

UNIVERSITY OF CAPE COAST

COUNTRY LEVEL CORPORATE GOVERNANCE AND DIRECT  
FOREIGN INVESTMENT IN SUB-SAHARAN AFRICA.



ERNEST TSLIE AGBOKAH

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UNIVERSITY OF CAPE COAST

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FOREIGN INVESTMENT IN SUB-SAHARAN AFRICA.



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fulfilment of the requirements for the award of Master of Business  
Administration (MBA) degree in Finance.

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## DECLARATION

### Candidate's Declaration

I hereby declare that this dissertation is the result of my own original work and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature: ..... Date: .....

Name: Ernest Tslie Agbokah

### Supervisor's Declaration

I hereby declare that the preparation and presentation of the dissertation was supervised in accordance with the guidelines on supervision of dissertation laid down by the University of Cape Coast.

Supervisor's Signature: ..... Date: .....

Name: Professor John Gartchie Gatsi

## ABSTRACT

This study examined the relationship between corporate governance and direct foreign investment in Sub – Saharan African. This study differentiates itself from literature by introducing new measures from global competitiveness index for corporate governance. The measures include ethical behaviour of firms, efficacy of corporate board, protection of minority shareholders and regulation of security exchange from 2009 to 2015. The study was guided by Eclectic theory and new institutional economic theory. The study employed Generalized Method of Moment (GMM) technique. The study has concluded that corporate governance has influence on direct foreign investment in Sub – Saharan Africa. Ethical behaviour of firms, efficacy of corporate governance, minority shareholders protection have positive influence direct foreign investment positive while regulation of securities exchange have negative influence on direct foreign investment. The study suggests that Sub – Saharan Africa economies should work on improving the ethical behaviour of firms, ensure that corporate boards are efficient and interest of minority shareholders are protected. However, regulation of security exchange should be reduced or made friendly in order to raise the inflows from direct foreign investment.

## KEY WORDS

Direct foreign investment

Corporate governance

Sub – Saharan Africa



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## DEDICATION

To my dearest wife Mrs. Elizabeth Agbokah and children; Elsie, Emmanuel and Israel for their prayers and support.



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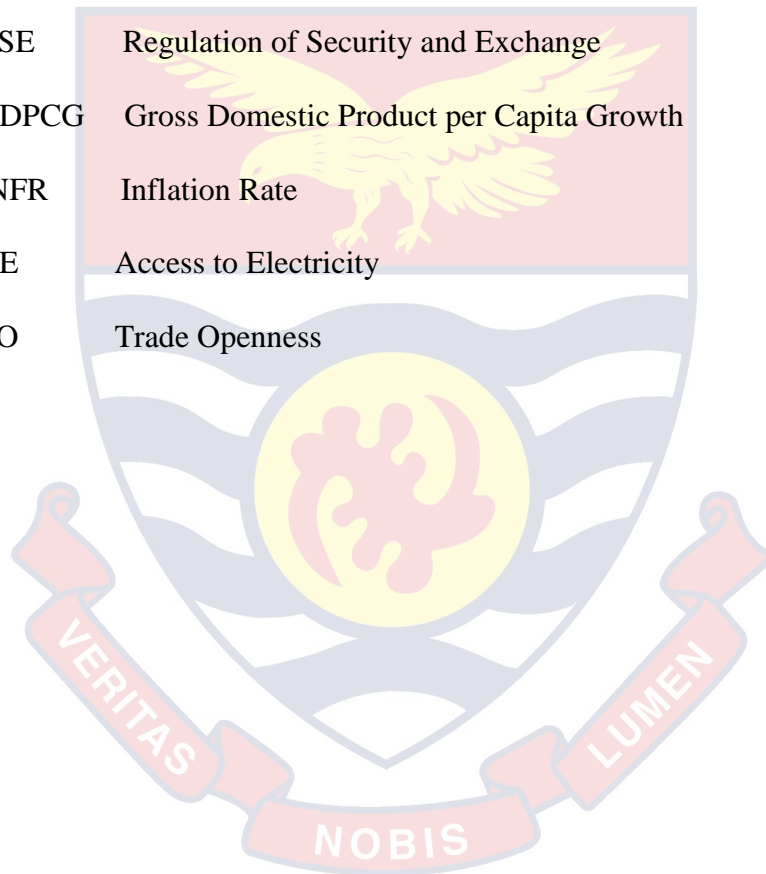
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## LIST OF ACRONYMS

GMM	Generalized Method of Moment
FDI	Direct Foreign Investment
C.GOV	Corporate Governance
EBF	Ethical Behaviour of Firms
ECB	Efficacy of Corporate Board
MSP	Protection of Minority Shareholders
RSE	Regulation of Security and Exchange
GDPCG	Gross Domestic Product per Capita Growth
INFR	Inflation Rate
AE	Access to Electricity
TO	Trade Openness



## CHAPTER ONE

### INTRODUCTION

It cannot be denied that direct foreign investment and corporate governance greatly affect the advancement of every nation. This has called for reasonable number of researchers' interest in corporate governance and direct foreign investment nexus. Yet, this study intends contributing to previous studies by analysing the role of corporate governance in the attraction of direct foreign investment in Sub- Saharan Africa by considering a new measure of corporate governance from global competitiveness index report.

#### **Background to the study**

Direct foreign investment is a key requirement for development of every economy including Sub- Saharan Africa (Almfraji & Almsafir, 2014; Iqbal Chaudhry, Mehmood, & Saqib Mehmood, 2013). It contributes to an economy in various ways including providing jobs, reduction of poverty and payment of taxes (Organisation for economic co-operation and development, 2002).

This has encouraged countries to formulate diverse means of increasing the investment of foreign companies. The International Monetary Fund (IMF) clarifies direct foreign investment to be investment which encompasses a long-term interest of a firm in a different country and not the investor's country". Also the World Bank, defines it as the net inward flows of investment to gain a long term administrative control in a firm, functioning in a different country not the country of the investor and can be further explained as the sum of reinvestment of equity capital, earnings, long term capital and other short-term capital as it can be seen in the balance of payments of a

country (World Development Indicator, 2018). It can be explained as a combined package of shares (capital) and technology, and can be seen as the existing stock of knowledge in the located country through skill acquisition, labor training, and diffusion, and the bring in of new administrative principles and structural arrangements (Almfraji & Almsafir, 2014).

However, the investment of foreigner in Sub- Saharan Africa continues to be dwindling for the past six years based on World Bank data from 2011 to 2016. Direct foreign investment inflow measured as a percentage of gross domestic product was 2.70%, then it fell in 2012 to 2.40%, it fell further in 2013 to 2.36%, it increased just a little in 2014 and 2015 to 2.38% and 2.69% respectively and reduced by 2016 to 2.56% (World Development Indicator, 2018).

Meanwhile Dunning (2006), introduced corporate governance in his theory, eclectic paradigm as one of the locational advantage that encourages inward flow of foreign investment. Corporate governance which can be explained as rule and regulation used in directing firms of a host country, are locational advantage that encourages inward flow of foreign investment. This is not surprising since investors are careful of opaque corporate governance nature both at firm and macro levels due to the attendant risk to their investments in an environment of poor corporate governance. Adelopo and Obalola (2009), indicated that most of these economies have seen the relevance of up and working corporate governance and the need to indicate accountability and transparency both at country levels and firm and have undertaken on substantial corporate governance modifications.

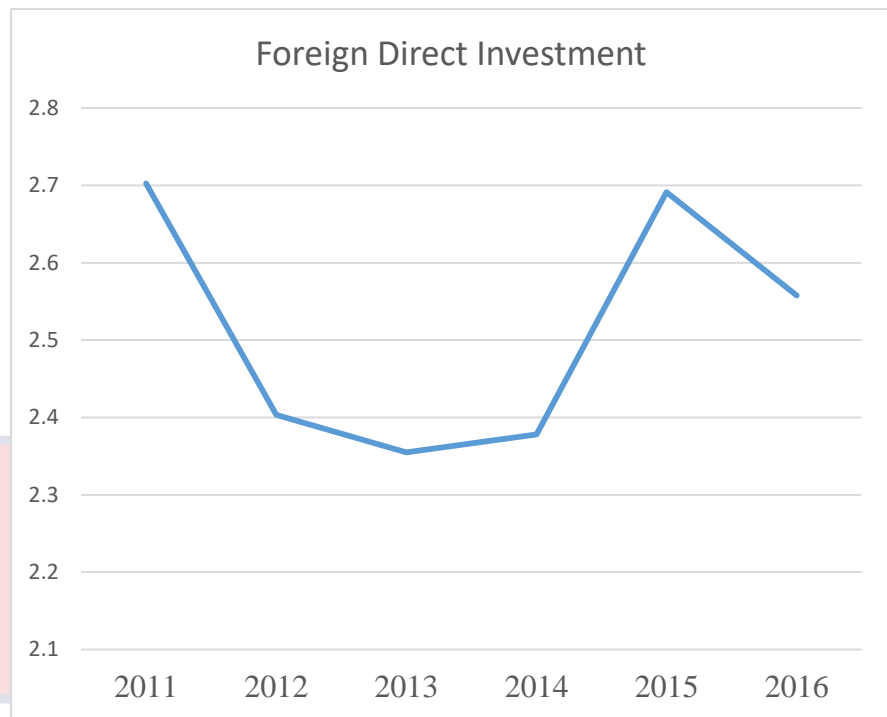
Corporate governance and direct foreign investment nexus has been studied by many (Basson, 2015; Esey & Yaroson, 2014; Lien, Piesse, Strange & Filatotchev, 2005) and have concluded a positive correlation. However, this study intended contributing to literature by using a difference measure namely, ethical behaviour of firms, protection of minority shareholders efficacy of corporate board and regulation of security and exchange from global competitiveness index report to confirm the correlation between corporate governance and direct foreign investment. This because the conventional corporate governance measures such as board size, firm size and leverage are given at the firm level. Thus, the global competitiveness measure for corporate governance would be appropriate for this study because this study is a panel study that requires data at the country level and global competitiveness measure for corporate governance is reported based on countries.

### **Statement of the Problem**

It cannot be denied that direct foreign investment has become an integral portion of the Sub –Saharan Africa economies. It plays a significant role in the economies' industrial, agricultural, and service sectors, which are the main contributors to the growth of gross domestic product in Sub – Saharan Africa (Organisation for economic co-operation and development, 2002).

However, there is a persistent fall of the inward flow of FDI in Sub – Saharan Africa based on World Development Indicator:





*Figure 1: Trend of foreign direct investment*

Source: Field survey, Agbokah (2019)

This is very disturbing because reduction in direct foreign investment affects the economic growth as a whole, since, it means reduction in employment, income level of cities as well as tax payment. Nevertheless, based on the Eclectic theory by Dunning (2006), this study suspects that the reduction or rise in direct foreign investment in a country depends on corporate governance of the economy.

This is very true because the corporate governance of a country depicts how firms are directed and controlled in a country, thus, it would be a major thing a foreign investor would consider before choosing the particular country to invest in (Adelopo & Obalola, 2009).

Even though there has been a number of studies on corporate governance and direct foreign investment (Basson, 2015; Esey & Yaroson,

2014; Lien, Piesse, Strange & Filatotchev, 2005; Morck, Wolfenzon & Yeung, 2005). Yet, this work intend to confirm the link between corporate governance and direct foreign investment by introducing new indicator for corporate governance (ethical behaviour of firms, efficacy of corporate board, protection of minority shareholders and regulation of security and exchange) by global competitiveness index report instead of the traditional ones (Board size, CEO non-duality, board independence, board diversity). This because the traditional corporate governance measures such as board size, firm size and leverage are given at the firm level. Thus, the global competitiveness measure for corporate governance would be appropriate for this study because this study is a panel study that requires data at the country level and global competitiveness measure for corporate governance is reported based on countries.

It is against this backdrop that this study differentiates itself by using new indicator from global competitiveness index report as the indicators of country level corporate governance to analyse corporate governance - direct foreign investment nexus in Sub – Saharan Africa.

### **Purpose of the Study**

The purpose of the study is to examine the role of corporate governance in the attraction of direct foreign investment in Sub – Saharan Africa.

Precisely, the study sought to:

1. analyse the trend of FDI in Sub – Saharan Africa.
2. assess the relationship between ethical behaviour of firms and direct foreign investment in Sub – Saharan Africa.

3. examine the relationship between efficacy of corporate board and direct foreign investment in Sub – Saharan Africa.
4. analyse the relationship between protection of minority shareholders and direct foreign investment in Sub – Saharan Africa.
5. assess the relationship between regulation of security exchange and direct foreign investment in Sub – Saharan Africa.

### **Hypotheses of the Study**

In relation to objective two to five to the following null hypotheses was tested:

1. Ho: there is no significant relationship between ethical behaviour of firms and direct foreign investment in Sub- Saharan Africa.
2. Ho: there is no significant relationship between efficacy of corporate board and direct foreign investment in Sub- Saharan Africa.
3. Ho: there is no significant relationship between protection of minority shareholders and direct foreign investment in Sub- Saharan Africa.
4. Ho: there is no significant relationship regulation of security exchange and direct foreign investment in Sub- Saharan Africa.

### **Significance of the Study**

Direct foreign investment has experienced constant fall in current times (UNCTAD, 2015). This may affect the purpose of countries to achieve high stable economic growth. Hence, this study seeks to analyse corporate governance in direct foreign investment in Sub- Saharan Africa. This, in the view of the researcher could be useful for the policy makers of Sub- Saharan Africa nations to provide suitable governance policies as well as good corporate governance that will help boost direct foreign investment inflow.

Also, the study would serve as guideline to other who would like to investigate related area as well as to provide information to future investigators who may be interested in studying direct foreign investment and corporate governance in Sub-Saharan Africa.

### **Delimitation of the Study**

This study examines country level corporate governance in the attraction of direct foreign investment for the period of 2009 to 2015. The main variables used by this study were direct foreign investment and country level corporate governance. The study cannot say it has considered the overall measures on country level corporate governance employed under global competitiveness index. In that, the study employed just four (which are ethical behaviour of firms, efficacy of corporate board, protection of minority shareholders and regulation of security exchange) out of many such as strength of investor protection, strength of auditing and reporting standard and reliability of police services.

### **Limitations of the Study**

Other relevant measure such as strength of investor protection, strength of auditing and reporting standard and reliability of police services which are part of the measures that made up corporate governance under global competitiveness index were not included. These measures were not included because of time constraint and space.

### **Organization of the Study**

This work is ordered into five chapters. Chapter one, the introductory chapter, gives a background to the study, statement of the problem, purpose of the study, the hypotheses, significance, and delimitation of the study as well as

organization of the study. Chapter two contains the review of related works; theoretical and empirical works related works that underpins the link between corporate governance and direct foreign investment in Sub – Saharan Africa. Chapter three gives the detail of the research method that guided this study. Chapter four scrutinizes and deliberates the findings with reference to the studies reviewed in chapter two. The last chapter provided the summary, conclusions and recommendations of the work understudy.



## CHAPTER TWO

### LITERATURE REVIEW

#### Introduction

The general purpose of this part is to elaborate the evaluation of previous studies on the role of corporate governance structure in the attraction of direct foreign investment in Sub-Saharan Africa. That is, getting related theory and empirical review for the study. This episode is separated into two main portions. The first deliberates on theoretical literature on the corporate governance - direct foreign investment nexus in Sub-Saharan Africa. The second section in this chapter presents a evaluation of empirical evidence on corporate governance - direct foreign investment nexus in Sub-Saharan Africa.

#### Theoretical review

##### Eclectic theory

The eclectic paradigm is a theory that explains why foreign firms and individuals invest in certain economies (Abbas & El Mosallamy, 2016) and it was introduced by Dunning in 1977. This theory gave three reasons namely; ownership, location and internalization that would cause a firm to multinational. Ownership advantages explain why certain firm go abroad yet others do not, it explains that a efficacious multinational company has some firm-unique advantages which cause it to become successful in foreign economies. Location advantages also explain which country to choose. Lastly, internalization advantages affect the way a company chooses to operate in another country.

Specifically, this study would be explained by the firm specific location advantages aspect of this theory. The host country is chosen when the firm can combine its ownership advantages with certain factors in the host country such as corporate governance (Dohse, Hassink & Klaerding, 2012). Thus, Dunning's OLI eclectic paradigm has been expanded to incorporate institutional theory. In 2006 Dunning proposed institution (which includes corporate governance) in the locational advantages needed for a country to receive an FDI.

Therefore, this study argues that, countries need good corporate governance to enable foreign investors to choose them as a host country for their businesses.

### **Empirical review**

Studies were reviewed in relation to hypotheses tested in line with the purpose of the study that reads, corporate governance and direct foreign investment nexus in Sub – Saharan Africa. These are studies that have justified corporate governance and direct foreign investment nexus in Sub-Saharan Africa.

Buchanan (2017), analysed corporate governance and the shareholder: confidence, asymmetry and decision-making. The work is purported to differentiate itself from previous study on the association among disclosure governance, assurance and decision-making of non-institutional accredited stockholder's. The study employed Akerlof's information theory conceptual frameworks as well as Buchholtz's trust and Verstegen Ryan or risk decision model as a supportive theory. Non-random purposive sampling method was used to select 21 informants from non-institutional accredited investor's.

Examination of interview data affirmed the adverse effects of asymmetrical disseminations on members' decision making on investment as well as their trust behaviors.

Tariquzzaman (2017) analyzed whether corporate governance guidelines affect investors: An experimental check of Bangladeshi investors' decisions. The key aim of the study was to assess if investors give much attention to corporate governance when investment decisions is being made. The work involved a 2x2x2 between-member test on real investors which investigated the impacts of corporate governance measures, finance state and insider trading on the investment decision of each investor. The work contributed to studies on corporate board activities and perceptions of investors by using information emerging economy. The finding was, corporate governance has a high positive influence on the decision of an investor. The work again confirmed the results of earlier works that financial circumstance of a company influences the decisions of investors positively. Thus, the findings gave details into the effects of solidifying corporate governance guidelines and variation in financial activities on decisions of investors. The work provided an indication that the wrong act of unlawful insider trading in the developing market of Bangladesh seems not to affect the investment decision of investors, this contradict the results from the developed nations.

Xiaolu, Jieji and Jian (2016), also conducted a study that sought examine the power of corporate governance level on the confidence of investors. It selected the indicators of corporate governance level to assess the how corporate governance level appraisal affect keeping and increasing the confident of investor from the viewpoint of investors. The method used to



measure investors' confidence and corporate governance level was enhanced and the data from only A-share firms listed in Shanghai stock exchange of China from 2011 to 2013 was adopted to investigate the work. The findings revealed that, the vibrant the corporate governance level, the higher the confident of investors.

A study assessed the connection between the performance of governance at macro-level of the Sub – Saharan African countries and whether it is a major factor that influences direct foreign investment inward flows. The work employed panel data fixed effect estimator for 45 Sub – Saharan African economies sampled since 2002 to 2011. The results established that corporate governance at macro-level has a significant positive impact on boosting direct foreign investment inward flows. It provides encouragement to economies that want to attract more of FDI to develop polices which can leverage and promote investment to the Sub – Saharan Africa region, basically, dealing with serious social challenges and sustainable economic growth (Basson, 2015).

Furthermore, the influence of good corporate governance structure in enhancing the confidence of investor in the public financial information was the objective of study. The study used 10 public firms in Jordan. Determinate data were assessed employing the statistical package of social sciences (SPSS) together with other statistical softwares. The work revealed that corporate governance in the public firm in Jordanian is efficient because it conforms with state and federal laws, observing the standards required from listed firms, and employing the finest practices recommended by professional investors and investment firms. Also, the study endorsed that investors confidence should be

maintained and again, the legal framework for corporate governance should be worked base on the proposed development of a conceptual framework. To end, accounting, legal research, economic and administrative that leads to the finest practices that meet the required governance practices should be encourage (Alnaser, Shaban &. Al-Zubi, 2014).

Moreover, this study investigated how the supposed complete observance by financial institutions to risk, compliance and governance practices would improve customers confidence in credit organizations in Malta. The study administered two different questionnaires in order to collect primary data from the general public as well as four officials who invest in Maltese credit organization. When investigating the opinion of customers and comparing the result with experience professional in the business, the detailed of the gaps between the opinion of the professionals as well as their consumers was attained. The work found that risk, compliance and governance practices have a positive effect on the confidence of investors in the Maltese setting. It also found that good governance strongly influences the confidence of investors. The work again indicate that by stressing their approval of risk, compliance and governance practices, the credit institutions in the locality would be accomplishing an additional positive outcome more than simply employing media campaigns or by offer huge interest rates to depositors. Moreover, the work reveals that when tertiary and post-tertiary education grows, it enhances the awareness of investor on their recent financial situation and the relevant of evaluating other indicator other than financial return when selecting a financial institution. Thus, employing of risk, compliance and governance practices would be profitable to the credit institutions engaging

them. That is, credit institution would gain numerous benefit not only enhancing the confidence of investors (Scicluna, 2014).

Another studies too suspected that when corporate governance become vibrant, it might lessen the possibility grow shareholder value and hence reduce merger and acquisition of foreign direct investment inward flows. It added that predicted good governance could reduced acquisition and non-merger of inward flow of direct foreign investment in the event of the opposite correlation between acquisition and merger and acquisition and non-merger of direct foreign investment firms. The study used evidence from firm-level to empirically analyze the impact of United State corporate governance on the acquisition and merger as well as non-merger and acquisition of Japanese foreign direct investment. The result showed that two indicators in the United State corporate governance regulations give details on the sharp drop in acquisition and merger as well as non-merger and acquisition of Japanese foreign direct investment into the United State during the 1990s. The study suggested that corporate governance affect acquisition and merger as well as non-merger and acquisition of Japanese direct foreign investment (Wang, Alba & Park, 2012).

In addition, a study asked a question, does firm-level governance / transparency influences direct foreign investment? It sought to assess the correlation between the foreign direct investments and the corporate governance/ transparency. It adopted variables on country-level foreign direct investment inward flows, corporate governance and transparency variables. The techniques employed was Newey-West estimator regression. The study was panel because 28 country was adopted from 1990- 2002. The results

showed a high positive link between corporate governance/ transparency level and foreign firm performance that country where the FDI is located. A robust positive connection was reported between anti-director rights level or number of analysts of hosting countries and direct foreign investment performance in the hosting economies. Also, the work revealed a positive correlation between the number of analysts of hosting countries and direct foreign investment inward movement (Kim, 2010).

Again, the influence of corporate governance on direct foreign investment was examined in Nigeria. In the work corporate governance restructurings in Nigeria and employing time series data across over a decade were empirically studied to the determinants of foreign capital inflow stating that among the indicators noted in the literature, direct foreign investment is positively related to improvement in corporate governance (CG). The study again reasoned that even though corporate governance principles should be contextualized within the unique nature of the emerging countries, this should not be main factor so that potential foreign investors trust would not be diminished. The study also tried to recognize upcoming directions of the association between corporate governance initiatives and direct foreign investment in Nigeria (Adelopo & Obalola, 2009).

Moreover, how “attractive” is good governance for foreign direct investment? was investigated. It investigated empirically the relevance of corporate governance in enticing FDI compared to other forms of motivations, which includes lower taxes and remuneration costs. To be specific, it used a two-step gravity technique, where in the first step the work controlled for a lot of other well-known element employed in gravity models. And in the second

explicitly analyzed the importance of a set of measuring corporate factors affecting corporate quality. The findings of the study implies corporate governance is important attractors of FDI (Fazio & Talamo, 2008).

Finally, another study build on previous studies by assessing the effects of corporate governance factors on the decision to embark on direct foreign investment. Specifically, it assessed the role of these corporate governance factors on the direct foreign investment decision of (a) the decisions of families that control, (b) the existence of local and overseas institutional shareholders, and (c) the number of the board of directors. This was achieved using a sample of 228 openly listed firms in Taiwan, and the finding showed the control of family and share interest by domestic financial institutions in Taiwanese firms influences the decision to commence direct foreign investment. It again revealed that corporate governance affect different Taiwanese foreign direct investment flows China in comparison to Taiwanese foreign direct investment in the rest of the world (Lien, Piesse, Strange & Filatotchev, 2005).

Therefore, the above reviewed literature justifies that for Sub – Saharan Africa to increase foreign direct investment, it must be vibrant in corporate governance. It can be noted from the above literature that this study is different in term of its measure for corporate governance.

### **Control variable**

#### **Gross domestic product per capita growth (GDPCG)**

A study was conducted on factors of direct foreign investment moving to emerging economies: a cross-sectional analysis and found substantial positive linkage between GDP per capita and FDI (Demirhan & Masca, 2008);

in a study conducted by Mottaleb and Kalirajan (2010) on causes of direct foreign investment in emerging countries and also found that nations with higher GDP growth rate attract more FDI.

### **Inflation**

Many studies have highlighted negative association between inflation and FDI among them are Wani, Haq and Rehman (2017) who examined the determinants of foreign direct investment in Afghanistan: An Empirical Analysis as well as Demirhan and Masca, 2008) who also analyzed the determinants of foreign direct investment flows to developing countries: a cross-sectional analysis.

### **Access to electricity**

Nutassey (2018) found positive relationship between access to electricity and foreign direct investment, this reemphasis the positive relationship between electricity product and foreign direct investment by Ibrahim (2015).

### **Trade Openness**

According to Elheddad (2016), empirical results show that trade openness is one of the main influencers that encourage FDI.

### **Conceptual Framework**

This framework exhibited the relationship between corporate governance and direct foreign investment.

### Independent variables

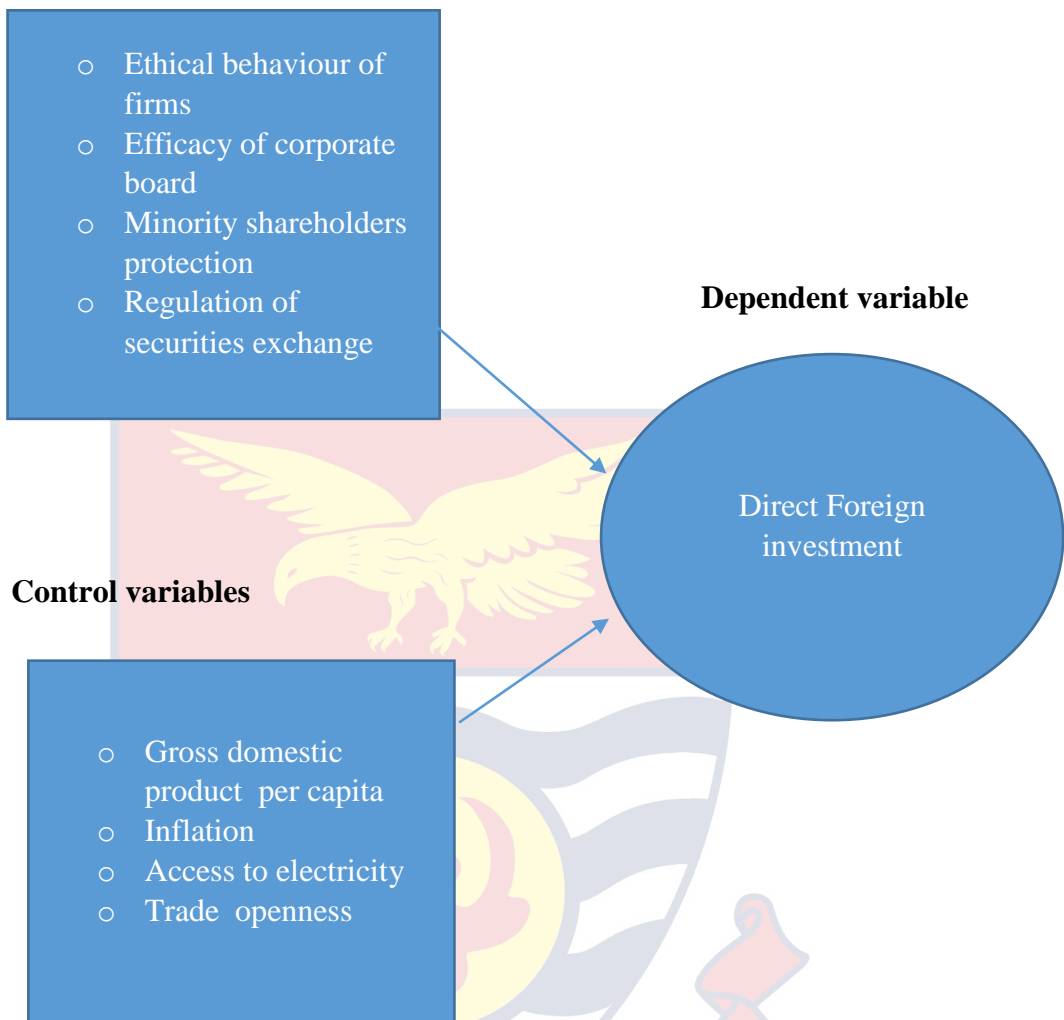


Figure 2: Conceptual framework

Source: Author's Construct, Agbokah (2019)

From the above conceptual framework, corporate governance is viewed by this study as an influencer FDI. In addition, other variables namely, trade openness, gross domestic product per capita, electricity production and inflation were displayed as influencers of foreign direct investment inflow.

### Chapter summary

From the above, a theory was reviewed to support the study, specifically, the theory reviewed were eclectic theory. Since the study sought to examine the relationship between corporate governance and foreign direct

investment in Sub – Saharan Africa. With the expectation that corporate governance influences FDI. Studies were reviewed on the relationship between corporate governance and FDI as well as the control variables and FDI. Conceptual framework was added in order to have a pictorial view of what the study was about.





## CHAPTER THREE

### RESEARCH METHODS

#### Introduction

This part gives detailed information of the research methods to be used in the study. Specifically, research design, research approach, specification of the model, definition and measurement of variables in the model, sources of the data in the study, estimation techniques, tools for data analysis and chapter summary.

#### Research Design

The research design employed in this work was both explanatory and descriptive. The explanatory research is used since the study looks at how one variable predicts the other. That is, how independent(s) (one or more variables) predict the dependent in a model developed. Explanatory research design is deployed in this study because of objective two which state to examine the corporate governance - direct foreign investment nexus in Sub-Saharan Africa. Since, the objective one necessitated the test of hypothesis which reads, there is no significant corporate governance indicators - direct foreign investment nexus in Sub – Saharan Africa.

There are two key methods in research; quantitative and qualitative. In some cases, mixed method is added. Quantitative methods lend itself to objective and numeric analysis as well as generalization of finding (Crowther & Lancaster, 2008). Hence, quantitative approach is suitable for this study since it would develop a mathematical model and objective analysis. This because implementing a quantitative method gives results that could be condensed to statistics; allowing statistical comparison between entities;

findings are specific, definitive and standardize (Nutassey, 2018; Sukamolson, 2005).

### Model Specification

There are two widely used model, namely, time series and panel model. This model are developed owing to the features of the data collected (time series and cross sectional). This study is considering selected Sub – Saharan African nations over a period of time, panel model would be developed. According to Nutassey (2018), panel data combine the features of cross- sectional data and time series data. In other words, when a set of data used for a study considers more than one unit over a period of time, then panel study is deemed appropriate for that study. This study reflects multiple units (Sub- Saharan Africa countries) and time series data from 2009 to 2015 of each unit, thus, panel model was employed.

Following Desbordes and Wei (2017), the dynamic panel model relating to FDI and other explanatory variables, specifically, GMM is stated as:

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

Where *FDI* is direct foreign investment, *C.GOV* is corporate governance, *GDPCG* is gross domestic product per capita growth, *INFR* is inflation rate, *AE* is access to electricity and *TO* is trade openness.

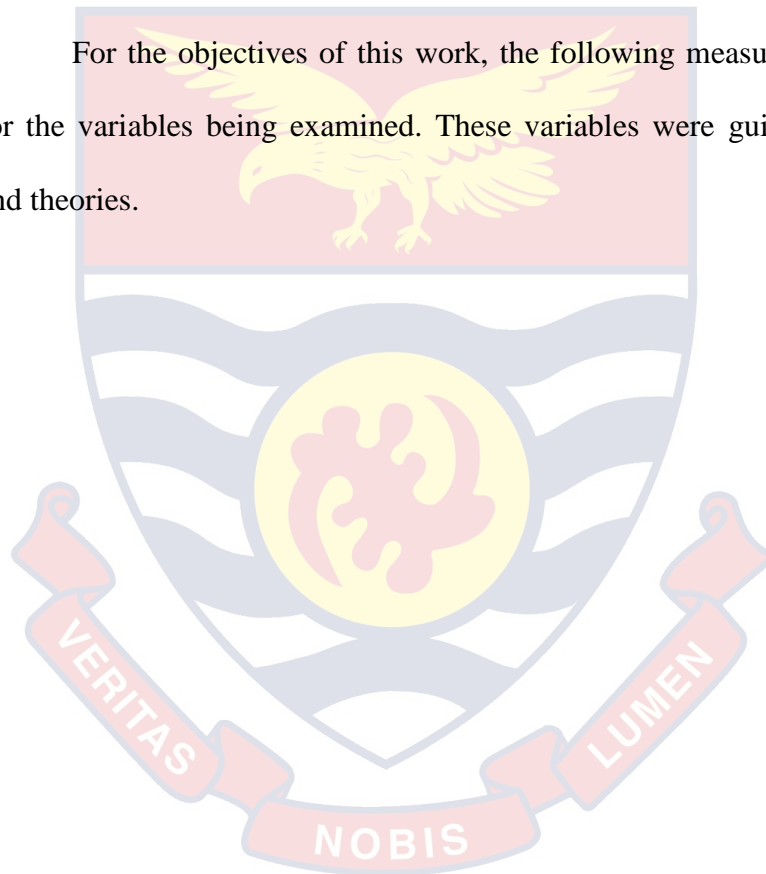
According to Baltagi et al. (2009), pass direct foreign investment have association with current direct foreign investment which presupposes that lag values of the dependent variable must be included in the explanatory variables to avoid miss specification. Therefore, the dynamic GMM panel model of equation (2) is modeled as:

$$FDI_{it} = \alpha_{it} + \delta FDI_{it-1} + B_3 C.GOV_{it} + B_4 GDPCG_{it} + B_5 INFL_{it} + B_6 AE_{it} + B_7 TO_{it} + u_i + \varepsilon_{it} \quad (2)$$

Where  $i$  denotes country ( $i = 33$ );  $t$  refers to the time span from (2009 to 2015) ( $t = 8$ );  $FDI$  is the dependent,  $FDI_{it-1}$  is first lag of foreign direct investment;  $u$  unobserved country-specific effect and  $\varepsilon$  is the error term assumed to be serially uncorrelated.

### Measurement of Variables

For the objectives of this work, the following measurement was used for the variables being examined. These variables were guided by literature and theories.



Variable	Measurement	Meaning
<b>Dependent variable:</b> Direct foreign investment	Foreign direct investment as a percentage of gross domestic production	It is explained as the net inward flows of investment to attain a permanent ownership interest (at least 10% voting stock) in a business working in a nation different from that of the investor (WDI, 2019)
<b>Independent variable:</b> Country level corporate governance	<ol style="list-style-type: none"> <li>1. Ethical behaviour of firms</li> <li>2. Efficacy of corporate board</li> <li>3. Minority shareholders protection</li> <li>4. Regulation of securities exchange</li> </ol>	To what extent is firms with in your country lead and directed well? (Global competitiveness index, 2016)
<b>Control variables:</b> Gross domestic product	Gross domestic product per capita growth	
Inflation	Customer price index	It is the yearly percental variation in the cost to the regular customer of acquiring a basket of goods and services that could be fixed or altered at specified intervals, like yearly (WDI, 2019)
Access to electricity	Access to electricity	It is the percentage of population with access to electricity (WDI, 2019).
Trade Openness	Trade as a percentage of gross domestic products	It is the summation of imports and exports of services and goods measured as a share of gross domestic product (WDI, 2019).

## Sources of Data

This study is considered secondary because of the variables of interest: direct foreign investment, corporate governance and the control variables. These variables are labeled secondary because they are already in existence. These variables adopted in the models were guided by existing literature reviewed on the topic, financial theory, and whether they are statistically good to be used in the models. The work employed yearly data from 2009 to 2015. The period chosen was guided by the date currently available and the current state of affairs in the countries under consideration. Data on direct foreign investment and the variables used to control the model were obtained from World Bank's Development indicators (WDI), 2015 but date on corporate governance was obtained from global competitiveness index.

## Estimation Technique

This study assesses the corporate governance - direct foreign investment nexus with data crossing from 2009 to 2015. The main technique used for the estimation was dynamic generalised method of moment (GMM). The dynamic general method of moments (GMM) estimator was promoted by Arellano and Bond (1991) and Blundell and Bond (1998) and is the most efficient for two main reasons. This is because the dynamic Generalized Method of Moment exercises direct control of endogeneity problems caused by the independent variables. Also, it is appropriate because of the data, the time series period is less than cross section unit (Roodman, 2006). The time period considered in this study is 8 which is less than the 33 countries that have been included. To ensure whether the estimation is consistent, the study applied the Arellano and Bond test of second order serial correlation with the

disturbance term (Arellona & Bond, 1991). This estimation is made possible by adopting the lags of the independent variables as instrumental variables. All estimations were done using Eview 9.0.

### **Post Estimation Tests**

The Generalized Method of Moment technique do not contain much assumptions on the error term. Two common tests are considered after the GMM estimation (Blundell & Bond, 1998). The first is the Arellano and Bond test of autocorrelation (AR-test) (Roodman, 2009). The AR-test account for the test statistics of the first and second difference autocorrelation in default mode but the lag levels can be adjusted. It poises a null hypothesis of no autocorrelation in the first difference error which demands that the study fail to reject the null hypothesis. That is, if the probability value is higher, then the autocorrelation of the model is less. A correction to the problem of autocorrelation is the two-step estimation. When using the two-step estimation, the standard covariance matrix is robust to individual specific autocorrelation and heteroskedasticity, but the standard errors are downward biased (Baltagi, 2008). Windmeijer (2005) procedure can be used to get the finite-sample corrected two-step covariance matrix.

The subsequent test is the Hansen/Sargan test of valid over-identifying restriction. It has a null hypothesis of correct over-identifying restrictions which requires that this study accept the null hypotheses like the case of the AR-test. For one-step, non-robust estimation gives the Hansen/Sargan test, which is the smallest value of the one-step GMM criterion function. The Sargan test is not robust to heteroskedasticity or autocorrelation. So for one-step, robust estimation and for all two-step estimation also reports the Hansen

test, which is the smallest value of the two-step GMM criterion function, and is robust to heteroskedasticity or autocorrelation.

### Chapter Summary

This chapter presents the research methods involved in undertaking this study. This study was purely quantitative in its approach. It also employed the explanatory research design because the independent variables predicted the dependent variables. Again, the study comprises thirty – three (33) Sub-Saharan African countries based on data available. In addition, the model developed in the study sought to test four hypotheses. They read there is no substantial relationship between ethical behaviour of firms and direct foreign investment in Sub-Saharan Africa, there is no substantial association between efficacy of corporate board and direct foreign investment in Sub-Saharan Africa, there is no substantial association between protection of minority shareholders and direct foreign investment in Sub-Saharan Africa and there is no substantial association between regulation of security exchange and direct foreign investment in Sub-Saharan Africa.

Furthermore, the study employed the dynamic Generalized Method of Moment estimation techniques to attain the aims of the study. The tool used to run the analysis was stata.

## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### Introduction

This chapter give the detailed finding of the study and provides discussion for the results. The outcomes are provided in figures and tables. The results and discussions were presented in accordance with the specific objectives for the study. It started with trend analysis of direct foreign investment inward movements in Sub- Saharan African economies for the period of 2009 to 2015. The trend analysis was presented on direct foreign investment. It began with trend analysis, descriptive statistics and finally, correlation analysis for the study.

#### Trend Analysis

This section seeks adopt trend analysis which gives pictorial presentation of FDI, in Sub-Saharan Africa from the period of 2009 to 2016 in order to achieve objective one that read, analysing the trend of FDI for Sub – Saharan Africa. This trend analysis was conducted based on available data obtained on direct foreign investment inward movement into Sub-Saharan Africa from World Development Indicator (WDI). The trend analysis reveals the pictorial performance of Sub – Saharan Africa in direct foreign investment inflow.



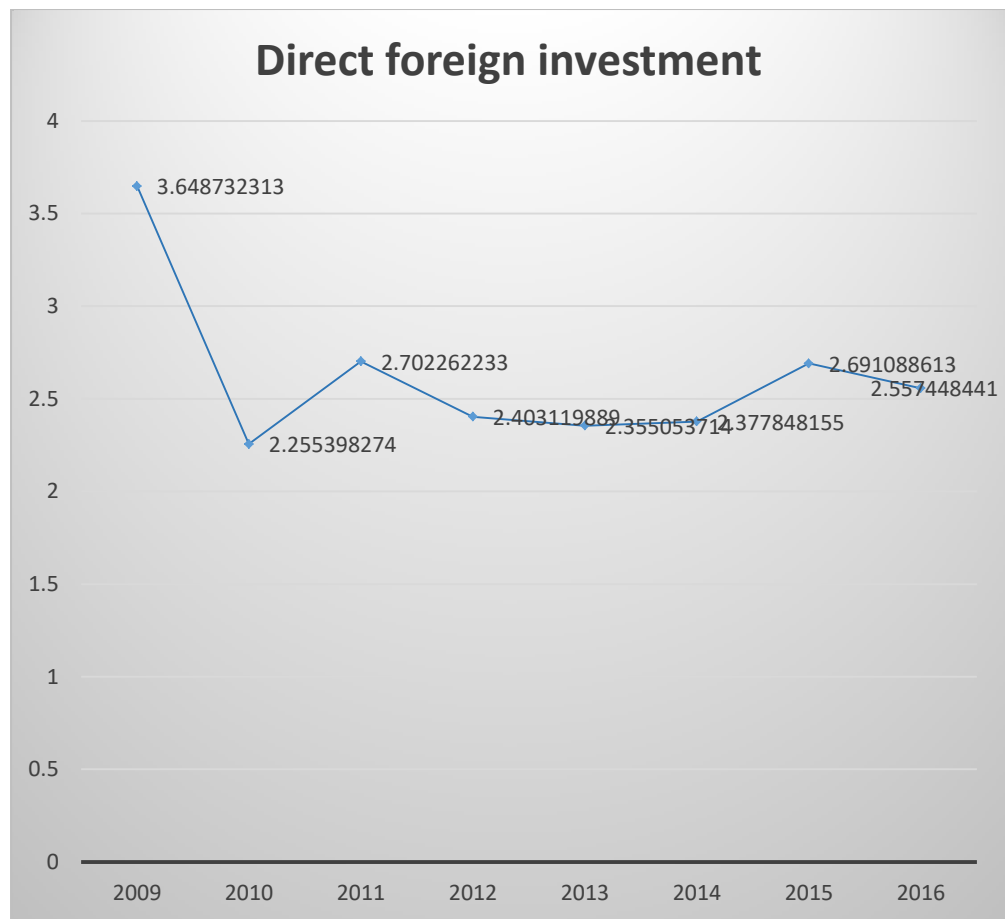


Figure 3: Trend of foreign direct investment

Source: Field survey, Agbokah (2019)

From figure 2, the study depicts the nature of foreign direct investment from 2009 to 2016. It portrays that FDI inflow reduced from 3.65 in 2009 to 2.26 in 2010, it increased to 2.70 in 2011. It again reduced to 2.40 in 2012 and reduced further to 2.36 in 2013. It rise a bit in 2014 to 2.37, then to 2.69 in 2015 and finally, dropped to 2.56 in 2016

Generally, the nature of direct foreign investment (FDI) inward movement into Sub- Saharan Africa is unpredictable. Also, the pictorial performance of direct foreign investment inward movement to Sub- Saharan Africa is poor. Cantah, Wiafe & Adams (2013), agrees that the performance of direct foreign investment in Sub- Saharan Africa is bad, they recorded in their

study that Sub-Saharan African nations still entice low level of FDI over the years as compared with other regions.

### **Descriptive Statistics**

The variables employed with their descriptive statistics were presented in Table 1. These descriptive captures thirty - five (35) economies with a time period of eight (8) years. It gives report on the standard deviation, mean, maximum and minimum values and the observation for the variables of the study. The mean measures the average values of the variable but standard deviation measure the dispersion. The maximum and minimum values capture the range of variables. The total number of observation is 242.

The dependent variable foreign direct investment has a standard deviation of 9.214 which is higher than the central tendencies, mean 4.971 which means there is high fluctuation around the mean between a range of -6.014 to 79.942. Also, the composite of the four corporate governance has a standard deviation of 0.725 which is more than the mean 3.925. This means there is low fluctuation around the mean between a range of 2.025 to 6.269.

Again, the descriptive statistics of the individual indicators were presented as follow: Ethical behaviour of firms (EBF) with in the range of 2.499 to 6.269 shows a standard deviation of 0.618 which is lesser than its mean 3.257 which demonstrate low fluctuation around its mean. Efficacy of corporate board has a standard deviation of 0.550 and a mean of 4.169; thus, these variables also indicate a high fluctuation around the mean. Minority shareholders protection (MSP) also with in a range of 2.467 – 5.945 has a standard deviation of 3.901 which is higher than its mean of 0.890 indicating high fluctuation around the mean. Regulation of securities exchange too has a

standard deviation of 0.995 which is lower than the mean of 3.578, this show a low fluctuation around the mean.

More so, the control variables gross domestic product per capita (GDPC), Inflation (INFLA), access to electricity (AE) and trade openness (TO), have their standard deviations to be 20.186, 29.152, 76.090 and 967.341 respectively. These are lower than their associated means of 32.73, 30.362, 166.142 and 287.00. This, indicate less variability around their means.

**Table 1: Descriptive Statistics**

Variables	Mean	Standard Deviation	Minimum	Maximum	Observation
FDI	4.971	9.214	-6.014	79.942	242
CGOV	3.925	0.725	2.025	6.375	242
EBF	3.257	0.618	2.499	6.269	242
ECB	4.169	0.550	2.234	6.198	242
MSP	3.901	0.890	2.467	5.945	242
RSE	3.578	0.995	1.252	6.497	242
GDPC	32.731	20.186	0.204	78.63	242
INFL	30.362	29.152	0.651	84.85	242
AE	166.142	76.090	49.148	310.2	242
TO	287.003	967.341	3.989	5.282	242

Source: Field survey, Agbokah (2019).

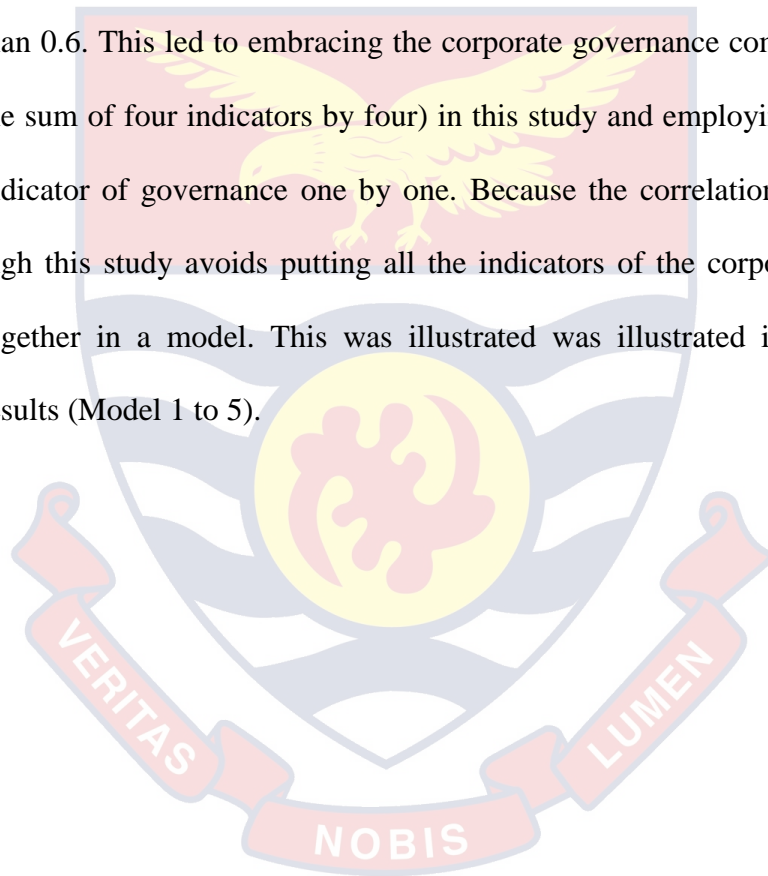
### Correlation Analysis

The correlation among the indicator employed in this work is given in Table 2. Correlation analysis was tested in order to identify variables that are multi-collinearity based on the cross section data of the panel data. The correlation coefficient between independence variable (direct foreign investment) as well as the composite corporate governance indicators is negative and significant (-0.000). This means that these two variables are related and relationship can be tested between them. Also, the correlation matrix shows a significant negative association between direct foreign investment inflows into Sub-Saharan African economies and ethical behaviour of firm (EBF) with coefficient of -0.070. Again, the correlation matrix indicated negative correlation between direct foreign investment (FDI) and efficiency of corporate board (ECB) with the coefficient of -0.059. Furthermore, the correlation matrix indicated positive relationship between foreign direct investment (FDI) and minority shareholder protection (MSP) with the coefficient of 0.064. Finally, the correlation matrix indicated a negative correlation between direct foreign investment (FDI) and regulation of security and exchange (RSE) with the coefficient of -0.071. Since, the coefficient of the correlation matrix between the direct foreign investment and the independent variables used are below 0.6. Then, it can be concluded that employing corporate governance indicators as the independent variables of foreign direct investment is justified because there is no multi-collinearity between the governance indicators and direct foreign investment.

Similarly, the correlation between the control variables (gross domestic production per capital (GDPC), inflation (INFLA), electricity production (EP)

and trade openness (TO)) and the direct foreign investment were all significant with coefficients -0.024, 0.014, 0.057 and 0.548 respectively. The coefficients were below 0.6 and are therefore justified to be used as control variable to the dependent variable, direct foreign investment because it indicates that the control variables and direct foreign investment are not correlated.

However, the results from Table 3 show that, the corporate governance indicators are highly correlated because the coefficients among them are more than 0.6. This led to embracing the corporate governance composite (dividing the sum of four indicators by four) in this study and employing the individual indicator of governance one by one. Because the correlation among them is high this study avoids putting all the indicators of the corporate governance together in a model. This was illustrated was illustrated in the regression results (Model 1 to 5).



**Table 2: Correlation Matrix**

	FDI	CGOV	EBF	ECB	MIP	ERSE	GDPC	INFL	AE	TO
FDI	1.000									
CGOV	-0.000	1.000								
EBF	-0.070	0.751	1.000							
ECB	-0.059	0.708	0.615	1.000						
MSP	0.064	0.770	0.683	0.718	1.000					
RSE	-0.071	0.691	0.741	0.748	0.791	1.000				
GDPC	-0.024	0.461	0.367	0.457	0.401	0.372	1.000			
INFL	0.014	0.001	0.0019	0.022	-0.018	-0.015	-0.005	1.000		
AE	0.057	0.013	-0.010	-0.041	0.008	0.039	0.018	0.336	1.000	
TO	0.548	0.112	0.123	0.434	0.076	0.047	0.357	-0.004	0.020	1.000

Source: Field survey, Agbokah (2019)

## Regression result

This section gives a discussion of the regression outcome for the models of the study centered on objective two to five. These objectives reads: assess the relationship between ethical behavior of firms and direct foreign investment in Sub – Saharan Africa, assess the relationship between efficacy of corporate board and direct foreign investment in Sub – Saharan Africa, assess the relationship between protection of minority shareholders and direct foreign investment in Sub – Saharan Africa, assess the relationship between regulation of security exchange and direct foreign investment in Sub – Saharan Africa. In view of that, Table 4 depicts the lag of direct foreign investment FDI (-1) as an instrument in order to prevent endogeneity problems, foreign direct investment inflow as the dependent variable and corporate governance indicators as the independent variables. The control variables that was presented were economic growth (GDPC), inflation (INFLA), access to electricity (AE) and trade openness (TO) to ensure the avoidance of omission of relevant variables (Adam & Owusu, 2017).

**The relationships among corporate governance indicators and foreign direct investment in Sub – Saharan Africa**

**Table 3: Regression result**

**Dependent Variable: Foreign direct investment**

	Model 1	Model 2	Model 3	Model 4	Model 5
FDI -1	0.0411*** 0.0010	0.0399*** 0.0020	0.0400*** 0.0014	0.0311*** 0.0012	0.0296*** 0.0009
CGOV	40.986*** 0.0003				
EBF		35.001*** 0.0000			
ECB			24.114*** 0.0001		
MSP				31.909*** 0.0005	
RSE					-9.000*** 0.0089
<b>Control</b>					
GDPC	9.1583*** 0.1203	8.5115*** 0.0695	8.6320*** 0.0822	8.6572*** 0.0626	9.2768*** 0.1010
INFL	-0.011*** 0.0001	-0.0115*** 0.0002	-0.0109*** 0.0002	- 0.0126*** 0.0002	- 0.0103*** 0.0001
AE	0.0260*** 0.0012	0.0251*** 0.0014	0.0239*** 0.0005	0.0229*** 0.0006	0.0283*** 0.0006
TO	0.0152*** 0.0002	0.0194*** 0.0004	0.0189*** 0.0003	0.0198*** 0.0002	0.0192*** 0.0005
<b>Diagnostic</b>					
J- Stat	36.6001	36.5219	34.1570	35.3659	36.4998
Prob. Of	0.4399	0.4401	0.5001	0.4912	0.4749
J- Stat					
AR(2):z	0.7160	NA	0.1951	0.2013	0.7905
No. of	326	326	326	326	326
Obs.					

The first represent the coefficient; the second value is the standard error;

\*\*\*significant at 1% ( $p < 0.01$ ) and \*\*significant at 5% ( $p < 0.05$ )



**Model 1: The role of corporate governance in the attraction of direct foreign investment in Sub – Saharan Africa.**

Model 1 addresses the overall purpose of the study which reads, the role of corporate governance in the attraction of direct foreign investment in Sub- Saharan Africa. As such, Model 1 throws light on the composite index of the corporate governance indicators and how it influences direct foreign investment in Sub- Saharan Africa.

Model 1 indicate a positive significant level of 1%, on the relationship between composite of the four corporate governance indicator and direct foreign investment inflows into Sub- Saharan African over the period from 2009 to 2015. This means, the results reject the hypothesis, there is no significant relationship corporate governance and direct foreign investment in Sub – Saharan Africa. The result in the table implies that, an increase in corporate governance causes 40.986 growth in direct foreign investment into Sub – Saharan Africa. Hence, the result indicates that foreign investors consider the corporate governance of a country before chosen it as for investment. This is so because when a business is established in an economy, it is going to be directed and controlled, just like the way corporate governance has been in the chosen in that economy. The 40.986 increase in the foreign direct investment cause by corporate governance as indicated in model 1 emphasize the huge role corporate governance play in bring in foreign investors. This explains why Dunning included corporate governance to locational advantage an economy has in attracting foreign investor in the eclectic theory in 2006. The findings is supported by Lien, Piesse, Strange and Filatotchev (2005) who stated in their study that the nature of corporate

governance in a country influence the decisions of foreign investors. The results of the study by Fazio and Talamo (2008) validate the result depicted in model 1 that good corporate governance is important attractors of foreign direct investment (FDI). Kim (2010) too argued that corporate governance or transparency level of hosting countries affect direct foreign investment performance within the hosting countries. Contrary to this findings and other studies, Wang, Alba and Park (2012) concluded in their study that improved corporate governance can lessen the scope for increase shareholder value and as such discourage acquisition and merger direct foreign investment inflows. It further augured good governance may also discourage acquisition and non-merger direct foreign investment inflows in with regards to complementary relationship between acquisition and merger as well as acquisition and non-merger direct foreign investment inflows.

Again, the findings in model 1 showed that the lag of direct foreign investment have positive significant correlation with the current FDI at 0.99 confidence level. This implies that an increase in previous direct foreign investment leads to 0.0411 increase in current direct foreign investment (FDI). This suggests that there is endogeneity problem and including the lag of direct foreign investment was necessary in order to prevent misspecified result. The results obtain by Nutassey (2018) support this finding, yet that of Dellis, Sondermann and Vansteenkiste (2017), oppose this findings.

Also, the results gave a positive significant correlation between gross domestic product per capita and direct foreign investment (FDI) from 2009 to 2015 in Sub- Saharan Africa. It established that an increase in GDPC increases the inward flows of direct foreign investment (FDI) by 9.1583. This supports

previous related results such as Demirhan and Masca (2008), which found significant positive correlation between GDP per capita and FDI.

Moreover, another result was present by model 1 representing significant negative relationship between inflation and direct foreign investment in Sub – Saharan Africa countries. An rise in inflation lead to 0.011 decline in direct foreign investment (FDI). It is very normal in literature to find negative relationships between inflation and FDI (Wani, Haq & Rehman, 2017; Demirhan & Masca, 2008). This is because high inflation rate presupposes more increase in price, thus, high cost of production for the foreign investor.

In addition, the results revealed substantial positive correlation between access to electricity and direct foreign investment. To be more specific, a growth in access to electricity result in 0.0260 foreign direct investment. A confirmation of the result can be drawn for Ibrahiem (2015) who also found positive relationship between access to electricity and direct foreign investment. This presupposes that, one means government can draw in direct foreign investment is by increasing access to electricity.

Finally, model 1 depicts a substantial positive relation between trade openness and direct foreign investment in Sub- Saharan Africa from the period of 2009 to 2015 at 1% significant level. This indicates that an increase in trade openness causes 0.0152 increase in FDI. This suggests that when a country becomes business friendly it tend to increase the inflow of foreign direct investment. The result of this study is backed by Shah and Khan (2016), who also proved positive correlation between trade openness and direct foreign investment inflows.

**Model 2: there is no significant relationship between ethical behaviour of firms (ECB) and foreign direct investment in Sub – Saharan Africa.**

Model 2 discussed the result on objective two (2) which sought to analyse the relationship between ethical behaviour of firms and direct foreign investment in Sub – Saharan Africa. Model 2 presented a positive significant level of 1%, on the correlation between ethical behaviour of firms and direct foreign investment inflows into Sub- Saharan African over the period from 2009 to 2015. This means, the results reject the hypothesis, there is no substantial correlation between ethical behaviour of firms and direct foreign investment in Sub – Saharan Africa. The result in the table implies that, an increase in corporate governance causes 35.001 rise in direct foreign investment into Sub – Saharan Africa. This outcome is backed by Miletkov, Poulsen and Wintoki, (2014), who argued that economies that have independent and effective corporate boards of directors encourage capital investment from foreign countries. Essen, van Oosterhout and Carney (2012), concluded in his study that corporate boards stimulate investment efficiency. This presupposes that nations that would wish to boast direct foreign investment, it must ensure that corporate boards are well constituted and ethical. Kim (2010) opined that transparency of a board has a great influence on the attraction of foreign investors. Any ethical behaved firm is most likely to be transparent. The result again through a light on the weight ethical doctrines carry when it comes to enticing foreign investors to invest in Sub – Saharan Africa economies. Fairness, equality and transparency to interest groups, especially, shareholders are considered major requirements to attract direct foreign investment in every nation (Kasser & Sheldon, 2009). This

implies that for Sub-Saharan Africa to be able to attract high foreign investors, it should be able to guarantee ethically-oriented corporate practices.

Similar to model 1, the findings in model 2 showed that the lag of direct foreign investment have substantial positive correlation with the current FDI at 1% significant level. This presupposes that an increase in past direct foreign investment leads to 0.0399 rise in current direct foreign investment (FDI). This suggests that there is endogeneity problem and inclusion of the lag of direct foreign investment was necessary in order to prevent misspecified result. The results obtained by Agyemang; et al. (2019) depicted a negative correlation between the lag of direct foreign investment and current direct foreign investment.

More so, the results gave a substantial positive correlation between gross domestic product per capita and direct foreign investment (FDI) from 2009 to 2015 in Sub-Saharan Africa. It established that an increase in GDPC increases the inflows of direct foreign investment (FDI) by 8.5115. This is in line with the results Mottaleb and Kalirajan (2010) on element of direct foreign investment in emerging nations: A comparative analysis, it was found that countries with higher GDP growth rate attract more direct foreign investment.

Furthermore, results presented by model 2 indicated significant negative correlation between inflation and direct foreign investment in Sub-Saharan Africa countries. an increase in inflation will cause 0.0115 reduction in foreign direct investment (FDI) inflow. Studies define inflation as a constant rise in the general price level (Cantah, Wiafe, & Adams, 2013), this discourages investment.

Additionally, the results showed a substantial positive correlation between access to electricity and direct foreign investment. This implies that an increase to access to electricity lead to 0.0251 foreign direct investment. Nutassey (2018) explained in her study that electricity production affect foreign direct investment. This presupposes that, one means government can draw in foreign direct investment is by improving access to electricity. Intuitively, if access to electricity is low, investor are likely to feel reluctant about investing in that economy.

As a final point, model 2 depicts a substantial positive correlation between trade openness and direct foreign investment in Sub- Saharan Africa from the period of 2009 to 2015 at 1% significant level. This indicates that a rise in trade openness lead to 0.0194 rise in direct foreign investment (FDI). When rule and regulation over businesses in a country concerning doing business are reduce, it helps to bring in more investment.

**Model 3: there is no significant correlation between efficacy of corporate board and direct foreign investment in Sub – Saharan Africa.**

Model 3 too presented a positive significant level of 5%, on the correlation between efficacy of corporate boards and direct foreign investment inflows into Sub- Saharan African between the period from 2009 to 2015. This means, the results reject the hypothesis, there is no substantial correlation between efficacy of corporate board and direct foreign investment in Sub – Saharan Africa. The result in the above table implies that, 0.05 increase in corporate governance causes 24.114 increase in direct foreign investment into Sub – Saharan Africa. The result from this study stresses that foreign investor take special interest in an economy whose corporate board are accountable to

shareholder and corporate board. Hence, international investors believe their money would be in danger in an economy characterized by unaccountable corporate governance structures (Globerman & Shapiro, 2003). Miletkov, Poulsen and Wintoki (2014), established in their study that effective corporate board have a substantial influence on direct foreign investment, which is in line with the result of this study. According to Global Competitiveness Index (2016), the 2007 to 2008 worldwide financial disaster together with frequent corporate issues, has emphasized the importance of accounting and reporting standards and trustworthiness for elimination of fraud and maladministration, guaranteeing good governance which lead to preserving and building investor faith.

Also model 1, the findings in model 2 showed that the lag of direct foreign investment have positive significant correlation with the current FDI at 1% significant level. This can be further explain as an increase in **pass** direct foreign investment leads to 0.0400 improvement in current direct foreign investment (FDI). This suggests that there is endogeneity problem and introduction of the lag of direct foreign investment was necessary in order to prevent misspecified result.

More so, the results gave a substantial positive correlation between gross domestic product per capita and foreign direct investment (FDI) from 2009 to 2015 in Sub- Saharan Africa. It established that an increase in GDPC increases the inflows of direct foreign investment (FDI) by 8.6320. This favour the results of Baklouti and Boujelbene (2016), who conducted interrelationships between direct foreign investment and economic growth and

found bidirectional causality between them. Implying that economic growth causes foreign direct investment.

Still, results presented by model 3 indicated significant negative relationship between inflation and direct foreign investment in Sub – Saharan Africa countries. An intensification in inflation will cause 0.0109 reduction in foreign direct investment (FDI) inflow. The result contradicts the results in this study because Omankhanlen (2011) established that there is no correlation between inflation and direct foreign investment.

Again, the results showed a substantial positive correlation between access to electricity and direct foreign investment at 1% significant level. This implies that an increase to access to electricity lead to 0.0239 foreign direct investment. Based on this result we can say, foreign investor requires a higher access to electricity to choose a country as a host.

Lastly for model 3, the results depict a substantial positive correlation between trade openness and direct foreign investment in Sub- Saharan Africa from the period of 2009 to 2015 at 1% significant level. This indicates that an upsurge in trade openness lead to 0.0189 intensification in direct foreign investment (FDI).

**Model 4: there is no significant relationship between protection of minority shareholders and foreign direct investment in Sub – Saharan Africa.**

Model 4 too presented a positive significant level of 1%, on the relationship between efficacy of corporate boards and direct foreign investment inflows into Sub- Saharan African over the period from 2009 to 2015. This means, the results reject the hypothesis, there is no substantial



correlation between protection of minority shareholder and direct foreign investment in Sub – Saharan Africa. The result in the table implies that, an increase in the protection of minority shareholder lead to 31.909 strengthening in direct foreign investment inflow into Sub – Saharan Africa. Therefore, numerous studies have posited that comparably economies that protect the interest of minority stockholders attract a higher foreign direct investment because investors feel safe (La Porta, Lopez-de-Silanes, Shleifer & Vishny, 2000). This has led a number of countries in developing good corporate governance guideline in order to cause high foreign investment seeking to attract foreign direct investment (Aguilera & Cuervo-Cazurra, 2004). These codes empower shareholders in the minority to have same right and power as those shareholders in the majority. This result also confirms agency theory which further state that when a country refuse to protect minority shareholders' interest, it encourages international investors to divert the income out of the country (Klapper & Love, 2004).

Also, model 4 showed that the lag of direct foreign investment have positive significant correlation with the current FDI at 1% significant level. This presuppose that a rise in pass direct foreign investment leads to 0.0311 intensification in current direct foreign investment (FDI). This suggests that there is endogeneity problem and introduction of the lag of direct foreign investment was necessary in order to prevent misspecified result.

More so, the results gave a substantial positive linkage between gross domestic product per capita and direct foreign investment (FDI) from 2009 to 2015 in Sub- Saharan Africa. It established that an increase in GDPC increases the inward flows of direct foreign investment (FDI) by 8.6572.

Iamsiraroj and Doucouliagos (2015), indicated that there is a robust positive linkage between economic growth and direct foreign investment. They further argued significantly higher correlations for individual nation case studies than with cross-country analysis. Again, they stated that it appears that growth is a little more related with direct foreign investment in emerging nations.

Furthermore, results presented by model 4 indicated significant negative relationship between inflation and direct foreign investment in Sub – Saharan Africa countries. A growth in inflation would cause 0.0126 fall in direct foreign investment (FDI) inflow. The result is supported by (Kiat, 2008) who concluded in the study titled as the impact of exchange rate and inflation on direct foreign investment and its correlation with economic growth in South Africa that there is negative correlation between inflation and foreign direct investment (FDI).

Likewise, the results showed a substantial positive correlation between access to electricity and direct foreign investment. This implies that an increase to access to electricity lead to 0.229 foreign direct investment. Model 2 again depict a substantial positive correlation between trade openness and direct foreign investment in Sub- Saharan Africa from the period of 2009 to 2015 at 1% significant level. This indicates that an increase in trade openness lead to 0.0198 upsurge in direct foreign investment (FDI). This result confirms the findings of Donghui, Yasin, Zaman and Imran (2018).

**Model 5: There is no significant relationship between regulation of security exchange and foreign direct investment in Sub – Saharan Africa.**

Model 5 too presented no substantial correlation between regulation of security exchange and direct foreign investment inflows into Sub- Saharan

African spanning from 2009 to 2015. This means, the results failed to reject the hypothesis, there is no substantial correlation between regulation of security exchange and direct foreign investment in Sub – Saharan Africa. The result in the table means, an increase in corporate governance lead to 9.000 decline in direct foreign investment into Sub – Saharan Africa. When rules and regulation over businesses in a country concerning doing business are reduced, it helps to bring in more investment (Nutassey, 2018).

The model showed that the lag of direct foreign investment have positive significant correlation with the current direct foreign investment (FDI) at 1% significant level. This suggests that an rise in pass foreign direct investment causes 0.0296 intensification in current direct foreign investment (FDI). This advocates that there is endogeneity problem and introduction of the lag of direct foreign investment was necessary in order to prevent misspecified result. The results obtain from Dellis, Sondermann and Vansteenkiste (2017), contradict this result because lag of FDI in their study was not significant.

More so, the results gave a substantial positive linkage between gross domestic product per capita and direct foreign investment (FDI) from 2009 to 2015 in Sub- Saharan Africa. It established that an increase in GDPC increases the inflows of foreign direct investment (FDI) by 9.2768. Simionescu (2016) identified a positive correlation between direct foreign investment and economic growth in EU-28. However, the work established that is not every economic growth that increases direct foreign investment.

Also, results presented point to significant negative linkage between inflation and direct foreign investment in Sub – Saharan Africa countries. An

increase in inflation cause 9.2768 reduction in direct foreign investment (FDI) inflow. Studies define inflation as a persistence rise in the general price level (Cantah, Wiafe, & Adams, 2013), this discourage investment.

Additionally, the results showed a substantial positive correlation between access to electricity and direct foreign investment. This implies that an increase to access to electricity lead to 0.0283 direct foreign investment. It again showed substantial positive connection between trade openness and direct foreign investment in Sub- Saharan Africa from the period of 2009 to 2015 at 1% significant level. This indicates that an increase in trade openness lead to 0.0192 increase in foreign direct investment (FDI).

### **Chapter Summary**

In light of the purpose of the study the role of corporate governance in direct foreign investment inflow in Sub- Saharan Africa. This study addresses five specific objectives. It started with the first objective and gave trend analysis of direct foreign investment in Sub – Saharan African. The second objective, assess the relationship between ethical behaviour of firms and direct foreign investment in Sub – Saharan Africa was given by model 2, where the study rejected the hypothesis there is no substantial linkage between ethical behaviour of firms and direct foreign investment in Sub- Saharan Africa countries. There third objective was also indicated in model 3, which examined the correlation between efficacy of corporate board and direct foreign investment in Sub – Saharan Africa, the results rejected the hypothesis there is no substantial connection between efficacy of corporate board and direct foreign investment in Sub- Saharan Africa economies. Model 4 also analysed the relationship between protection of minority shareholders and

direct foreign investment in Sub – Saharan Africa and rejected the null hypothesis three (3), that read there is no substantial association between protection of minority shareholders and direct foreign investment in Sub – Saharan Africa. Again, model 5 assessed the relationship between regulation of security exchange and direct foreign investment in Sub – Saharan Africa and also, rejected the null hypothesis that there is no significant relationship between regulation of security exchange and direct foreign investment in Sub – Saharan Africa. Model 1 presented result on the composite of the corporate governance and direct foreign investment and the result was 99% confidence level significant.



## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMENDATIONS

#### Introductions

This presents the final chapter of the work. It contains the major outcomes after running the analysis base on the specific objectives. The chapter also presents a summary of conclusions, recommendations as well as the suggestions for further research.

#### Summary of the Study

The study examined the relationship between corporate governance and direct foreign investment in Sub- Saharan employing a new measure form the global competitiveness. This is because the traditional measure for corporate governance was create based on firm level. After reviewed existing literature that was in line with the purpose of the study. It was proven that none of the study has employed the global competitiveness indicators on corporate governance. Thus, this will helps confirm the strength of the relationship between corporate governance and direct foreign investment.

Base on the purpose of the study explanatory research design was used in because corporate governance is predicting the inflow of direct foreign investment in Sub- Saharan Africa.

#### Findings of the Study

With reference to the main purpose of this study, to analyse the role of corporate governance in the attraction of direct foreign investment, specifically the study sought to:

1. analyse the trend of FDI in Sub – Saharan Africa.

2. assess the relationship between ethical behaviour of firms and direct foreign investment in Sub – Saharan Africa.
3. examine the relationship between efficacy of corporate board and direct foreign investment in Sub – Saharan Africa.
4. analyse the relationship between protection of minority shareholders and direct foreign investment in Sub – Saharan Africa.
5. assess the relationship between regulation of security exchange and direct foreign investment in Sub – Saharan Africa.

The first objective with the research objective, analyzing trend of direct foreign investment in Sub- Saharan Africa concluded that the nature of direct foreign investment in Sub- Saharan Africa was unpredictable and poor (see figure 2).

The second objective examined assess the relationship between ethical behaviour of firms and direct foreign investment in Sub – Saharan Africa with the hypothesis there is no substantial association between ethical behaviour of firms and direct foreign investment in Sub – Saharan Africa. The result was an increase in ethical behaviour of firms causes 35.001 growth in direct foreign investment into Sub – Saharan Africa. This rejected the null hypotheses which implied there is substantial positive association between ethical behaviour of firms and direct foreign investment in Sub – Saharan Africa (see table 3, model 2).

The third objective also inspected the association between efficacy of corporate board and direct foreign investment in Sub – Saharan Africa. The null hypothesis was there is no significant association between efficacy of corporate board and direct foreign investment in Sub – Saharan Africa. The

study rejected the null hypothesis, meaning there is substantial positive association between efficacy of corporate board and direct foreign investment in Sub – Saharan Africa (see table 3, model 3). Precisely, the result indicate was an increase in efficacy of corporate board causes 24.114 rise in direct foreign investment into Sub – Saharan Africa.

The fourth objective of the study sought to analyse the relationship between protection of minority shareholders and direct foreign investment in Sub – Saharan Africa. The finding was that protection of minority shareholders influence direct foreign investment inward movement in Sub – Saharan Africa positively. This was because protection of minority shareholders and direct foreign investment inflow in Sub – Saharan Africa statistically was significant, and therefore an increase protection of minority shareholders boast direct foreign investment inflow in Sub – Saharan Africa by 31.909 (see table 3, model 4).

Surprisingly, the fifth objective of the study found negative relationship between regulation of security exchange and direct foreign investment, when it assess the relationship between regulation of security exchange and direct foreign investment in Sub – Saharan Africa. The finding was that regulation of security exchange influence foreign direct investment inflow negatively by -9.000. Hence, when regulation of security exchanges increase it discourages direct foreign investment inward movement in Sub – Saharan Africa.

Finally, the study considered the composite (average of the four) influence of the four governance indicated on direct foreign investment in Sub – Saharan Africa. It found positive significant relationship between foreign



direct investments (see table 3, model 1). The result was an increase in the corporate governance causes 40.986 growth in direct foreign investment into Sub – Saharan Africa.

### Conclusions

The study has concluded that corporate governance has influence on direct foreign investment in Sub – Saharan Africa.

- Ethical behaviour of firms have positive influenced on direct foreign investment in Sub – Saharan Africa. Thus, authorities should put measures (such as transparency) in place such that the boards of various firm within the countries under Sub - Saharan Africa are morally sound.
- Efficacy of corporate governance have positive influenced on direct foreign investment in Sub – Saharan Africa. Training and education should be given to board of various firm in order to increase the efficiency of boards in Sub – Saharan Africa.
- Minority shareholders protection have positive influenced on direct foreign investment in Sub – Saharan Africa. It is not always that major shareholder should given the upper hand, the minorities interest should protected.
- Regulation of securities exchange have negative influence on direct foreign investment in Sub – Saharan Africa.

### **Recommendations**

Guided the findings obtained from the study, the following recommendations were put forward to help enhance corporate governance in order to boost direct foreign investment in Sub-Saharan Africa. The study suggests that Sub-Saharan Africa economies should work on improving the ethical behaviour of firm, ensure that corporate board are efficient and interest of minority shareholders are protected. However, regulation of security exchange should be reduced or made friendly in order to raise the inflows from direct foreign investment.

### **Suggestions for Further Research**

The study was limited to only Sub-Saharan Africa, thus, other studies can consider Africa as a whole. Also new studies should consider controlling for governance difference among Sub-Saharan Africa economies.



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