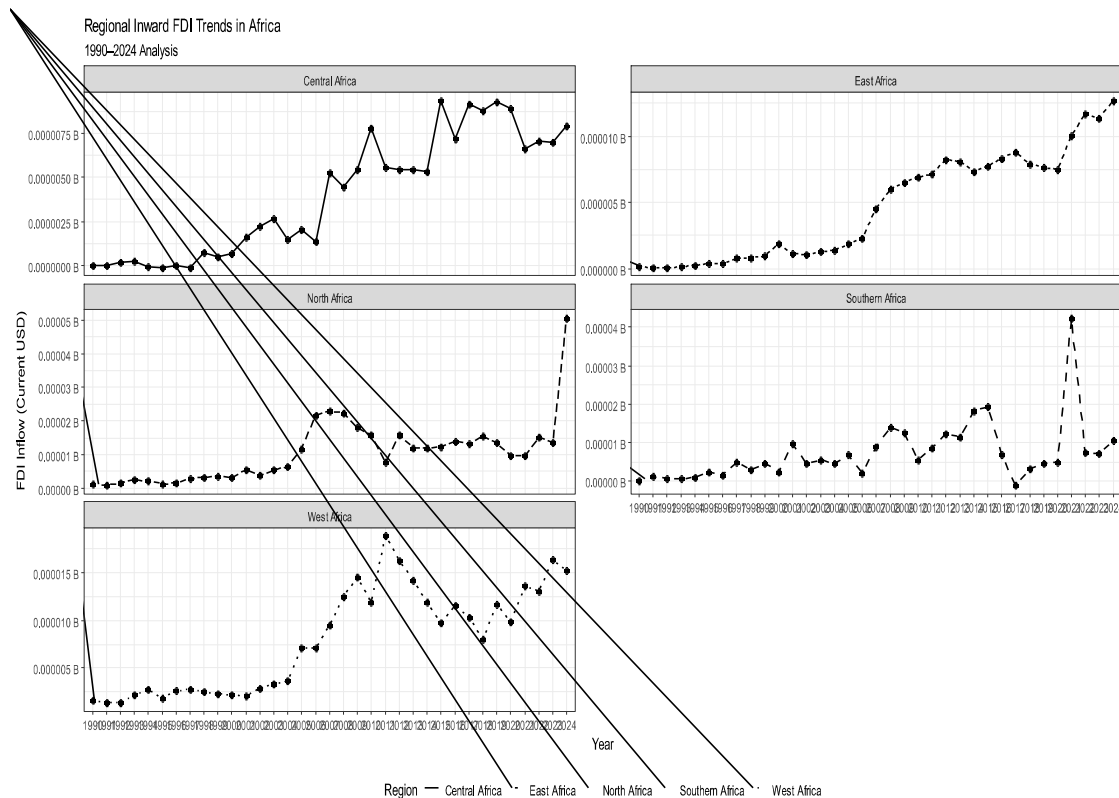
(Accessed on February 18, 2026)

## 1. North Africa

Since the early 1980s, North African nations (such as Algeria, Morocco, and Tunisia) have embarked on the paths of liberalization and privatization with varying degrees and rates across the various regions

when they discovered that the strict economic policies and poor performance of state-led development are keeping their growth stagnant. FDI spiked from initially and peaked in the year 2007 with 4.5% of regional GDP. However, as a result of political upheavals (Arab Spring) and COVID-19, FDI inflows fell dramatically post 2020 but started recovering and reached 50675.3 million \$ in 2024.

**Figure 1: FDI inflows in Africa (Region-wise) from 1990-2024**



## 2. East Africa

Despite economic inequalities in East Africa, countries like Ethiopia, Tanzania, Djibouti, Kenya, Uganda and Seychelles showed an increasing trend. However, regions of South Sudan, Eritrea and Somalia, on the other hand, remain impoverished and violent. Kenya has the greatest level of FDI in East Africa. Various factors like trade openness, inflation rate, infrastructure, real effective exchange rate and political stability affect the flows in this region. With the exception of the inflation rate, all factors have a positive effect. When compared to other African regions, FDI investments in East Africa have been fairly modest. In 1991, it was only 92 million dollars. It has yet to reach \$10 billion.

## 3. West Africa

Natural resource richness, market size or GDP, product and service imports and exports, trade openness, and currency strength and exchange rate are all important factors influencing the inflows into this region. FDI is more prevalent in French-speaking nations than in English-speaking countries. FDI inflows into West African countries are unaffected by infrastructure development, inflation, taxes, or political stability. FDI in West Africa amounted 1367 million USD in 1991. It grew quickly with little hiccups to reach 19038 million dollars in 2011, the greatest level ever. Following that, it shows a continuing decreasing trend with minor positives finally reaching 15214.4 million \$.

#### **4. Southern Africa**

The states that form “Southern Africa Development Community” (SADC) have aroused interest from global business community since the early 1990s. Improved political climate and independence of Namibia (1990), end of civil war in Mozambique (1992), and end of apartheid and international sanctions in South Africa (1994) substantially influences the investors’ interest. While SADC states’ economic performance in the 1990s was varied, it was also encouraging. Since the mid-1990s, the SADC region has had tremendous development, with Mozambique, Botswana, and Mauritius seeing greater than 5% growth rates. Inflation rates in all the countries decreased except Zambia, Angola, Zimbabwe and Malawi. Various nations achieved the Balance-of-payments surplus including Namibia, Botswana, Swaziland, Lesotho and Mozambique. FDI in Southern Africa amounted 1148 million dollars in 1991. From 1991 to 2023, it exhibits a mixed tendency with growing and decreasing movements. In 2008, it climbed to 14023 million dollars. Another notable statistic is 19273 million dollars in 2015, which peaked at 42372 million dollars in 2021 and later fell to 10521.2 million dollars in 2024.

#### **5. Central Africa**

Central Africa is a resource-rich region where various nations rely on the mining sector. Its Gross Domestic Product (GDP) grew substantially in the early 2000s till 2009 fall because of global financial crisis and decreasing demand for commodities such as gold, nickel, and copper. Following a record decline in oil prices, the economy progressively recovered in the years that followed, until contracting again in 2015. GDP increased between 2017 and 2019, until the Covid-19 outbreak put the region vulnerable once more. Central Africa’s FDI situation is bad. It, like East Africa, has yet to reach the \$10 billion mark. The most recent number indicates just 7906.7 million dollars in FDI in Central Africa in 2024.

## Section V: Results and Discussion

### 1. FDI Summary Statistics

**Table 2: FDI Summary Statistics**

Region	Mean_FDI	Max_FDI	Volatility (measured by the coefficient of variation)	Growth_Total
North Africa	10605	50675	0.907	4286
West Africa	7962	18885	0.689	879
Southern Africa	7211	42373	1.09	230342
East Africa	4672	12715	0.865	9468
Central Africa	3987	9371	0.857	-662050

Table 2 presents summary statistics for inward FDI across the five African regions from 1990 to 2024. The mean FDI inflows ranged from 1,857 million USD (1st quartile) to 50,675 million USD (maximum), with a median of 5,461 million USD.  $\log$ FDI was used for econometric analysis to stabilize variance and reduce skewness.

The coefficient of variation indicates differing volatility across regions. North Africa showed higher variability as compared to Southern Africa. Other regions displayed moderate fluctuations suggesting FDI inflows were unevenly distributed and volatile across the continent from 1990-2024.

### 2. Cross-Sectional Dependence

Pesaran's Cross-Sectional Dependence test was used to test the Cross-Sectional Dependence:

$\text{pcdtest}(\log\_FDI \sim 1, \text{data} = \text{p\_df}, \text{test} = \text{"cd"})$

CD statistic = 11.18

p-value  $< 2.2 \times 10^{-16}$

There is strong cross-sectional dependence. Investment flows in one region are significantly correlated with those in others, confirming the economic interconnectedness of African regions. This also implies that traditional first-generation panel unit root tests assuming independence could be biased.

### 3. Im–Pesaran–Shin (IPS) Panel Unit Root Test

The IPS unit root test was conducted to assess the stationarity properties of  $\log\_FDI$ .

**Table 3: Im–Pesaran–Shin (IPS) Panel Unit Root Test**

Region	lags	obs	rho	trho	p.trho	mean	var
Central Africa	8	26	-0.70093	-8.4877	1.77E-14	-1.2228	1.1946
East Africa	6	28	-0.11279	-2.7557	6.48E-02	-1.3142	1.0594
North Africa	0	34	-0.07743	-1.0864	7.23E-01	-1.5248	0.7814
Southern Africa	0	34	-0.89881	-5.78818	3.81E-07	-1.5248	0.7814
West Africa	8	26	-0.09718	-1.9426	3.13E-01	-1.2228	1.1946

Wt-bar of -5.919 with an effectively zero p-value indicates stationarity of  $\log\_FDI$  in the panel context. However, region-specific results indicate strong stationarity in Central and Southern Africa, borderline stationarity in East Africa and non-stationarity in **North Africa and West Africa**.

#### 4. Breusch–Pagan Test for Heteroscedasticity

The Breusch–Pagan test was applied to examine variance homogeneity.

- Test statistic: BP = 49.638
- p-value = 0.04064

The null hypothesis is rejected at the 5% significance level, confirming the presence of heteroscedasticity across regions.

#### 5. Serial Correlation

The Breusch–Godfrey/Wooldridge test was applied for panel serial correlation:

`pbgtest(log_FDI ~ Year, data = p_df)`

Chi-square = 68.47

p-value = 0.0006094

Significant serial correlation exists in the idiosyncratic errors.

#### 6. Testing for Fixed vs Random Effects

Breusch–Pagan Lagrange Multiplier test was applied to test for regional effects `plmtest (pool_mod, type = "bp")`

Chi-square = 106.23

p-value <  $2.2 \times 10^{-16}$

Significant individual effects exist, rejecting pooled OLS. Then, Hausman test was applied to compare fixed and random effects:

`phtest(fe_mod, re_mod)`

Chi-square  $\approx 3.50 \times 10^{-14}$

p-value = 1

Random effects are technically consistent, but due to serial correlation, heteroskedasticity, and cross-sectional dependence, the fixed effects model with cluster-robust SE is preferred for reliable inference.

## 7. Fixed Effects Estimation of FDI Trends

A fixed effects model was estimated with `log_FDI` as the dependent variable and `Year` as the independent variable:

```
fe_mod <- plm(log_FDI ~ Year, data = p_df, model = "within")
```

```
coefest(fe_mod, vcov = vcovHC(fe_mod, type = "HC1", cluster = "group"))
```

The estimated year coefficients reveal the following pattern:

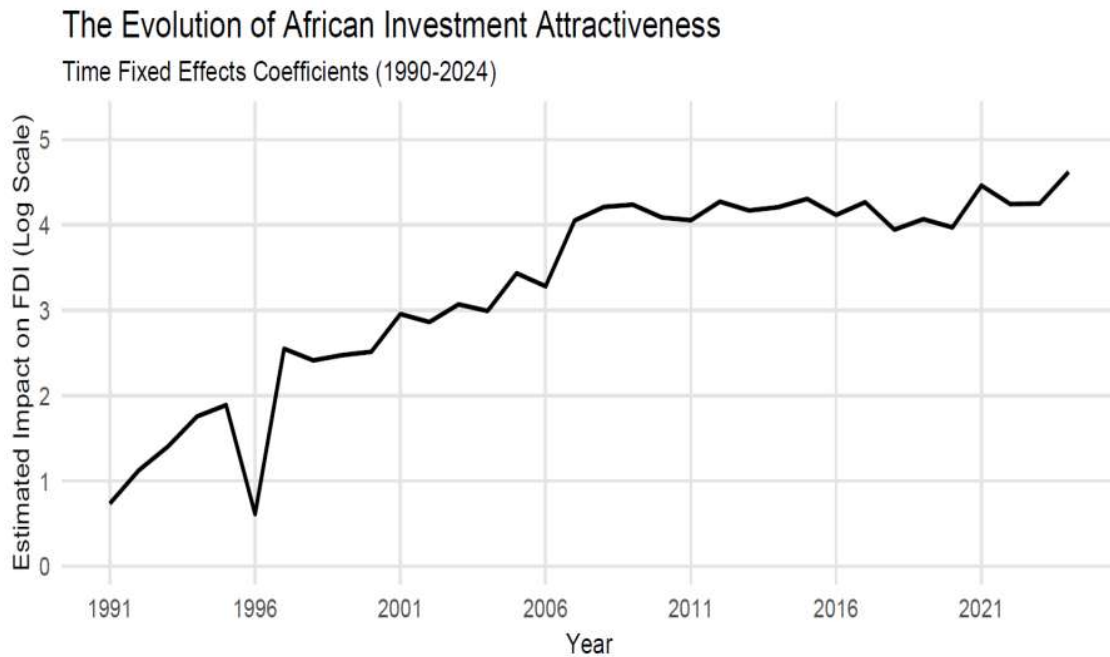
**Table 4: Fixed Effects Model**

Year	Estimate	St. Error	t value	Pr(> t )
1991	2.50088	1.70954	1.4629	0.1458
1992	2.89254	1.93955	1.4913	0.13819
1993	3.16952	1.90754	1.6616	0.0989
1994	1.40472	0.96792	1.4513	0.14901
1995	1.51179	1.188	1.2726	0.20535
1996	2.37849	1.10444	2.1536	0.03304
1997	2.04027	1.26227	1.6164	0.10834
1998	4.18041	2.0437	2.0455	0.04273
1999	4.24066	1.99448	2.1262	0.03529
2000	4.27899	1.98921	2.1511	0.03324
2001	4.72176	2.20421	2.1422	0.03396
2002	4.62665	2.21435	2.0894	0.03854
2003	4.83512	2.2048	2.193	0.03001
2004	4.75743	2.07046	2.2978	0.0231
2005	5.19957	2.02006	2.574	0.01112
2006	5.04935	1.85353	2.7242	0.00729
2007	5.81878	2.0716	2.8088	0.00571
2008	5.97812	2.02584	2.9509	0.00373
2009	6.00531	2.05184	2.9268	0.00402
2010	5.85481	2.11158	2.7727	0.00634

Year	Estimate	St. Error	t value	Pr(> t )
2011	5.82244	2.08677	2.7902	0.00603
2012	6.0386	2.04065	2.9592	0.00364
2013	5.93708	2.07231	2.865	0.00483
2014	5.97361	2.11295	2.8271	0.00541
2015	6.07296	2.22632	2.7278	0.00722
2016	5.88514	2.10757	2.7924	0.00599
2017	3.2277	3.15942	1.0216	0.30878
2018	5.71224	2.15212	2.6542	0.0089
2019	5.83395	2.14571	2.7189	0.0074
2020	5.73824	2.18216	2.6296	0.00953
2021	6.22901	2.19365	2.8396	0.00521
2022	6.01116	2.07516	2.8967	0.0044
2023	6.01809	2.06469	2.9148	0.00416
2024	6.38938	1.99992	3.1948	0.00174
Signif. codes	0.001	0.01	0.05	0.01

- **Early 1990s (1991–1995):** Initially, the year coefficients are mostly statistically insignificant reflecting a period before the onset of strong continental FDI expansion.
- **Structural Takeoff (1996–2004):** During this time, data is significant at 5% level signaling a structural upward shift in Africa-wide FDI inflows which corresponds to Africa's increasing integration into global capital markets and liberalization reforms.
- **Strong Expansion Phase (2005–2016):** During this interval, results are significant at 1% suggesting a sustained continent-wide FDI boom driven by strong common macroeconomic and external shocks.
- **2017 Contraction:** The coefficient declines sharply loses statistical significance indicating a synchronized continental slowdown in FDI inflows reflecting commodity price shocks and global investment slowdown.

**Figure 2: Temporal Evolution of African FDI Inward Flows**

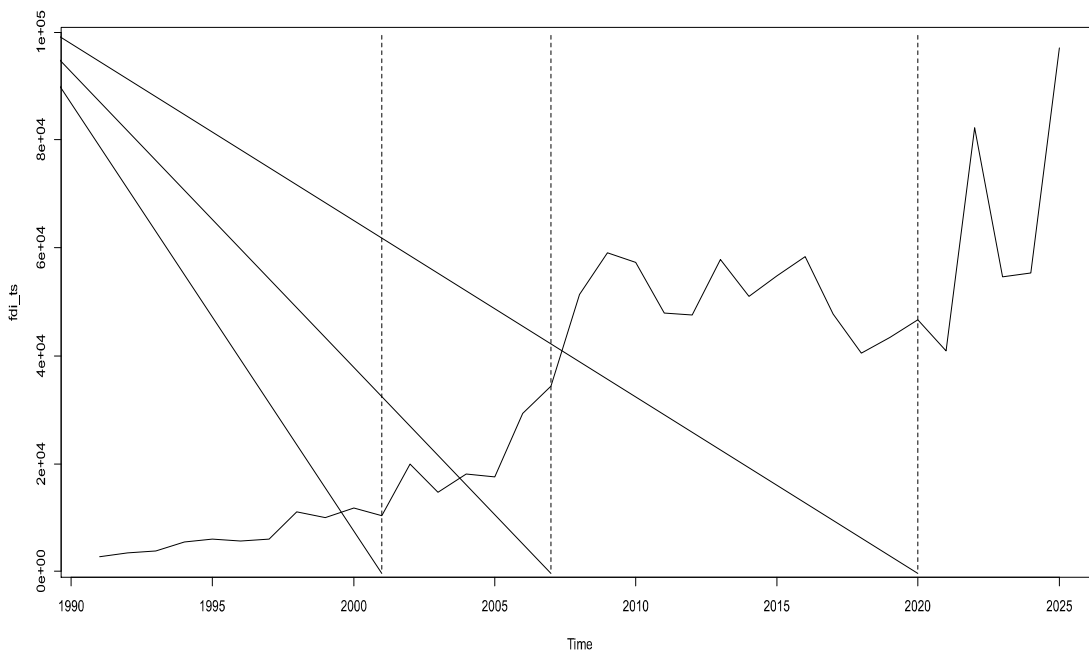


- **Post-2018 Recovery:** From 2018 onward, coefficients are statistically significant marking a renewed investment growth period driven by increasing regional attractiveness.

**8. Structural Break Analysis**

Using the `strucchange` package, a breakpoint analysis was conducted:

**Figure 3: Structural Break Analysis**



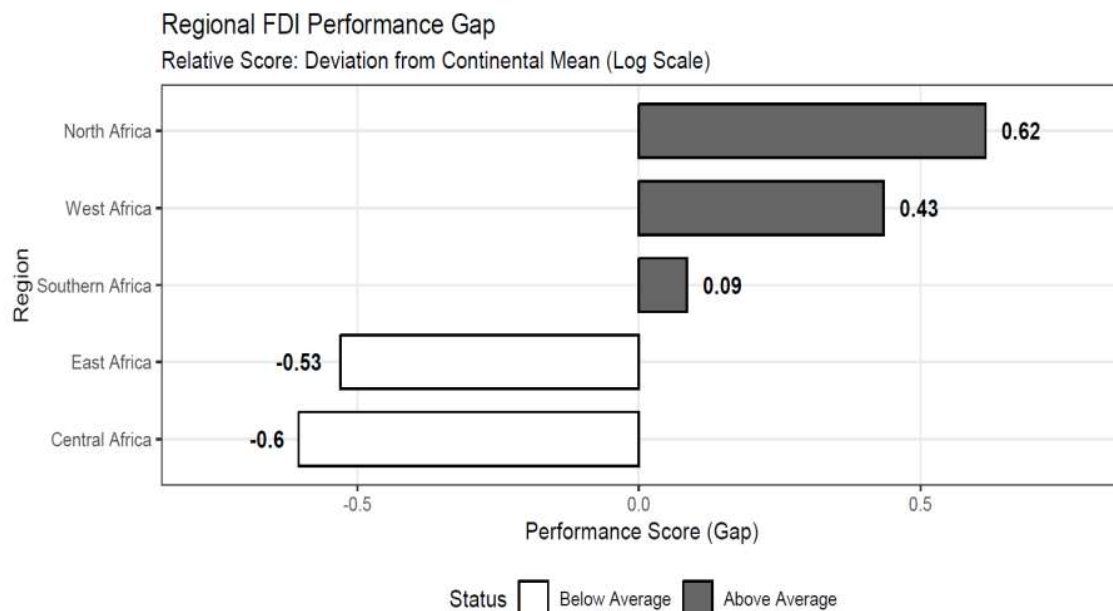
There were three major structural breaks:

- **2001 Breakpoint:** This breakpoint reflects the transition from the low FDI levels of the 1990s to a period of increased FDI flows, supported by initiatives such as the African Growth and Opportunity Act (AGOA) enacted in 2000 and increasing globalization.
- **2009 Breakpoint:** This breakpoint coincides with the global financial crisis, which significantly disrupted international capital flows. The crisis led to a worldwide contraction in FDI as investors became risk-averse.
- **2017 Breakpoint:** This period corresponds to multiple factors including a slump in commodity prices, political uncertainties in several African countries, and changing global trade dynamics. Additionally, China's Belt and Road Initiative was gaining momentum, potentially altering investment patterns.

These breakpoints highlight that African FDI inflows are not only shaped by long-term trends but are also subject to discrete shifts driven by global economic cycles, commodity price volatility, and geopolitical events.

## 9. Regional FDI Performance Gap

**Figure 4: Regional FDI Performance Gap**



As per the figure, North Africa & West Africa have \$0.62 and \$0.43 respectively emerging as Leaders indicating that they consistently attracted significantly more FDI than average. Southern Africa with a score of \$0.09 sits at the continental average. However, East & Central

Africa have consistently low score suggesting a structural challenge in attracting investment compared to the other regions.

## **Section VI: Findings**

FDI in Africa began at \$3543 million in 1991 and increased dramatically till 2008 after which it declines in 2011 due to the worldwide economic slump. It has been modest and constant, with inflows averaging 3% of the global total between 2014 and 2018. The reduction in FDI was on the upper end of the curve, decreasing because of the COVID-19 pandemic but it again recovered to 97032.3 million in 2024. Labor and natural resource endowments in Africa are insufficient to tempt financial capital, and other endowments such as low public capital, human capital, and institutional capital are crucial. The quality of these assets boosts physical and financial capital productivity while lowering corporate expenses, functioning as taxation on investment returns.

The regions of North and South Africa have been substantial, whereas the regions of East and West Africa have experienced considerable uptick. Since the early 1980s, North African nations like Algeria, Morocco, and Tunisia have been undergoing extensive reforms to rebuild their economies through liberalization and privatization. However, FDI inflows into North Africa have been unevenly distributed, with Egypt and Morocco being notable examples. Same is the case with East Africa, having Kenya (highest FDI), Djibouti, Seychelles, Ethiopia, Tanzania, and Uganda being the examples. West Africa, driven by natural resource richness, market size, GDP, product and service imports and exports, trade openness, and currency strength, has seen a decreasing trend with minor positives before falling below the \$10 billion mark in 2022. SADC states have been able to attract global business since 90s, with countries Mauritius, Botswana and Mozambique experiencing more than 5% growth rates. FDI in Southern Africa amounted to 1148 million dollars in 1991 and peaked at 42206 million dollars in 2021 before reducing to 10521.2 million dollars in 2024. Central Africa, a resource-rich region, has experienced a decline in FDI since the Covid-19 outbreak, with the most recent number indicating 7906.7 million dollars in FDI in 2024.

Descriptive statistics was calculated to understand the overall trends of different regions in Africa. After that, Cross-Sectional Dependence was checked using using Pesaran's Cross-Sectional Dependence test indicating strong cross-sectional dependence. Despite this dependence, Im-Pesaran-Shin Unit Root Test showed that the data is overall stationary. Then, the Breusch-Pagan Test was conducted which

indicated presence of heteroscedasticity across regions and Breusch–Pagan test was used to check for panel serial correlation which also confirmed significant heteroskedasticity. Based on the diagnostic results, a standard OLS or Random Effects approach would have yielded biased standard errors. Though Hausman test yielded a p-value of 1.00 which showed that random effects are technically consistent, all fixed effects regressions were estimated with cluster-robust standard errors to correct for serial correlation, heteroskedasticity, and cross-sectional dependence. Thus, a fixed effects model was estimated with *log\_FDI* as the dependent variable and Year as the independent variable was conducted. Early 1990s (1991–1995) year coefficients are mostly statistically insignificant reflecting a period before the onset of strong continental FDI expansion. During 1996–2004, data is significant at 5% level signaling a structural upward shift in Africa-wide FDI inflows which corresponds to Africa’s increasing integration into global capital markets and liberalization reforms. From the years 2005–2016, a sustained FDI boom is observed driven by strong common macroeconomic and external shocks. A sharp decline is seen in 2017 indicating a continental slowdown in FDI inflows reflecting commodity price shocks and global investment slowdown. Results are again significant post 2018 marking a renewed investment growth period driven by increasing regional attractiveness.

## **Section VII: Conclusion**

Investment strategies in Africa should prioritize sectors poised to drive the continent’s advancement over the medium and long term. Projections indicate Africa’s renewable energy capacity could soar to 310GW by 2030, fostering a resilient, low carbon environment. Additionally, significant growth is anticipated in logistics and e-commerce, fueled by the expected rise in mobile and internet penetration and a promising consumer spending set to reach \$2.1 trillion. However, challenges in infrastructure and logistics have often hindered organizations from fully leveraging these opportunities. The concept of the circular economy, emphasizing resource sharing, reuse, repair, recycling, and regeneration, presents a substantial avenue for FDI in Africa. Recognizing this potential, the World Economic Forum and the African Circular Economy Alliance have identified five key focus areas: fashion and textiles, food systems, electronics, packaging and the built environment. Notably, circular food systems alone could evolve into a trillion-dollar sector and create millions of inclusive green jobs by 2030.

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