# THE ROLE OF CORRUPTION IN FINANCIAL DEVELOPMENT-FOREIGN DIRECT INVESTMENT NEXUS IN SUB- SAHARAN AFRICAN COUNTRIES

Victoria Abena Nutassey
Associate Professor Siaw Frimpong

## ABSTRACT

*The study adopted control of corruption as a moderating variable in FD-FDI nexus in Sub- Saharan African countries. This was due to mixed results between FD and FDI in literature. Data from 49 SSA economies over the 1996–2016 periods were used. The results from the System GMM concluded that financial development cannot cause foreign direct investment in isolation but requires control of corruption in Sub – Saharan Africa. Therefore, the study suggests that Sub – Saharan African economies should put appropriate measures (such as revising the remunerations of government workers in order to discourage corruption, making sure the laws in these countries give adequate punishment to those who engage in corrupt activities in order to deter people from corruption, reviewing the constitutions to enable the suggestions given above and other existing law that fight corruption to be successfully implemented and finally, agencies and institutions that check corruption should be double checked so that they will not practice corruption) should be put in place in order to control corruption which would in turn empower financial development to influence foreign direct investment.*

*Keywords:* Corruption, Foreign Direct Investment, Financial Development and Sub – Saharan African.

## INTRODUCTION

Foreign direct investment (FDI) is still one of the utmost forms of cross-border investment inflow in Sub-Saharan Africa (World Bank, 2014). It has been established that, foreign direct investment stands as a major influencer of the economies of Sub-Saharan Africa (Jugurnath, Chuckun & Fauzel, 2016; Adam, 2009) that is, foreign direct investment is seen as a source of economic growth through employment, income growth and modernization (Anyanwu, 2012; Organisation for economic co-operation and development, 2002). Despite the contribution of FDI in advancing economic growth and development plan, Sub-Saharan African nations frequently attract low level of FDI over the years as compared to other regions (Nutassey, 2018; Basson, 2015; Cantah,Wiafe & Adams, 2013). This is confirmed by data from the World Bank, which depicts a continuous fall of FDI in Sub-Saharan Africa. For instance, foreign direct investment inflow as a percentage of gross domestic product fell from 2.70% to 2.36% from 2011 to 2013; it increased just a little in 2014 and 2015 to 2.38% and 2.69% respectively and dropped by 2016 to 2.56% (World Development Indicator, 2018). This is a very disturbing issue that needs immediate attention; hence, researchers in Sub – Saharan Africa continue to conduct studies on FDI. These researchers have proven over the years that there are various determining factors of foreign direct investment in Sub- Saharan Africa such as trade openness, economic growth and financial development (Druppers, 2017; Fiodendji, 2016, Soumaré &Tchana, 2015).

However, this study considered financial development because a sound financial market is required by foreign investors in order to choose an economy which can help them to partly finance their project by providing credit facilities when the need arises. Also, when their operation starts in the chosen host country, these companies would have regular transactions such as deposit, withdrawal and investment with the financial institutions in the host country (The Global Competitiveness Report, 2016 – 2017). In so doing, financial institutions lower the cost of assembling, monitoring investment information, and processing, and consequently aids in diminishing the problems of information asymmetry that foreign investors are likely to face in a strange economy (Naceur and Ghazouani, 2007).

Nevertheless, the results of the relationship between financial development and foreign direct investment in literature have been ambiguous and inconclusive (Desbordes and Wei, 2017; Wang and Liu, 2017; Otchere, Soumaré and Yourougou, 2016; Soumaré et al., 2011). These mixed or inconclusive results in literature on the relationship between financial development and foreign direct investment could be explained by certain factors in Sub- Saharan Africa economies. That is, for FD to maximize FDI in Sub-Saharan Africa, it will depend on certain conditions in the economies such as trade openness, corporate governance and corruption level of a country (Druppers, 2017; Agyemang, Fantini & Ansong, 2016; Yarram &Farooque, 2010). Therefore, this study sought to clear this inconclusiveness by considering one of these conditions in the economy that could influences the relationship between FD and FDI in Sub- Saharan Africa.

The study considered only corruption because Sub-Saharan Africa is widely known to be among the world's most corrupt economies (Council on Foreign Relation, 2009; United Nations, 2008a). A survey conducted on corruption perception index, 2017 highlighted that the poorest performing countries are in Sub – Saharan Africa with an average score of 32 (Transparency International, 2018). Also, six out of the ten countries considered highly corrupt globally are in Sub-Saharan Africa. This has caused economies under Sub- Saharan Africa to lose billions of dollars (Council on Foreign Relation, 2009). In 2020 U4 Anti-Corruption Resource Centre indicated high levels of corruption, alongside the problem of petty bribery is very extensive in Sub- Saharan Africa. Meanwhile, corruption has been said to play imperative role in the attraction of foreign direct investment in Sub – Saharan Africa (Agyemang et al., 2016; Basson, 2015; Mengistu & Adhikary, 2011). Thus, if the level of corruption in Sub- Saharan Africa is noted to be high then, intuitively, issues such as employing corrupt workers and incurring high costs are bound to occur to investors. A corrupt nation discourages foreign investors (Basson, 2015) and thus, might have

accounted for the continuous fall of FDI in Sub – Saharan Africa (see World Bank data, 2011 – 2016). This implies that an economy requires both good financial development and low corruption to attract a higher FDI.

Therefore, this study intends to address the limitations of previous studies which examined the relationship between financial development and foreign direct investment in isolation (Agyemang et al. 2016; Mengistu et al., 2011) and corruption and foreign direct investment separately (Agyemang et al. 2016) by introducing a moderating variable (corruption) in the relationship between financial development and foreign direct investment in this study. It is against this background, that this study sought to examine the role of country level corruption in the FMD-FDI nexus in Sub- Saharan African countries.

## LITERATURE REVIEW

### *Financial Development and Foreign Direct Investment*

Most studies on foreign direct investment has employed eclectic paradigm theories to explain the reasons companies decide to invest in other countries (Nutassey, 2018; Abbas & El Mosallamy, 2016; Donaubauer, Neumayer & Nunnenkamp, 2016; Soumaré et al., 2011; Asiedu, 2009). Dunning (1977) developed eclectic theory also known as OLI paradigm where the "OLI" stands for Ownership, Location and Internalization; three possible reasons that would make a firm decide to be a multinational. Ownership advantages indicate why particular organizations go abroad while others do not, it explains that, a successful multinational company has some firm-specific advantages which allows it to become successful in foreign economies. Location advantages focus on which location (country) to choose. Lastly, internalization advantages affect the way a company chooses to operate in another country.

Specifically, the locational advantages aspect of eclectic paradigm theory underscores this study. Because it looks at certain conditions in an economy that motivate foreign investors in choosing a country for their investments. That is, an economy is chosen when the firm can combine its ownership advantages with certain factors in the host country which includes financial conditions. Fafchamps and Schündeln (2013) and Giannettid and Ongena (2009) agree to financial conditions being a major factor that influence the choice of a firm's location. This is because their studies concluded that financial development strongly influences the performance of a firm.

From this, the study can anticipate a relationship between financial development and foreign direct investment because investors would like to choose a country which can help them to partly finance their project by providing credit facilities. Also, when the operation of a multinational company starts in a host country, the company would be dealing with the financial institutions and markets in the host country thus, the investor would be expecting sound financial system in the chosen country (The Global competitive index, 2016 – 2017).To throw more light on this, once a multinational firm is established in a country, the firm would definitely open an account with the local financial institution to facilitate it financial dealing such as savings, credit, investment and transfers.

Also, prior studies that have established relationship between financial development and foreign direct investment (Donaubauer et al. 2016; Soumaré et al., 2011; Ang, 2009) had proven that financial development indeed influences foreign direct investment. However, the studies reviewed under this hypothesis gave mixed results. These mixed results could be because the relationship between financial development and foreign direct investment was examined isolated of corruption, all other things being held constant. Hence, this study would introduce corruption as a moderation variable, with the intention of unearthing the difference that it is likely to bring in results.

### *Corruption and Foreign Direct Investment*

In 2006, Dunning proposed institutional structure which included corruption in the choice of the locational advantages needed for a country to receive foreign direct investment. These institutional factors could be both firm as well as country level (Dunning, 2006). This was supported by Asiedu (2006), who said the control of corruption promote foreign direct investment. This implies that high corruption discourages FDI, thus, limits the establishment of new business. In this study country specific corruption advantage was considered. The argument was that if the institutional structure which include corruption is good, then foreign investor would like to invest in that country (Dunning, 2006). This again implies that, the nature of corruption of an economy determines its foreign investment level (Dohse, Hassink & Klaerding, 2012). Simply, if corruption is high, foreign direct investment will be low. This is not surprising because, intuitively, every investor would consider the nature of corruption in a country before investing there. Reason being that, if corruption is high there is high chance of employing corrupt worker in addition to incurring high cost (Agyemang et al. 2016). Extant literature have also provided evidence to this (Epaphra & Massawe, 2017; Kurul & Yalta, 2017; Kurul, 2017; Belgibayeva and Plekhanov,2016).

These presupposes that corruption is also relevant in determining foreign direct investment.

### *Financial Development-Foreign Direct Investment nexus: the moderating role of Corruption*

Financial development has been regarded to be relevant for foreign direct investment inflows. Particularly, reserve requirement, credit availability and interest rates of banking sectors influences the level of foreign direct investment that flows into a country (Donaubauer et al., 2016; Soumaré et al., 2011; Ang, 2009). Similarly, a good number of studies have provided evidence that corruption is very important for the attraction of foreign direct investment (Kurul et al., 2017; Kurul, 2017; Agyemang et al. 2016; Belgibayeva et al., 2016). The argument therefore is that corruption may have a moderating influence on the relationship between financial development and foreign direct investment. This hunch is based on works that point out that foreign direct investment

regards financial development (Donaubauer et al., 2016; Soumaré et al., 2011; Ang, 2009) and the nature of corruption of a country before choosing to invest there (Kurul et al., 2017; Belgibayeva et al., 2016; Asiedu, 2006). Therefore, the attraction of foreign direct investment (FDI) is not influenced by financial development alone but it includes the corruption level of an economy. More so, the locational advantage aspect of eclectic paradigm theory argues that, all other things being held constant, economies require both good financial system and low corruption to enable foreign investors to choose them as a host country for their businesses. Thus, even if the financial system of a country is good but with a high level of corruption, foreign direct investment inflow would be restricted. Conclusively, all other thing being held in constant, a country requires a vibrant financial system and low level of corruption to maximize foreign direct investment.

Yet, studies have looked at financial development and foreign direct investment in isolation as well as corruption and FDI in seclusion. It would be prudent to consider corruption as a moderating variable to FD and FDI with the intention of bridging the gap in literature. The study therefore, hypotheses that:

*Ho: there is no significant relationship between financial markets development and foreign direct investment in Sub- Saharan Africa.*

*H1: there is a positive direct relationship between corruption and foreign direct investment in Sub- Saharan Africa.*

*H2: there is interactive effect of corruption in the FMD-FDI nexus in Sub- Saharan African countries.*

## RESEARCH DESIGN

This study uses quantitative research approach and explanatory research design. The estimation technique this study employed was Dynamic Generalised Method of Moment (GMM) technique. Dynamic GMM was chosen over static GMM because the study needed to deal with simultaneity bias and country-specific effect. The dynamic general method of Moments (GMM) estimator was popularized by Arellano and Bond (1991) and Blundell and Bond (1998) and is the most efficient for two main reasons. Firstly, the Dynamic Generalized Method of Moment method exercises direct control over endogeneity problems caused by the regressors. Secondly, it is efficient due to the feature of the data, that is, the time series period is shorter than cross section unit (Roodman, 2009). The time period considered in this study is just 21 years (1996 to 2016) which is shorter than the 49 numbers of countries that have been included. To be more specific the study engages two - step system Generalized Method of Moment estimator coupled with a corrected standard error over the one-step estimators because, theoretically; it is more efficient than one-step estimator.

## DATA

This study considered secondary data because of the variables of interest: foreign direct investment (regressand), financial development (regressor), control corruption (moderating variable) and the control variables (trade openness, gross domestic product per capita growth, inflation and electricity production). The study used annual series data from 1996 to 2016.

**Table 1- Description the variables employed**

| Variable | Measure | Explanation | Source | Exp. sign |
|---|---|---|---|---|
| Foreign direct investment inflows | Foreign direct investment as a percentage of GDP | Foreign direct investment inflows to African economies as a percentage of gross domestic product. | World Development Indicators 1996 to 2016 | |
| Financial development | Domestic credit to private sector | Domestic credit to private sector denotes as a financial resource given to the private sector by financial organizations. This includes credit, purchases of bond, and credit buying and others, which requires repayment. | World Development Indicators 1996 to 2016 | + |
| Country-level corruption | Control of corruption | Control of Corruption captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests. | Worldwide Governance Indicators 1996 to 2016 | + |
| Gross domestic product per capita | Log of gross domestic product per capita | GDP per capita is gross domestic product divided by midyear population | World Development Indicators 1996 to 2016 | + |
| Trade Openness | Trade as a percentage of GDP | Trade as a percentage of gross domestic product which is explained as the sum of exports and imports of goods and services measured as a share of gross domestic product | World Development Indicators 1996 to 2016 | + |
| Inflation | Consumer price index | Consumer price index reflects the annual percentage change in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals, such as yearly. | World Development Indicators 1996 to 2016 | + |
| Electricity Production | Electric power consumption | Electric power consumption is explained as the production of power plants and combined heat and power plants less transmission, distribution, and transformation losses and own use by heat and power plants. | World Development Indicators 1996 to 2016 | + |

Note: Exp. Sign = Expected Sign , + = positive relationship and - = negative relationship.

## MODEL

$$FDI_{it} = \alpha_{it} + \delta FDI_{it-1} + B_1 FD_{it} + B_2 CC_{it} + B_3 \ln(FDI_{it} \times CC_{it}) + B_4 \ln GDPC_{it} + B_5 TO_{it} + B_6 INFL_{it} + B_7 EP_{it}$$
$$+ u_i + \varepsilon_{it} \qquad (1)$$

Where *FDI* is foreign direct investment, $FDI_{it-1}$ is first lag of foreign direct investment, *FD* is financial development, CC is control of corruption, *ln*(FD*CC) is log of interaction between foreign direct investment and control of corruption, *ln*GDPC is gross domestic product per capita *TO* is trade openness, *INFL* is inflation, and *EP* is electricity production. It should also be noted that *i* refers to the country ($i$ = 1, 2, 3,…, 49); t refers to time period from (1996 to 2016) (t = 1, 2, 3, …, 21); $u$ unobserved country–specific effect and $\varepsilon$ is the error term assumed to be serially uncorrelated.

## GMM RESULTS

Now the study present and deliberates on the GMM outcome from the empirical analysis. It started with the descriptive statistics, the correlation matrix and the regression result.

**Table 2- Descriptive Statistics of the Regresand, regressor and control variables**

| Variable | Obs | Mean | Std. Dev | Min | Max |
|---|---|---|---|---|---|
| FDI | 938 | 5.1270 | 10.6231 | -82.8921 | 161.8238 |
| FD | 911 | 19.25240 | 23.3503 | 0.4104 | 160.1248 |
| CC | 853 | 31.0797 | 22.6256 | 0 | 84.8485 |
| *Ln*GDPC | 946 | 2.9099 | 0.4881 | 1.8618 | 4.3568 |
| TO | 908 | 77.9956 | 47.7156 | 17.8586 | 531.7374 |
| *INFL* | 1008 | 267.7147 | 872.0325 | 7.2795 | 4145.108 |
| *EP* | 912 | 139.9998 | 75.0237 | 50.1284 | 312.476 |

Note: Obs. =Number of Observations Std. Dev =Standard Deviation, Min=Minimum, Max=Maximum,
Source: Authors' computation.

Table 2 presents descriptive statistics for the sample used in this analysis. This sample includes 49 Sub- Saharan African economies for the period from 1996–2016. These countries are Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo, Democratic Republic, Cote D'Ivoire, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gabon, The Gambia, Ghana, Guinea, Guinea- Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, South Africa, Sudan, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe.

**Table 3- Correlation Matrix**

| Variable | FD | FDI | CC | lnGDPC | TO | INFL | EP |
|---|---|---|---|---|---|---|---|
| FD | 1.0000 | | | | | | |
| FDI | -0.0469 | 1.0000 | | | | | |
| CC | 0.0035 | 0.5088 | 1.0000 | | | | |
| LnGDPC | 0.0087 | 0.4497 | 0.3522 | 1.0000 | | | |
| TO | 0.5212 | 0.0423 | 0.1256 | 0.3755 | 1.0000 | | |
| INFL | -0.0328 | -0.0541 | 0.0360 | -0.1273 | -0.0049 | 1.0000 | |
| EP | 0.0426 | 0.1337 | -0.0450 | 0.3444 | 0.0313 | -0.3457 | 1.0000 |

Note: This Table presents correlation analysis for the sample used in the analysis. This sample includes 49 Sub – Saharan countries for the period 1996-2016.
Source: Authors' estimation.

From table 3, the correlation matrix indicates that the correlation among the variables are below 0.6. There is no multicollinearity among the variables employed. Therefore, putting the variable together in a model is justified.

**REGRESSION RESULT**

This section discusses the regression result presented in table 4 with foreign direct investment (FDI) being the regressand, financial development (FD) being the regressor and control of corruption (CC) being the moderating variable. Also, it presented the results of log of the interaction between financial development and control of corruption (*ln*inter) as well as results on the control variables {log of gross domestic production per capita (*ln*GDPC), trade openness (TO), inflation (INFLA) and electricity production (EP)}.

**Table 4- Results GMM Model**

Regressand: Foreign direct investment (FDI)

| Variables | Model |
|---|---|
| FDI (-1) | 0.0523*** |
| | 0.0053 |
| FD | -0.0031 |
| | 0.0222 |
| CC | -0.2041*** |
| | 0.0298 |
| *Ln*inter | 2.7943*** |
| | 0.3655 |
| Control | |
| *Ln*GDPC | 17.0623*** |
| | 1.9798 |
| TO | -0.0946*** |
| | 0.0042 |
| INFLA | -0.0002 |
| | 0.0028 |
| EP | 0.0129*** |
| | 0.0028 |
| Diagonostic | |
| Wald Chi 2 | 1223.40 |
| | (0.0000) |
| AR(1): z | -1.4084 |
| | (0.1590) |
| AR(2):z | -1.1736 |
| | (0.2406) |
| Sargan Chi 2 | 27.0634 |
| | (0.2533) |
| No. of Instruments | 32 |
| No. of group | 44 |
| No. of Obs. | **473** |

Note: significant at 1% is denoted by ***

**GMM RESULT DISCUSSION**

Table 4 displays the role of corruption in the FD-FDI nexus in Sub – Saharan African economies. The model gives the coefficient and standard error of financial development (FD), control of corruption measure and their interaction. *ln*inter represents the log of the interaction between financial development and control of corruption. The results are detailed below based on the hypotheses tested:

The model shows that the lagged regressand of foreign direct investment is statistically significant, which is suggestive that the dynamic GMM model employed is a suitable estimator and therefore, the result can be trusted to make statistical inferences.

***Ho: There is no significant relationship between financial development and foreign direct investment in Sub- Saharan Africa.***
This hypothesis was tested in the model above. The model portrayed an insignificant relationship between FD and FDI in Sub-Saharan African. This means, the results failed to reject the hypothesis, there is no significant relationship between financial development and foreign direct investment in Sub- Saharan African. This implies that financial development in Sub- Saharan African does not encourage inflow of foreign investment. These results contradict both literature and reasonableness. For instance, Dellis (2018), Donaubauer et al. (2016), Soumaré et al. (2011) and Ang (2009) had proven that financial development influences foreign direct investment. They argue that investors would like to choose a country which can help them to partly finance their project by providing credit facilities. Also, Global competitive index (2016 – 2017) reasoned that when the operation of a multinational company starts in a host country, the company would be dealing with the banks in the host country in many way such as opening an account, saving, investing and possibly getting listed in their local stock exchange, thus, they would be expecting sound financial system. The results established for the relationship between FD and FDI in this study indicates otherwise; it rather depicts that financial development in Sub- Saharan Africa does not boost foreign direct investment. It could be that FD in Sub- Saharan Africa is not developed enough to seclusively attract foreign direct investment. Thus, introducing a third variable to moderate the relationship is justified.

***H1: There is a positive direct relationship between control of corruption and foreign direct investment in Sub- Saharan Africa.***
The model also gave negative but significant association of control of corruption with FDI [$\beta$= -0.2041; sig.=1%]. This means that when corruption is controlled in Sub- Saharan Africa, it drives foreign investors out of the economy. This further presupposes that in Sub – Saharan Africa, corruption actually increases the chance of getting more foreign investors by 20.41%. In as much as this result looks depraved, it is supported by a number of studies like Agyemang et al. (2016), Castro and Nune (2013), Al-Sadig (2009), Voyer & Beamish (2004). Castro et al. (2013) defended their result by stating that African economies (including Sub-Saharan Africa) were characterized with corruption and yet it had not gotten to a point which can dampen the spirit of foreign investors from investing in their economies.

But from the authors' point of view, in as much as it undermines a country's integrity, and development (Agyemang et al. 2016), there are so many investors who prefer a host country with high corruption. Intuitively, high corruption in an economy could actually increase the chance of easiness and low cost of establishing and running a business. For instance, procedures for commencing a business is shortening and investors can run their businesses anyhow provided it would maximize shareholders' wealth without the interference of the law. These is happening in most economies under Sub- Saharan Africa. Multinational companies regularly evade taxes in countries where they operate, through trade misinvoicing, among other schemes (Signé, Sow & Madden, 2020). Al-Sadig (2009) put corruption by foreign investors this way, paying bribes to government bureaucrat to get "favour". Favour brings speed and easiness in business transaction. This implies that some of these multinational companies choose Sub – Saharan economies because corruption level is relatively high and thus, transacting business is easy.

***H2: There is interactive effect of corruption in the FMD-FDI nexus in Sub- Saharan African countries.***
It analyzes whether control of corruption (CC) matters in the relationship between financial development and foreign direct investment inflows in Sub – Saharan African Countries. The model demonstrated that log of the interaction between financial development and control of corruption (*ln*inter) had positive influence on FDI [$\beta$= 2.7943/100 = 0.0279; sig. = 1%]. This presupposes that increase in FD on its own cannot affect FDI in Sub – Saharan Africa, but if it merges with control of corruption it will bring a boost in FDI inflow. In other words, CC enables FD to attract foreign direct investment in Sub- Saharan Africa. This is not surprising because Belgibayeva et al. (2016) support that CC has a significant positive relationship with foreign direct investment inflows. This is because high level of corruption increases the cost of doing business and thus gives the foreign investor extra cost which in turn discourages them (Daude & Stein, 2007). Thus, when corruption is controlled, it strengthens the ability of FD in influencing the FDI positively. This means that the proven high corruption (U4 Anti-Corruption Resource Centre, 2020; Council on Foreign Relation, 2009; United Nations, 2008a) in Sub- Saharan African, has hider the financial development from attracting FDI at it best.

**Control variable**

Gross domestic production per capita (*ln*GDPC) exhibited significant positive relationship with foreign direct investment in the model. Trade openness (TO) also indicated significant negative relationship with foreign direct investment. In addition, Inflation (INFLA) also showed no significant relationship in the models. Electricity production (EP) specified a significant positive relationship with the foreign direct investment in Sub – Saharan Africa in the model. Therefore, except for inflation which was insignificant in the attraction of foreign investment, all the others were significant for direct foreign investment in Sub- Saharan economies.

**ROBUSTNESS CHECK**

Following Agyemang, Gbettey, Gatsi and Acquah (2019), the robustness was check using the lagged of all the variables employed in the study with the same technique (dynamic GMM). This particular robustness check suggests that levels of foreign direct investment (regressand) could be enhanced based on past data and thus, the interaction of FD and CC that have been established to boost foreign direct investment in table 4 base on the 49 countries used in this study becomes evident in the subsequent period. The results obtained was very similar to that of the main model in table 4. Thus, the result obtain in this study can be relied upon.

**Table 5- Robustness check**

| Variables | Model |
|---|---|
| FDI (-2) | 0.0513*** |
| | 0.0054 |
| FD (-1) | 0.0114 |
| | 0.0325 |
| CC (-1) | -0.2053*** |
| | 0.0301 |
| Lninter (-1) | 2.7525*** |
| | 0.3625 |
| Control | |
| lnGDPC (-1) | -17.2699*** |
| | 1.9602 |
| TO (-1) | -0.0947*** |
| | 0.0042 |
| INFLA (-1) | 0.0006 |
| | 0.0028 |
| EP (-1) | 0.0138*** |
| | 0.0028 |
| Diagonostic | |
| Wald Chi 2 | 1228.41 |
| | (0.0000) |
| AR(1): z | -1.4072 |
| | (0.1594) |
| AR(2):z | -1.1827 |
| | (0.2369) |
| Sargan Chi 2 | 27.5181 |
| | (0.2346) |
| No. of Instruments | 32 |
| No. of group | 43 |
| No. of Obs. | **470** |

**Conclusion and policy recommendation**

In Sub – Saharan Africa, financial development cannot cause foreign direct investment just on its own but requires control of corruption. This means that the proven high corruption in Sub- Saharan African, has hindered the financial development from attract FDI at it best. Based on this, the study suggests that Sub – Saharan African economies should put appropriate measures (such as revising the remunerations of government workers in order to discourage corruption, making sure the laws in these countries give adequate punishment to those who engage in corrupt activities in order to deter people from corruption, reviewing the constitutions to enable the suggestions given above and other existing laws to fight corruption to be successfully implemented and finally, agencies and institutions that check corruption should be double checked in order for themselves not to be corrupt) should be put in place in order to control corruption which would in turn empower financial development to influence foreign direct investment.

**REFERENCE**

Abbas, S., & Mosallamy, D. E. (2016). Determinants of FDI flows to developing countries: An empirical study on the MENA region. *Journal of Finance and Economics*, *4*(1), 30-38.

Adams, S. (2009). Foreign direct investment, domestic investment, and economic growth in Sub-Saharan Africa. *Journal of policy modeling*, *31*(6), 939-949.

Al-Sadig, A. (2009). The effects of corruption on FDI inflows. Cato Journal, 29(2), 267–294.

Ang, J. B. (2009). Foreign direct investment and its impact on the Thai economy: the role of financial development. *Journal of Economics and Finance*, *33*(3), 316-323.

America Security Project. (2014). Critical issues facing Africa: governance and corruption. Retrieved from https://www.americansecuritypr oject.org/\ critical -issues-facing-africa-governance-corruption/ on 30th July, 2018.

Anyanwu, J.C. (2012). Why does foreign direct investment go where it goes? New evidence from African countries. *Annals of Economics & Finance,* 13(2), 425-462.

Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *The review of economic studies, 58(2)*, 277-297.

Agyemang, O. S., Fantini, G., & Ansong, A. (2016). Unearthing the integral determinants of foreign ownership prevalence of companies in Africa: Role of country-level governance. *Journal of African Business, 17(2),* 225-253.

Agyemang, O. S., Gbettey, C., Gatsi, J. G., & Acquah, I. S. K. (2019). Country-level corporate governance and foreign direct investment in Africa. *Corporate Governance: The International Journal of Business in Society*, 19(5), 1133-1152.

Asiedu, E. (2006). Foreign direct investment in Africa: The role of natural resources, market size, government policy, institutions and political instability. *The World Economy,* 29(1), 63-77.

Basson, S. (2015). *Does macro-level corporate governance attract foreign direct investment (FDI)? A review of Sub-Saharan African Countries* (Doctoral dissertation, Stellenbosch: Stellenbosch University).

Belgibayeva, A., & Plekhanov, A. (2019). Does corruption matter for sources of foreign direct investment? *Review of World Economics*, *155*(3), 487-510.

Blundell, R., & Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of econometrics, 87(1)*, 115-143.

Castro, C., & Nunes, P. (2013). Does corruption inhibit foreign Direct investment? *Revista Política, 51(1)*, 61–83.

Cantah, W. G., Wiafe, E. A., & Adams, A. (2013). Foreign direct investment and trade policy openness in Sub-Saharan Africa. *MPRA Paper, 58074*, 494-513.

Council on Foreign Relation (2009). Corruption in Sub-Saharan Africa. Retrieved from https://www.cfr.org/backgrounder/corruption-sub-saharan-africa on2 on 2nd May, 2020.

Daude, C., & Stein, E. (2007). The quality of institutions and foreign direct investment. *Economics & Politics*, *19*(3), 317-344.

Dunning, J. H. (1977). Trade, location of economic activity and the MNE: A search for an eclectic approach. *The international allocation of economic activity*, 395-418.

Dunning, J., H. (2006). Towards a new paradigm of development: implications for the determinants of international business. *Transnational Corporations, 15(1),* 173-227.

Dohse, D., Hassink, R., & Klaerding, C. (2012). Emerging multinationals, international knowledge flows and economic geography: A research agenda (Kiel Working Paper No. 1776). Kiellinie, Germany: Kiel Institute for the World Economy.

Druppers, B. (2017). *FDI in Sub-Saharan Africa: The Importance of trade openness* (Masters thesis, Erasmus University).

Dellis, K. (2018). *Financial development and FDI flows: evidence from advanced economies* (No. 254).

Desbordes, R., & Wei, S. J. (2017). The effects of financial development on foreign direct investment. *Journal of Development Economics*, 127, 153-168.

Donaubauer, J., Neumayer, E., & Nunnenkamp, P. (2016). *Financial market development in host and source countries and its effects on bilateral FDI* (No. 2029). Kiel Working Paper.

Epaphra, M., & Massawe, J. (2017). The effect of corruption on foreign direct investment: A panel data study. *Turkish Economic Review*, *4*(1), 19-54.

Fafchamps, M., & Schündeln, M. (2013). Local financial development and firm performance: Evidence from Morocco. *Journal of Development Economics,* 103, 15-28.

Fiodendji, K. (2016). Do institutions quality affect FDI inflows in Sub Saharan African Countries?.*Journal of Economics and Development Studies,* 4 (2), 28-55.

Giannetti, M., & Ongena, S. (2009). Financial integration and firm performance: Evidence from foreign bank entry in emerging markets. *Review of Finance,* 13(2), 181-223.

Jugurnath, B., Chuckun, N., & Fauzel, S. (2016). Foreign direct investment and economic growth in Sub-Saharan Africa: An empirical study. *Theoretical economics letters*, 6(04), 798- 840.

Kurul, Z. (2017). Nonlinear relationship between institutional factors and FDI flows: dynamic panel threshold analysis. *International Review of Economics and Finance*, 48, 148-160.

Kurul, Z., & Yalta, A. Y. (2017). Relationship between institutional factors and FDI flows in developing countries: New evidence from dynamic panel estimation. *Economies*, 5(2), 17.

Mengistu, A. A., & Adhikary, B. K. (2011). Does good governance matter for FDI inflows? Evidence from Asian economies. *Asia Pacific business review*, *17*(3), 281-299.

Naceur, S.B. & Ghazouani, S. (2007) Stock Markets, Banks, and Economic Growth: Empirical Evidence from the MENA Region. *Research in International Business and Finance,* 21 (2), 297–315.

Nutassey, V. A. (2018). *Financial market development and foreign direct investment in Sub–Saharan Africa: the role of country level governance* (Doctoral dissertation, University of Cape Coast).

Organisation for economic co-operation and development, (2002). Foreign Direct Investment for Development. Retrieved from https://www.oecd.'org/investment/investmentfordevelopment/ 1959815. Pdf on 4th July, 2017.

Otchere, I., Soumaré, I., & Yourougou, P. (2016). FDI and financial market development in Africa. *The World Economy,* 39(5), 651-678.

Roodman, D. (2009). A note on the theme of too many instruments. *Oxford Bulletin of Economics and statistics*, 71(1), 135-158.

Roodman, D. (2009). How to do xtabond2: An introduction to difference and system GMM in Stata. *Stata Journal*, 9, 86-136.

Signé, L., Sow, M., & Madden, P. (2020). Illicit financial flows in Africa: drivers, destinations, and poolicy options.

Soumaré, I., & Tchana, F. T. (2015). Causality between FDI and financial market development: Evidence from emerging markets. *The World Bank Economic Review,* 29 (1), 205-216.

The Global Competitiveness Report. (2017). The Global Competitiveness Index 2016–2017 Rankings. World Economic Forum.

Transparency International (2018). Corruption perception index, 2017. Retrieved from CPI 2017 XLSX dataset on 3rd June, 2020.

United Nations. (2008a). Corruption thwarts development in Africa. New York, NY: Author. Retrieved from http://www.un.org on 3rd June,2020.U4 Anti-Corruption Resource Centre (2020). Sub-Saharan Africa: Overview of corruption and anti-corruption. Retrieved from https://www.u4.no/publications/sub-saharan-africa-overview-of-corruption-and-anti-corruption.pdf on 23rd December, 2020.

Voyer P. A., & Beamish P. W. (2004). The effect of corruption on Japanese foreign direct investment. *Journal of Business Ethics*, 50, 211–224.

Wang, H. & Liu, H (2017). An empirical research of FDI spillovers and financial development threshold effects in different regions of China. Retrieved from https://www. researchgate.net on 24th September, 2017.

World Bank (2018). World development indicators. Retrieved from https://datacatalog.worldbank.org/dataset/wdi-database-archiveson 29th march, 2018.

Yarram, S. R. & Farooque, O. A. (2010). Corporate governance and foreign direct investment inflows: cross-sectional international evidence. *American Journal of Finance and Accounting*, 2 (1), 1752-7767.

Victoria Abena Nutassey
*Department of Finance, School of Business, University of Cape Coast, Ghana.*
*Email: victoria.nutassey@stu.ucc.edu.gh*

Associate Professor Siaw Frimpong (Ph.D)
*Department of Finance, School of Business, University of Cape Coast, Ghana.*
*Email: sfrimpong@ucc.edu.gh*