## Corporate Governance and Foreign Direct Investment in Sub-Saharan Africa

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**Abstract** 

This paper presents new indicators for corporate governance (effectiveness of the corporate board, ethical behavior of firms, regulation of securities and exchange, and protection of minority shareholders) by the Global Competitiveness Index Report rather than the traditional ones, this study confirms the relationship between corporate governance and foreign direct investment (FDI) (board size, CEO non-duality, board independence, board diversity). The poll examines the relationship between FDI and corporate governance using information from 2009 to 2016. The Generalized Method of Moments (GMM) was the primary evaluation technique used in this study. According to the review, corporate governance affects FDI in Sub-Saharan Africa (SSA). While regulation of securities exchanges has a negative impact on FDI, ethical business practices, effective corporate governance, and the protection of minority shareholders have beneficial effects. The study suggests that sub-Saharan African economies should strengthen corporate ethics, guarantee the effectiveness of corporate boards, and safeguard the interests of minority shareholders.

## **Keywords**

Corporate governance, Ethical behavior, Board of directors, Investors, and Security and Exchange.

### 1. Introduction

Corporate governance can be understood as rules and guidelines utilized in coordinating firms of a host country as they have a locational advantage that energizes the inflow of FDI. This is not shocking on the grounds that investors have one or two doubts about murky corporate governance structures both at the firm and large-scale levels in light of the specialized risk to their investments in a climate of poor corporate governance. Recent occasions demonstrate that some of these economies have understood the pertinence of good corporate governance and the need to flag straightforwardness and accountability both at the firm and national levels and have embarked on huge corporate governance reforms (Appiah Kubi et al., 2020; Adelopo and Obalola, 2009). Dunning (2006) presented corporate governance in his eclectic paradigm as one of the locational benefits that support the inflow of foreign investment. In light of the eclectic theory by Dunning (2006), this study thinks that the decrease or expansion in FDI in an economy depends upon the corporate governance of the economy.

This is extremely evident in light of the fact that the corporate governance of a nation reflects how firms are coordinated and controlled within a nation. Hence, it would be something significant an investor would consider prior to choosing a specific country to invest in (Appiah Kubi et al., 2019; Adelopo and Obalola, 2009; Johnson A., 2006).

Despite the fact that there have been various investigations into corporate governance and FDI (Basson, 2015; Esew and Yaroson, 2014), however, this study affirms the connection between corporate governance and FDI by presenting new pointers for corporate governance (ethical behavior of firms, the efficacy of corporate boards, protection of minority shareholders, and regulations of security and exchange) by competitiveness index report rather than traditional ones (CEO non-duality, board size, board diversity, and board independence). It is against this backdrop that this study separates itself by utilizing new indicators from the Global Competitiveness Index report as a measure of a nation's level of corporate governance to break down the connection between corporate governance and FDI in Sub-Saharan Africa (SSA).

# 2. The Purpose of the Study

The primary reason for the review is to look at the role of corporate governance in the attraction of FDI in Sub-Saharan Africa.

## 3. Research Question

This study responded to the inquiry: do the effectiveness of the corporate board, ethical behavior of firms, regulation of security and exchange, and protection of minority shareholders draw FDI into the SSA?

#### 4. Review of the Literature

Studies were reviewed based on their relevance to the review's purpose, which is to investigate the relationship between country-level corporate administration and a new direct interest in Sub-Saharan Africa. These are the factors that have legitimized corporate and foreign direct investment in Sub-Saharan Africa.

Buchanan (2017) investigated corporate governance and the shareholder: certainty and decision-making. This study bridges the gap between the impacts of governance disclosure and the certainty and dynamic tendencies of noninstitutional accredited investors (NIAIs).

Tariquzzaman (2017) examined the effects of corporate governance guidelines on Bangladeshi investor decisions in a trial assessment. The principal reason for the review was to see whether investors assigned significance to corporate governance in making investment decisions.

Xiaolu, Jieji, and Jian (2016), likewise, conducted a study on the influence of corporate governance level on investor confidence. It chose the variable of corporate governance level to research the impact of corporate governance level assessment on keeping up with and expanding investor confidence, according to the point of view of investors. The technique to measure investors' confidence and corporate governance level has been improved, and the information of A-share organizations recorded in the Shanghai Stock Exchange in 2011–2013 was chosen as the example to examine the panel data. That's what the outcomes show: the higher the corporate administration level, the more grounded the financial investor certainty. A study conducted by Basson (2015) examined the relationship between full-scale level governance performances in the Sub-Saharan African region and FDI inflows, with the goal of determining whether a contributing variable influences FDI inflows. The study utilized panel data information and a fixed impact assessor for an example of 45 Sub-Saharan African economies from 2002 to 2011. The outcome of the study was that the higher the corporate governance level, the stronger investors' confidence.

# 5. Research Methodology

### **Model Specification**

In order to reflect several units (Countries in Sub-Saharan Africa) and time series data for each unit from 2009 to 2016, a panel model was used. The dynamic panel model for FDI and other explanatory variables is defined as follows by Desbordes and Wei (2017):

$$DI = f (FDI, C.GOV, GDPCG, INFL, AE, TO)$$
 (1)

Where AE stands for access to electricity, FDI stands for foreign direct investment, C.GOV stands for corporate governance, GDPCG stands for gross domestic product per capita growth, INFR is for the inflation rate, and TO stands for trade openness. According to Baltagi et al. (2009), there is a link between past and present foreign direct investment, which necessitates the inclusion of lag values for the dependent variable in the explanatory variables in order to prevent miss specification. Therefore, the dynamic GMM panel model of equation (2) is modeled as:

$$FDI_{it} = \alpha_{it} + \delta FDI_{it-1} + B_3C.GOV_{it} + B_4GDPCG_{it} + B_5INFL_{it} + B_6AE_{it} + B_7TO_{it} + u_i + E_{it}$$

$$(2)$$

Where *i* refers to the country (i = 35); t refers to the time-period from (2009 to 2016) (t = 7); *FDI* is dependent,  $FDI_{it-1}$  is a first lag of foreign direct investment; u unobserved country-specific effect and  $\varepsilon$  is the error term assumed to be serially uncorrelated.

#### 6. Justification and Measurement of Variables

The measurements used for the variables being examined were considered based on literature and theories.

## 7. Foreign Direct Investment (FDI) (% of GDP)

It is defined as the net investments made to get a long-term management interest (10 percent or more of voting stock) in a company that operates in a different economy than the investor's own. Consequently, FDI symbolizes the influx of capital into a nation. Foreign direct investment will be calculated as the log of foreign direct investment in accordance with Adam and Tweneboah (2009).

## 8. Independent Variable

#### **Country-Level Corporate Governance**

The study used a composite of country-level corporate governance, which includes the protection of minority shareholders, effective corporate boards, and ethical business practices (Global Competitiveness Index, 2016). Because this study thinks that improved corporate governance would boost the inflow of foreign direct investment, corporate governance is the independent variable. This is due to the beneficial association between corporate governance and foreign direct investment (Basson, 2015; Esew & Yaroson, 2014). Therefore, having sound corporate governance increases the amount of foreign direct investment coming in.

#### 9. Control Variables

This section presents other variables for which studies have established their impact on foreign direct investment. Specifically,

# 10. Growth in Gross Domestic Product Per Capita (GDPCG)

The value of all marketed and some non-marketed products and services generated within a specific nation is defined as the gross domestic product (GDP) (World Bank, 2019). It is used to gauge the economic production of a nation. A study on the factors that influence foreign direct investment in developing countries by Demirhan and Masca (2008) revealed a significant positive relationship between GDP per capita and FDI; a similar study by Mottaleb and Kalirajan (2010) revealed the following factors: Additionally, a comparative investigation revealed that nations with higher GDP growth rates get more FDI.

### 11. Inflation (INFLA)

According to studies, "inflation" is the persistent rise in the general price level (Cantah, Wiafe, & Adams, 2013). The cost of procuring a typical consumer's basket of goods and services, which may be fixed or modified at predetermined intervals, such as annually, is measured by the consumer price index (World Bank, 2017). Numerous studies have emphasized the negative association between FDI and inflation (Wani, Haq, and Rehman, 2017; Demirhan & Masca, 2008).

## 12. Access to Electricity (AE)

It measures the proportion of people who have access to electricity (World Bank, 2017). This suggests that a country's population or business usage of power may be explained by the availability of electricity. Based on the findings of Nutassey (2018) and Ibrahim (2015), this study anticipates a favorable association between access to electricity and foreign direct investment (2015).

## 13. Trade Openness (TO)

According to Elheddad (2016), empirical findings demonstrate that one of the key elements promoting FDI is trade openness. Trade as a part of GDP, defined by the World Bank (2017) as the total of exports and imports of goods and services measured as a share of GDP, is a proxy measure of trade openness. This analysis anticipates a favorable relationship between FDI and trade openness.

#### 14. Sources of Data

Previous research on the subject, economic theory, and whether the variables statistically fit the models effectively were all taken into consideration while choosing the variables to be utilized in the models. Annual series data from 2009 to 2016 was used in the study. The World Bank's 2015 Development Indicators (WDI) provided the data on foreign direct investment and the control variables, whereas the Global Competitiveness Index provided information on corporate governance.

## 15. Estimation Technique

The study assesses the relationship between corporate governance and foreign direct investment using data spanning from 2009 to 2016. The main estimation technique that this study employed was dynamic. The Generalized Method of Moments (GMM) Arellano and Bond (1991) and Blundell and Bond (1998) popularized the dynamic general method of moments (GMM) estimator, which is the most effective for two key reasons. This is so that endogeneity issues brought on by the independent variables can be directly controlled by the dynamic Generalized Technique of the Moment method.

# 16. Data Analysis

## **Descriptive Statistics**

Table 1: Descriptive Statistics of the Dependent, Independent, and Control Variables

	, minusies							
Variables	Mean	Standard	Minimum	Maximum	Observation			
		Deviation						
FDI	4.97	9.21	-6.01	79.94	242			
CGOV	3.92	0.72	2.02	6.37	242			
EBF	3.25	0.61	2.49	6.26	242			
ECB	4.16	0.55	2.23	6.19	242			
MSP	3.901	0.89	2.46	5.94	242			
RSE	3.57	0.99	1.25	6.49	242			
GDPC	32.73	20.18	0.20	78.63	242			
INFL	30.36	29.15	0.65	84.85	242			
AE	166.14	76.09	49.14	310.2	242			
ТО	287.00	967.34	3.98	5.282	242			

Source: Field survey, (2019).

Note: This Table presents the descriptive statistics for the sample used in the analysis. 35 Sub-Saharan nations are represented in this sample, which spans the years 2009 to 2016. The nations included were Benin, Angola, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Chad, Cote d'Ivoire, Ethiopia, Gabon, Gambia, Ghana, Guinea, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Nigeria, Rwanda, Namibia, Senegal, Seychelles, Sierra Leone, South Africa, Swaziland, Zambia, Uganda, Tanzania, and Zimbabwe.

With a time span of seven years, the descriptive statistics in Table 1 cover 35 economies. The dependent variable, foreign direct investment, has a standard deviation of 9.214, larger than the central tendency, a mean of 4.971, indicating that there is significant variation around the mean, ranging from 6.014 to 79.942. The composite of the four corporate governance measures also has a standard deviation that is higher than the mean-3.925 of 0.725. This indicates that there is little variation around the mean, which is between 2.025 and 6.269. The descriptive statistics for each of the individual indicators were once again provided as follows: The standard deviation of ethical behavior of firms (EBF) within the range of 2.499 to 6.269 is 0.618, which is lower than its mean of 3.257 and suggests low variation around its mean. A significant degree of volatility around the mean is also shown by the standard deviation of 0.550 and a mean value of 4.169 for the effectiveness of the corporate board. The standard deviation for minority shareholders' protection (MSP), which has a range of 2.467 to 5.945 as well, is 3.901. This indicates considerable variability around the mean and is higher than its mean of 0.890. The standard deviation for regulation of securities exchanges is 0.995, which is lower than the mean of 3.578 and indicates that there is less variation around the mean. In addition, the control variables' respective standard deviations for the variables trade openness (TO), access to electricity (AE), inflation (INFLA), and gross domestic product per capita (GDPC) are 20.186, 29.152, 76.090, and 967.341, respectively. The corresponding means of 32.73, 30.364, 166.142, and 287.00 are lower than these. This suggests that their means are less variable.

## 17. Results and Discussion

Table 2: Regression Result Corporate Governance Indicators and Foreign Direct Investment in Sub-Saharan Africa Dependent Variable: Foreign Direct Investment

	Model 1	Model 2	Model 3	Model 4	Model 5	
	Model	Model	Model	Model	Model	
FDI -1	0.0411	0.039	0.040	0.031	0.029	
	0.001	0.002	0.001	0.001	0.000	
CGOV	40.986					
	0.000					
EBF		35.001				
		0.0000				
ECB			24.114			
			0.0001			
MSP				31.909		
				0.0005		
RSE					-9.000	
					0.008	
Control						
GDPC	9.158	8.511	8.632	8.657	9.276	
	0.120	0.069	0.082	0.062	0.101	
INFL	-0.011	-0.011	-0.010	-0.012	-0.010	
	0.000	0.000	0.000	0.000	0.000	
AE	0.026	0.025	0.023	0.022	0.028	
	0.001	0.001	0.000	0.000	0.000	
TO	0.015	0.019	0.018	0.019	0.019	
	0.000	0.0004	0.000	0.000	0.000	
Diagnostic						
J- Stat	36.600	36.521	34.157	35.365	36.499	
Prob. of J- Stat	0.439	0.440	0.500	0.491	0.474	
AR(2):z	0.716	NA	0.195	0.201	0.790	
No. of Obs.	326	326	326	326	326	

p < .05 \*\* p < .01

Model 1: The Role of Corporate Governance in Attracting FDI in Sub-Saharan Africa

Indicator 1 indicates a positive, significant level of 1 percent in the association between the composite of the four corporate governance indicators and foreign direct investment inflows into Sub-Saharan Africa over the period from 2009 to

2016. This indicates that the findings disprove the claim that there is a causal link between corporate governance and foreign direct investment in Sub-Saharan Africa. According to the results in the table, there was a 40.986 percent rise in foreign direct investment into Sub-Saharan Africa for every 0.01 increase in corporate governance. As a result, the finding suggests that before making an investment decision, international investors take company governance into account. This is true since a business will be managed and controlled after it is created in an economy just like corporate governance has been chosen in that economy. The large impact of corporate governance is highlighted by the 40.986 percent increase in foreign direct investment that corporate governance caused, as seen in Model 1.

Corporate governance is important for attracting international investors. This explains why Dunning (1977) included corporate governance in the eclectic theory in 2006 to account for the geographic advantage an economy has in luring international investors. Lien, Piesse, Strange, and Filatotchev (2005) claimed in their study that the type of corporate governance in a country influences the choices of foreign investors, which lends support to the conclusion. The findings of the study by Fazio and Talamo (2008) confirm that effective corporate governance is a significant attractor of foreign direct investment (FDI). Kim (2010) made a similar argument, claiming that the degree of corporate governance or transparency in host nations has an impact on the performance of FDI in those nations. Wang, Alba, and Park (2012) came to the opposite conclusion in their study, arguing that improved corporate governance can limit the potential for increasing shareholder value and deter merger and acquisition inflows of foreign direct investment. This finding and those of other studies are at odds with Wang, Alba, and Park's (2012) findings. Furthermore, given the complementarity between merger and acquisition and non-merger and acquisition foreign direct investment inflows, it is hinted that good governance might potentially deter non-merger and acquisition foreign direct investment inflows. Once more, the results of model 1 demonstrated that, at a confidence level of 0.99, the lag of foreign direct investment has a positive, significant association with the present FDI. Accordingly, a rise of 0.01 in prior foreign direct investment results in an increase of 0.0411 percent in current foreign direct investment (FDI). This implies that there is an endogeneity issue and that the insertion of the lag of foreign direct investment was required to avoid results that were not as expected. While Dellis, Sondermann, and Vansteenkiste's (2017) findings are in opposition to this one, Nutassey's (2018) results support it. Additionally, the results showed a significant positive association between FDI (foreign direct investment) and GDP per capita in Sub-Saharan Africa from 2009 to 2016. It was determined that every 0.01 rise in GDPC results in a 9.1583

percent increase in FDI inflows. This validates earlier findings, such as those by Demirhan and Masca (2008), who discovered a strong positive relationship between FDI and GDP per capita. A further finding from Model 1 showed a strong inverse association between inflation and foreign direct investment in Sub-Saharan African nations. Foreign direct investment (FDI) decreases by 0.011 following a 0.01 increase in inflation. Finding inverse correlations between FDI and inflation in the literature is quite common (Wani, Haq, and Rehman, 2017; Demirhan & Masca, 2008). This is due to the fact that a high inflation rate implies a greater price increase, which results in a higher cost of production for foreign investors. The findings also showed a strong positive correlation between foreign direct investment and access to electricity.

More specifically, a 0.01 increase in power access led to a 0.0260 percent increase in foreign direct investment. The findings of Ibrahim (2015), who discovered a beneficial association between access to power and foreign direct investment, can be taken as validation of the outcome. This assumes that improving access to power is one way the government may attract foreign direct investment. In Sub-Saharan Africa from 2009 to 2016, model 1 shows a substantial positive relationship between trade openness and foreign direct investment at a 1 percent significant level. According to this, a rise in trade openness of 0.01 led to an increase in FDI of 0.0152. This shows that a country tends to attract more foreign direct investment when it becomes more business-friendly. The result of this study is backed by Shah and Khan (2016), who also proved a positive relationship between trade openness and foreign direct investment inflows.

# Model 2: There is no significant relationship between the ethical behavior of firms (ECB) and FDI in Sub-Saharan Africa.

In terms of the association between corporate ethics and foreign direct investment inflows into Sub-Saharan Africa between 2009 and 2016, Model 2 showed a significant positive level of 1 percent. This indicates that the findings disprove the claim that there is no connection between business ethics and foreign direct investment in Sub-Saharan Africa. The result in the table suggests that a 0.01 increase in corporate governance results in a 35.001 rise in foreign direct investment into Sub-Saharan Africa. Miletkov, Poulsen, and Wintoki (2014), who made the case that independent and successful company boards of directors attract foreign capital investment, support this finding. In their study, Carney et al. (2011) found that corporate boards encourage investment efficiency. This means that nations that want to boast about having foreign direct investment must make sure that company boards are ethically sound and well-constituted. According to Kim (2010), the ability of a board to be transparent greatly affects its ability to draw in international investors. Any business that acts ethically will

most likely be open and honest. The outcome once again highlights the importance of moral principles in luring foreign capital into Sub-Saharan African economies. Fairness, equity, and transparency toward stakeholder groups, particularly investors, are seen as essential conditions for attracting foreign direct investment in every economy (Kasser & Sheldon, 2009). This suggests that Sub-Saharan Africa must be able to guarantee ethical corporate operations in order to be appealing to high-end global investors.

Similar to model 1, model 2's findings demonstrated a positive and significant link between the lag of foreign direct investment and the present FDI at a 1 percent significant level. Accordingly, an increase of 0.01 in previous foreign direct investment results in an increase of 0.0399 in current foreign direct investment (FDI). This implies that there is an endogeneity issue and that the insertion of the lag of foreign direct investment was required to avoid results that were not as expected. According to the findings of Agyemang et al. (2019), there is a bad correlation between foreign direct investment that has lagged and current foreign direct investment. More specifically, the findings revealed a significant positive link between Sub-Saharan Africa's FDI and GDP per capita from 2009 to 2016.

It was determined that every 0.01 rise in GDPC results in an 8.515 percent increase in FDI inflows. This is consistent with the findings of Mottaleb and Kalirajan's (2010) study on the factors influencing FDI in developing nations: According to a comparative analysis, nations with faster GDP growth rates receive more foreign direct investment.

Additionally, the results of model 2 showed a strong inverse association between inflation and foreign direct investment in Sub-Saharan African nations. For every 0.01 increase in inflation, foreign direct investment (FDI) inflow will decrease by 0.0115. According to studies, "inflation" is defined as a persistent increase in the general level of prices (Cantah, Wiafe, & Adams, 2013). This deters investment. The findings also revealed a strong positive correlation between FDI and access to electricity. This suggests that a 0.01 increase in energy access resulted in a 0.0251 rise in foreign direct investment. In her study, Nutassey (2018) outlined how the production of energy affects foreign direct investment. This assumes that expanding access to power is one way the government may attract foreign direct investment. Intuitively, investors are likely to be wary about investing in an economy where there is limited access to electricity. Finally, model 2 shows a 1 percent significant positive association between trade openness and foreign direct investment in Sub-Saharan Africa between 2009 and 2016. According to this, a rise in trade openness results in an increase in foreign direct investment of 0.194 percent (FDI). When rules and regulations over

businesses in a country concerning doing business are reduced, it helps to bring in more investment.

# Model 3: There is no significant relationship between the efficacy of corporate boards and FDI in Sub-Saharan Africa.

In the association between the effectiveness of company boards and foreign direct investment inflows into Sub-Saharan Africa between 2009 and 2016, Model 3 also exhibited a significant positive level of 5 percent. This indicates that the findings disprove the claim that there is no connection between the effectiveness of company boards and foreign direct investment in Sub-Saharan Africa. According to the results in the table, there has been a 24.114 percent rise in foreign direct investment into Sub-Saharan Africa for every 0.05 percent increase in corporate governance. The findings of this study highlight the specific interest that foreign investors have in economies where corporate boards are answerable to shareholders and corporate boards. As a result, overseas investors think their investments won't be safe in a country with an unaccountable corporate governance system. (Globerman and Shapiro, 2003). In keeping with the findings of this study, Miletkov, Poulsen, and Wintoki (2014) found that successful company boards had a considerable impact on foreign direct investment. Several corporate scandals and the global financial crisis of 2007–2008, according to the Global Competitiveness Index (2016), have brought to light the importance of accounting and reporting standards and transparency for preventing fraud and mismanagement and ensuring good governance, which in turn led to maintaining and boosting investor confidence. However, model 3's results showed a strong inverse link between inflation and foreign direct investment in Sub-Saharan African nations. For every 0.01 increase in inflation, foreign direct investment (FDI) inflow will decrease by 0.0109. The outcome conflicts with the findings of this investigation because Omankhanlen (2011) found that there is no relationship between inflation and foreign direct investment. Again, the results showed a significant positive relationship between access to electricity and foreign direct investment at a 1 percent level. This implies that a 0.01 increase in access to electricity leads to a 0.0239 increase in foreign direct investment. Based on this result, we can say that foreign investors require greater access to electricity to choose a country as a host.

Lastly, for model 3, the results depict a significant positive relationship between trade openness and foreign direct investment in sub-Saharan Africa from the period of 2009 to 2016 at a 1 percent significance level. This indicates that a 0.01 increase in trade openness led to a 0.0189 increase in foreign direct investment (FDI).

## Model 4: There is no significant relationship between the protection of minority shareholders and FDI in Sub-Saharan Africa.

In the association between the effectiveness of company boards and foreign direct investment inflows into Sub-Saharan Africa between 2009 and 2016, Model 4 also exhibited a significant positive level of 1 percent. This indicates that the findings disprove the claim that minority shareholder protection and foreign direct investment are significantly related in Sub-Saharan Africa. According to the results in the table, there was a 31.909 percent rise in foreign direct investment into Sub-Saharan Africa for every 0.01 percent increase in minority shareholder protection. According to numerous studies, comparable economies that safeguard minority stockholder interests draw more foreign direct investment because investors feel secure doing so (La Porta, Lopez-de-Silanes, Shleifer & Vishny, 2000). This has prompted several nations to create solid corporate governance guidelines in an effort to attract substantial foreign investment and foreign direct investment (Cuervo-Cazurra & Aguilera 2004). These laws give minority shareholders the same rights and authorities as stockholders in the majority. This finding supports the agency theory, which maintains that when a nation fails to safeguard the interests of minority shareholders, it encourages international investors to divert revenue from that nation (Klapper & Love, 2004). Additionally, Model 4 demonstrated that the lag of foreign direct investment has a positive significant link with the present FDI at a 1 percent significant level. This implies that an increase of 0.1 in past foreign direct investment results in an increase of 0.0311 in present FDI. This implies that there is an endogeneity issue and that the implementation of the lag of foreign direct investment was required to avoid the occurrence of unexpected results. More specifically, the findings revealed a significant positive link between Sub-Saharan Africa's FDI and GDP per capita from 2009 to 2016. It was determined that every 0.01 rise in GDPC results in an 8.6572 increase in FDI inflows. According to Lamsiraroj and Doucouliagos (2015), economic growth and foreign direct investment have a strong positive relationship. They also stated that single-country case studies showed much higher correlations than cross-country analyses. Once more, they said that it seemed like growth in emerging nations was somewhat more correlated with FDI. Additionally, the results of model 4 showed a strong inverse association between inflation and foreign direct investment in Sub-Saharan African nations. For every 0.01 increase in inflation, the foreign direct investment (FDI) inflow will decrease by 0.0126. The finding is corroborated by Kiat (2008), who found that there is a negative association between inflation and foreign direct investment (FDI) in a study titled "The influence of exchange rate and inflation on foreign direct investment and its relationship with economic growth in South Africa". The findings also revealed a strong positive correlation between foreign

direct investment and the availability of power. This suggests that a 0.01 increase in power access resulted in 0.229 foreign direct investments. Model 4 again demonstrates a significant positive relationship between trade openness and foreign direct investment in Sub-Saharan Africa from the period of 2009 to 2016 at a 1 percent significance level. This indicates that a 0.01 increase in trade openness led to a 0.198 increase in foreign direct investment (FDI). This finding is consistent with Donghui, Yasin, Zaman, and Imran (2018).

# Model 5: There is no significant relationship between the regulation of security exchange and FDI in Sub-Saharan Africa.

Model 5 showed no discernible correlation between foreign direct investment inflows into Sub-Saharan Africa between 2009 and 2016 and the regulation of the securities market. This indicates that the data did not disprove the premise that there is no meaningful connection between foreign direct investment and regulation of the securities market in Sub-Saharan Africa. According to the results in the table, there was a 9.000 reduction in foreign direct investment into Sub-Saharan Africa for every 0.01 rise in corporate governance. It also lessens restrictions on how enterprises can conduct themselves within a nation, which encourages foreign investment (Nutassey, 2018). The model demonstrated a positive and significant association between the lag of foreign direct investment and the present level of FDI at a 1 percent significance level. This suggests that a 0.01 rise in past foreign direct investment leads to a 0.0296 increase in current foreign direct investment (FDI). This implies that there is an endogeneity issue and that the insertion of the lag of foreign direct investment was required to avoid results that were not as expected. The findings from Dellis, Sondermann, and Vansteenkiste (2017) are in direct opposition to this finding because the FDI lag in their research was not statistically significant. More specifically, the findings revealed a significant positive link between Sub-Saharan Africa's FDI and GDP per capita from 2009 to 2016. It was determined that every 0.01 rise in GDPC leads to a 9.2768 increase in FDI inflows. According to Simionescu (2016), economic growth in the EU28 is positively correlated with foreign direct investment. The study did find that not all economic development increased foreign direct investment, though. Additionally, the results show a strong inverse correlation between inflation and foreign direct investment in Sub-Saharan African nations. Foreign direct investment (FDI) inflow is reduced by 9.2768 when there is a 0.01 increase in inflation. According to studies, inflation is the general price level rising steadily (Cantah, Wiafe, & Adams, 2013); this deters investment. The findings also revealed a sizable positive link between foreign direct investment and the availability of energy. This suggests that a 0.01 increase in energy access resulted in a 0.283 percent rise in foreign direct investment.

From 2009 to 2016, it once again demonstrated a 1 percent significant positive link between trade openness and foreign direct investment in Sub-Saharan Africa. According to this, a rise in trade openness of 0.01 is linked to an increase in FDI of 0.0192.

#### 18. Conclusion

According to the study's findings, corporate governance affects foreign direct investment in Sub-Saharan Africa. While regulation of the securities exchange has a negative impact on foreign direct investment, ethical business practices, effective corporate governance, and protection of minority shareholders have beneficial effects.

### 19. Recommendation

Sub-Saharan African economies should improve business ethics, make sure company boards are effective, and safeguard the interests of minority shareholders. To increase the inflows of FDI's, the regulation of the securities market should be relaxed or made more accommodating.

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