

**Does macro-level corporate governance  
attract foreign direct investment (FDI)?  
A review of Sub-Saharan African Countries**

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of the requirements for the degree of  
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## **Declaration**

By submitting this research assignment electronically, I, Shawn Basson, declare that the entirety of the work contained therein is my own, original work, that I am the owner of the copyright thereof (unless to the extent explicitly otherwise stated) and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

S. Basson

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## Abstract

The performance of the Sub-Saharan Africa (SSA) region in attracting foreign direct investment (FDI) relevant to other developing regions has been poor over the last two decades, especially compared to Asian developing countries. FDI inflows are a catalyst for economic growth, employment and poverty reduction. This study examined whether good macro-level corporate governance, which is the way countries are managed and governed, can assist in promoting countries as potential investment locations. The Worldwide Governance Index, which has been developed by Kaufmann *et al* (1999, 2008, 2011), was used to objectively measure the performance of the SSA region. The region has generally been perceived to be negatively impacted by political risk, lack of government leadership, weak institutions, ineffective implementation of policies and a region susceptible to corruption.

This study examined the relationship between macro-level governance performances of the SSA region and sought to determine whether this is a contributing factor which affects FDI inflows. The study used panel data fixed effect estimator for a sample of 45 SSA countries from 2002 to 2011. The findings have revealed that macro-level corporate governance has a positive impact and is statistically significant in attracting FDI inflows. In addition to the other factors which drive FDI inflows for the region, this provides an incentive to host countries to develop policies which can leverage and promote investment to the region, fundamentally addressing pressing social challenges and sustainable economic development and growth.

### Key words:

Foreign direct investment

Sub-Saharan Africa

Macro-level corporate governance

Developing regions

## Table of contents

D e c l a r a t i o n	i i
A c k n o w l e d g e m e n t s	i i i
A b s t r a c t	i v
L i s t o f t a b l e s	v i i
L i s t o f f i g u r e s	v i i i
L i s t o f a c r o n y m s a n d a b b r e v i a t i o n s	i x
C H A P T E R 1	I N T R O D U C T I O N 1
1.1. BACKGROUND	1
1.2. PROBLEM STATEMENT	3
1.3. RESEARCH QUESTION	4
1.4. RESEARCH OBJECTIVES	4
1.5. RESEARCH METHODOLOGY	4
1.6. CHAPTER OUTLINE	5
C H A P T E R 2	L I T E R A T U R E R E V I E W 6
2.1. THEORETICAL FRAMEWORK	6
2.2. EMPIRICAL LITERATURE	8
2.3. CHAPTER SUMMARY	12
C H A P T E R 3	O V E R V I E W O F F O R E I G N D I R E C T I N V E
3.1. FOREIGN DIRECT INVESTMENT TRENDS	13
3.2. MACRO LEVEL CORPORATE GOVERNANCE TRENDS	16
3.3. CHAPTER SUMMARY	22
C H A P T E R 4	M E T H O D O L O G Y 2 3
4.1. THE MODEL	23
4.1.1. The model specification	23
4.2. DATA GATHERING	24
4.2.1. Governance indicators	24
4.2.2. Macro-economic factors	26
4.3. DATA ANALYSIS	28

4.3.1.	Specification tests and estimation technique	28
4.4.	CHAPTER SUMMARY	30
C H A P T E R 5		R E S U L T S 3 1
5.1.	EMPIRICAL RESULTS	31
5.2.	CHAPTER SUMMARY	34
C H A P T E R 6		C O N C L U S I O N 3 5
6.1.	SUMMARY	35
6.2.	LIMITATIONS AND POSSIBLE FUTURE STUDIES	37
R E F E R E N C E S		3 9
A P P E N D I X 1: S U B S A H A R A N A F R I C A N C O U N T R I E S L I S T		4 5
A P P E N D I X 2: L I S T O F S S A C O U N T R I E S A V E R A G E M A C R O L E V E L C O R P O R A T E G O V E R N A N C E 2 0 0 2 - 2 0 1 1		4 6
A P P E N D I X 2: L I S T O F S S A C O U N T R I E S A V E R A G E M A C R O L E V E L C O R P O R A T E G O V E R N A N C E 2 0 0 2 - 2 0 1 1		4 8

## List of tables

Table 3.1: FDI flows by region, 1970–2009 (billions of \$)	13
Table 3.2: Percentage share of World FDI inflows by region, 2009–2014 (US \$bn)	14
Table 3.3: SSA's top five countries in terms of macro-level corporate governance for the period 1996–2011	18
Table 3.4: SSA's bottom five countries in terms of macro-level corporate governance for the period 1996–2011	19
Table 3.5: SSA countries which have improved the most for the period 1996–2011	20
Table 3.6: SSA countries which have declined the most for the period 1996–2011	21
Table 4.1: Summary of variables	28
Table 4.2: Hausman test (fixed vs random effects)	29
Table 4.3: Testing for heteroskedasticity	30
Table 5.1: Descriptive statistics	31
Table 5.2: Correlation matrix	31
Table 5.3: VIF test for multicollinearity for explanatory variables	32
Table 5.4: Regression output for OLS, FE and FE with Driscoll Kraay standard errors	33

## List of figures

Figure 3.1: FDI inflows to Africa by region 1990–2014 (millions of dollars)

15



## List of acronyms and abbreviations

cpi	consumer price index
FDI	foreign direct investment
FE	fixed effects
fope	financial openness
GDP	gross domestic product
gdppc	gross domestic product per capita
GLS	generalised least squares
hcdse	human capital development secondary enrolment
ICT	information and communication technology
IMF	International Monetary Fund
Infraint	infrastructure internet users
mgov	macro-level governance
MNC	multinational corporations
OECD	The Organisation for Economic Co-operation and Development
OLI	Ownership, Location and Internalisation
OLS	ordinary least squares
RE	random effects
SSA	Sub-Saharan Africa
trdope	trade openness
UNCTAD	United Nations Conference on Trade and Development
US	United States
VIF	variance inflator factor
WDI	world development indicators

# CHAPTER 1

## INTRODUCTION

### 1 . 1 . B A C K G R O U N D

Foreign direct investment (FDI) is a catalyst for economic growth and sustainable development within all countries but particularly so for developing countries and emerging market economies. The reality is that FDI is not the saviour of all development cures of the world and will in itself not alleviate poverty and socio-economic challenges faced by the developing world. However, FDI objectives which are well defined, outlined and formulated in a coherent manner will be able to address the development objectives of Sub-Saharan African (SSA) countries and enable these countries to compete for capital intensive projects and be less reliant on the degree of local investment, trade flows and portfolio flows. According to Talamo (2011), the Washington consensus has actively promoted and hailed FDI as the panacea for economic stimulus and development. The increased FDI flows and market integration as a result of globalisation by both developed and less advanced industrial countries are largely associated with the introduction of structural adjustment programmes, which have resulted in trade liberalisation, privatisation, reduced state ownership, internationalisation of capital markets and more and better transparent institutional economic systems (OECD, 2002).

African countries have historically not fared particularly well in attracting FDI. This trend is improving as the continent liberalises its policies and institutions and provides incentives to attract capital flows. FDI flows to the SSA region have increased from \$1.7 billion in 1990 to \$42.3 billion in 2014 and its comparative share of global FDI has increased from 0.8 to 3.4 percent (UNCTAD, 2015). The significance of FDI is that it creates job opportunities as well as promotes technology transfer and access to international markets. The physical capital formation enables the access of markets in the form of resource mobilisation as well as the ability to access foreign markets; it also reduces the cost of business by locating primary activities at source markets; and furthermore it enables extracting of raw materials (Karimi & Gohari, 2014).

The most important factors driving FDI flows include size of the market, household expenditure, unemployment, availability of skilled staff, trade openness (taxes and tariffs), political stability, state of infrastructure, corruption and overall macro-economic stability (Musila & Sique, 2006). FDI presents those countries attracting capital flows an advantage in the form of technology sharing, managerial experience, labour productivity, improved export initiatives and improved market outreach. The major issue of FDI is its long-term nature and ability to provide a platform for sustainable economic growth and development. In contrast, short-term portfolio investments and other investment flows are subject to more volatility and prone to be influenced by world financial markets, structural macro-economic factors and geopolitical dynamics. The spate of corporate scandals and the financial crisis, have ironically in more developed countries put the spotlight firmly

on the quality and significance of corporate governance within all countries. A lack of strong corporate governance has been hailed as one of the major reasons for financial markets being in turmoil. As politicians, legislators and the investment community dissect all the relevant reasons for these events, it has caused global uncertainty and resulted in emerging economies becoming the major drivers for economic growth.

Despite the scandals being focused on the more developed countries, due to perceived risks in emerging market economies and less developed corporate governance structures in these countries, investors will in future closely monitor countries to mitigate risks associated with corporate governance. This will be important criteria when evaluating FDI opportunities (Peters, Miller & Kusyk, 2011). According to Adeoye (2009), there is a positive and significant relationship between macro-economic level governance and FDI flows for emerging market economies. Historically, this area versus other FDI determinants has not received widespread attention. Particularly, we are concerned with FDIs which are long-term investments as opposed to short-term portfolio inflows/other investments and which focus on ownership and control characterised by an influence on management of the enterprise. This interrelationship between good governance infrastructure and FDI inflows is important due to the following reasons (Mengistu & Adhikary, 2011):

- Analysis of FDI to country-specific political risks such as prudential laws and regulations and institutional efficiencies which aim to protect civil and property rights of investors.
- FDI is elastic to the transaction costs of investments which reflect that foreign direct capital flows will be invested where the return will be the highest and both the ease of doing business and cost of doing business are reduced.
- FDI is influenced by trust and confidence of the investors; this relates to the perceptions of investors of fiscal and monetary policy and the ability of governments in the consistent implementation and application of macro-economic fundamentals.

The linkage between overall country institutional governance indicators and FDI flows were investigated in this research study. It is widely held that in countries where the rule of law is enforced and prevails, where corruption is low and a greater degree of transparency prevails, these countries will attract higher FDI flows. The analysis during this research thus aimed to demonstrate that improvements in fundamental governance aspects within the SSA context could significantly aid and persuade investors on the merits of decisions relating to how FDI is allocated. This study focused on SSA countries' aggregate governance indicators and the impact this has on FDI inflows by using panel data techniques.

According to Ewstrand (2010), many institutional investors and multinational corporations specifically analyse, develop and implement investment policies which mitigate risks for emerging

economies. Aspects of political risk, civil liberties, independent judiciary and legal systems, monetary and fiscal transparency were analysed. These are very similar to the overall aggregate governance index as developed by Kaufmann, Kraay and Mastruzzi (2008) were used to determine the impact that these factors on aggregate have on overall FDI inflows and patterns. Over the last two decades, due to increased fierce competition amongst countries to attract scarce financial resources and FDI as a mechanism for sustainable development, there has been a major shift compelling recipients of FDI to adopt rules-based governance systems requiring greater transparency of governance. This is not only relevant at a micro corporate governance level but incorporating wide-level macro-economic level governance reforms (Kaufmann, Kraay & Zoido-Lobaton, 1999). Countries which do not conform to these improved international corporate governance standards and measures will not be successful in enticing FDI. SSA is competing with many developing Asian and Latin American countries for FDI. SSA needs to assess and propose policies which will enhance political risk relative to these competitors. While the region has the highest rate of return on investment when compared to other developing regions, it attracts a far lower proportion of FDI inflows. One of the main contributing reasons for this is the continued political and security risk concerns prospective FDI investors perceive of the region (Solomon & Ruiz, 2012).

In the formulation and implementation of macro-economic corporate governance strategies, developing countries need to carefully assess policies which account for their specific circumstances. The following should be taken into account: the historical context, corporate ownership characteristics, culture of the country, assessment of values and norms, and the socio-political economic climate (Adegbite, 2012). While the various studies on FDI determinants vary, evidence suggests that infrastructure development and political stability are the greatest drivers for long-term sustainable development and impact on countries' economic progress (Olatunji & Shahid, 2015).

## 1 . 2 . P R O B L E M S T A T E M E N T

Various studies focus on the economic determinants which influence FDI, including country-specific institutional aspects of governance such as rule of law, democracy and corruption (Blonigen, 2005; Viyakumar, Sridharan & Rao, 2010; Balusubramanyam, 2001; Globerman & Shapiro, 2003; Busse, 2007; Wei & Schleifer, 2000). However, there are only a few studies which look at how macro-level corporate governance indicators as developed by Kaufmann *et al.* (1999) at aggregate macro-level governance impact FDI inflows. Some studies, such as Adeoye (2009) and Ewestrand (2010), focused on middle income countries and used Kaufmann *et al.*'s (1999) governance indicators to determine the extent that this aggregate level of governance impacts FDI flows. The aim of this study was to evaluate aggregate macro-level corporate governance for SSA countries specifically, and to determine the impact of the aggregate level of governance on FDI

inflows. The study focused on a period of ten years (2002–2011) to determine the effects of macro-level governance on FDI inflows.

The importance of the study is that many SSA countries are perceived to have weak governance measures in place and that potential FDI decisions by investors and multinational corporations (MNCs) are negatively influenced by this lack of overall macro-governance stability. However, the link between FDI and macro-level corporate governance for SSA countries requires more in detail research and would be useful for policymakers and governments. If a positive link is found, strategies and policies which will induce foreign investors to increase the level of FDI in SSA countries should be encouraged. Past studies have only focused on selected aspects of macro-level governance, without evaluating all the governance indicators as developed by Kaufmann *et al.* (1999) and also not solely on SSA countries.

The research aimed to identify the following:

### 1 . 3 . R E S E A R C H Q U E S T I O N

- Is there a relationship between macro-level corporate governance and FDI inflows for the selected Sub-Saharan African countries for the period 2002–2011?
- What other macro-economic factors have influenced FDI inflows to the selected SSA countries for this period?

### 1 . 4 . R E S E A R C H O B J E C T I V E

- The objective of the research was to determine if there is a relationship between macro-level corporate governance and foreign direct investment inflows for selected Sub-Saharan African countries.

### 1 . 5 . R E S E A R C H M E T H O D O L O G Y

A review of the literature indicated that there is a positive relationship between macro-level corporate governance and foreign direct investment for developed countries (Adeoye, 2009). For this study, the researcher selected 45 SSA countries (Appendix A) for ten years for the period of 2002–2011. This study closely followed panel data regression techniques using a fixed effects model. This method was chosen due to the fact that there are individual specific factors present that drive FDI inflows to SSA countries. Panel data was used as it provides larger data sets and allows for less multicollinearity among the independent variables (Ewstrand, 2010). A positive relationship is expected between macro-level corporate governance and FDI inflows.

The following empirical model is specified:

$$FDI_{it} = \beta_0 + \beta_1 MGOV_{it} + \beta_2 GDPPC_{it} + \beta_3 TRDOPE_{it} + \beta_4 FOPE_{it} + \beta_5 CPI_{it} + \beta_6 HCDSE_{it} + \beta_7 INFRAINT_{it} + \epsilon_{it}$$

- i.  $FDI_{it}$  – Inwards FDI (as % of GDP) of country  $i$  at year  $t$
- ii.  $MGOV_{it}$  – Macro governance (mean World Bank governance indicators percentile rank) of country  $i$  at year  $t$
- iii.  $GDPPC_{it}$  – Gross domestic product per capita (2005 constant US\$) of country  $i$  at year  $t$
- iv.  $TRADEOPE_{it}$  – Trade openness (Sum of exports and imports as % of GDP) of country  $i$  at year  $t$
- v.  $FOPE_{it}$  – Financial openness (Ratio of foreign assets and foreign liabilities as a ratio of GDP) of country  $i$  at year  $t$
- vi.  $CPI_{it}$  – Inflation rate (Consumer price index, annual % increase) of country  $i$  at year  $t$
- vii.  $HCDSE_{it}$  – Secondary school enrolment both sexes as % of country  $i$  at year  $t$
- viii.  $INFRAINT_{it}$  – Internet users (per 1000 people), proxy for infrastructure development (Information Technology) of country  $i$  at year  $t$

## 1 . 6 . C H A P T E R O U T L I N E

The research assignment comprises six chapters and is structured as follows:

Chapter 1 has provided an introduction and background to the study which outlines the context, problem statement and research methodology. Chapter 2 is a presentation of the existing literature based on past theoretical and empirical research reviewed on the topic. The third chapter provides stylised facts and trends about FDI inflows and macro-level corporate governance performance of selected SSA countries. Chapter 4 details the research methodology and econometric model and provides a description of the data used. The results are presented and discussed in Chapter 5. The final chapter concludes and provides possible future research avenues as well as relevant policy directives and implications.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1. THEORETICAL FRAMEWORK

FDI is essential to ensure that emerging market economies and African economies in particular can boost economic development. Most of the early literature, such as the study conducted by Ohlin (1933), focused on the profitability of MNCs in growing markets and the intent to maximise profits through FDI. FDI has received wide attention over time and various research has been conducted which aims to provide relevant reasons why capital flows to respective recipient countries. According to Adeoye (2009), these can be broadly classified into two categories. The first category is directly linked to determinants which directly could impact the profitability of FDI in the form of gross domestic product and other macro-economic determinants (growth % and per capita, income levels and household consumption, inflation, taxes, human capital development, infrastructure development and openness of the economy). The second category refers to the security of the investment, rule of law, strength of institutions and political structure of the relevant countries. These relate to the ability of the investor to engage in business activities in the relevant country and the ability to repatriate profits and change ownership.

According to Kinotsha and Campos (2003), the motives of investors and MNCs can be classified into different types of FDI.

- Natural resource – seeking investment, with the aim of exploiting raw materials for production and which flows to countries which are well endowed with natural resources.
- Market – seeking investment, with the aim of accessing markets due to its size and relevant income earning potential and prospects for growth.
- Efficiency – seeking investment, which aims to extract advantage of country specific features such as access to skilled workforce, cheap labour and infrastructure development.
- Strategic asset – seeking investment in the forms of access of specialised knowledge (patents), product brands and market share of existing companies.

Dunning (1998) created the eclectic paradigm (OLI) framework which grouped and analysed MNC's investment abroad into three types of advantages which would be derived from this, namely:

1. ownership (property rights, patents and intangibles which is able to exploit, access and export natural resources);
2. location (labour advantages, institutional frameworks, trade barriers and trade costs);

3. internalisation (exploitation of market imperfections/arbitrage in external markets, such as exchange rates, tariffs and subsidies and production of goods and services as opposed to licensing).

Markusen and Maskus (1999) indicated that FDI flows to higher income developing countries such as China and Brazil due to the ability of MNCs to exploit the prevalence of skilled labour and established infrastructure as well as the ability to export this back to the MNC parent. Economies of scale and production costs are thus key aspects to invest in these countries with massive local markets to service. The definition of FDI can be described as the acquisition of long-term management interest by a direct investor of one country in an enterprise which is resident in a foreign country and relates to the acquisition as well as all subsequent transactions (The World Bank, 2000; IMF & OECD, 2003). In most instances it refers to investment of larger than ten percent of ordinary shares or voting rights. The differentiator between FDI and other forms of investment relates to control and ownership with direct investors fulfilling a significant role in enterprise through control and managerial activities, and decision making. FDI is also less volatile than other forms of investment as the decision is made in reference to long-term establishment of rights in a foreign investment enterprise.

It is widely held that countries with greater transparency and corporate governance will attract a greater degree of FDI inflows. Empirical evidence suggests that the level of corruption, transparent legal systems, protection of ownership rights, and surety of contract enforceability have influenced the level and volume of attracting capital flows at a national level. Prior to the 1990's, the extent and the impact of political, regulatory, rule of law, judicial system and bureaucratic environment were considered secondary to the economic factors influencing FDI inflows. These issues were considered post facto as sources of uncertainty and risk, but not as primary considerations in terms of where capital would flow (Wernick, Haar & Singh, 2009). Lucas (1990) argued that capital does not flow from rich to poor countries as the return is not high enough to compensate for the higher risks associated with the existence of a lack of corporate governance in the form of political risks, unreliable and unstable rules and regulations, a higher prevalence of bribery and corruption, and lack of rule of law. The relationship between capital flows and investment as a result of micro-economic governance at firm level has received wide attention (Klapper & Love, 2002; Okpara & Wynn, 2007). This is partly due to the ability of identifying and analysing firm corporate governance structures and the relationship with investment much easier, as compared to macro-economic corporate governance which is more complex. Studies by Gibson (2003) and Gillian and Starks (2003) have indicated that corporate governance which includes accounting disclosure and standards, protection of intellectual property and ownership rights, strong institutions and transparent legal systems promotes the growth of capital markets. In addition, formal investment decisions and improved competitiveness in developed and emerging countries and in particular to SSA countries are also promoted.



Macro-level corporate governance has no formal definition as it aggregates the level of efficiency and effectiveness of how the state manages to implement actions, policies, institutions and rules which in turn enables it to act as an agent of social inclusion. It also creates a platform or appropriate environment to which the economic relationship between the individuals, business and state can interact to stimulate economic growth. It is fundamentally underpinned by three components (Karimi & Gohari, 2014):

1. The level of democracy (selection), accountability and monitoring of those in power;
2. The capacity and ability by the state to implement appropriate policies and manage resources efficiently;
3. Respect of the rule of law, by citizens, business and government. Also, the acceptance and authority of the institutions which govern the economic and social interactions among them.

According to Talamo (2011), various studies conclude that countries can attract FDI by improving their governance in the form of efficient legal systems, improved degree of transparency and reduction in corruption. Countries, MNCs and investors will invest where the financial rate of return is the highest relative to the risk inherent to the allocation of FDI to the chosen host countries. This risk factor is thus important as investors weigh the relative return compared to the level of risk acceptable to them when deciding on the location (where) and how the FDI will be allocated. Countries and the investment environment within these countries are perceived to be risky where agency costs, transaction costs and information asymmetry are high (Mengistu & Adhikary, 2011).

The impact of institutions and quality of the governance structure of a country in the form of prudential laws and regulations, government policies, taxation and norms, and behaviours and customs influence the perception and willingness of investors in the application of FDI. These are important factors as they aid cross-border transactions and encourage investors to have faith in the financial stability of the markets and facilitate capital market development and transactional trust of the macro-economic system (North, 1990; La Porta, Florencio, and Shleifer & Vishny, 1998). Daude and Stein (2007) found that countries which positively attract FDI are those that have a stable government and implement predictable policies, regulations and laws accompanied by a reduction in excessive bureaucracy and regulatory burden.

## 2 . 2 . E M P I R I C A L L I T E R A T U R E

Alesina and Dollar (2000) revealed that foreign aid flow is positively influenced by factors such as political alliances and variables while in contrast FDI is supported by economic incentives such as good corporate governance policies and the protection of property rights in the receiving countries. Studies undertaken by Kurtzman, Yago and Phumiwasana (2004) which assessed multiple macro-level governance indicators based on an index on similar factors as per Kaufmann *et al* (1999), use the term “opacity” to describe the degree to which countries lack accurate, clear and acceptable

practices governing the relationship between governments, corporate and private investors. Their findings reveal that the higher the level of “opacity” the less FDI will be attracted by host countries. However, the findings of a study by Hooper and Kim (2007) who also examined the relationship between opacity and FDI flow differ in that they suggest that a lack of accounting and regulatory policies in fact increases FDI to the countries where this is prevalent as MNCs aim to improve profits due to these deficiencies.

A study of 13 host country risk factors by Wheeler and Mody (1992) examined the FDI-governance relationship by using the Business International Index. Their findings revealed that the aggregate impact of individual governance aspects such as rule of law, level of corruption, and strength of legal system had limited impact on the decision making of United States (US) firms in terms of the location of FDI decisions. In contrast, Globerman and Shapiro (2003), using ordinary least squares (OLS) regression analysis, found that the governance infrastructure based on the World Bank indicators for 143 countries was an important determinant for FDI investment from the US to those countries with a high degree of corporate governance infrastructure. Countries which received capital flows from the US have legal systems rooted in English common law. The importance of the corporate governance framework was perceived to enhance a transparent legal system, protect property and individual rights, and promote institutions which are credible, with resultant policies which favoured free and open markets. Studies by La Porta *et al.* (1998) and Prasad, Rogoff, Wei and Kose (2003) indicated that countries with well-developed investor rights and a well-developed legal framework for investor protection positively attract FDI.

Ali, Norbert and Macdonald (2006) found that the role of institutions and the maturity of the institutional framework are a robust indicators for FDI inflows. The study of 69 countries via panel data regression techniques revealed that countries with well-developed and legislated property rights, reduced expropriation risks, and overall rule of law positively attract FDI inflows. Countries which have weaker corporate governance structures often fail to attract high FDI inflows as the poor institutional controls within these countries adversely shape the growth of capital markets and confidence of investors to commit to allocate capital flows (Kim, 2010). The direct relationship between corporate governance development and performance of returns where FDI is invested is a key decision factor for the global financial institutions and investors as a risk mitigation strategy (Johnson, Breach & Friedman, 2000). A study by Stein and Daude (2001) which investigated a panel of 63 countries’ bilateral FDI flows, found that countries with better institutions and institutional framework attract higher levels of FDI inflows. Johnson *et al.* (2000) found that a country’s measure of law and order and protection of shareholders has a significant impact on economic growth as well as the ability of countries with strong institutions to attract FDI and withstand financial crisis. Bissoon (2011) studied the role of institutions to attract FDI for 45 developing countries using cross-sectional data. A significant and positive relationship was found and regulatory quality had the greatest impact.

The findings of Solomon and Ruiz (2012) revealed that the impact of political risk as a major component of overall macro corporate governance indicators is inconclusive. Wheeler and Mody (1992) revealed that the existence of strong human rights and political stability positively influenced US FDI. In contrast, Biswas (2002) found that political risk indicators deterred FDI inflows to those regions where it was found to be prevalent. Busse and Hefeker (2007), using a panel data fixed effects model and a general method moments (GMM) estimator, examined the impact of political risk and institutions on FDI flows using 12 indicators (such as government stability, rule of law and lack of conflict). Examining FDI flows for 83 developing countries from 1984 to 2003, they found that there is a significant and positive relationship for five of the governance factors (government stability, the absence of internal conflict and ethnic tensions, advancing democratic rights and ensuring law and order) and the level of FDI inflows into these countries. Harms and Ursprung (2001) used a cross-section model of 62 developing and emerging market countries for the period 1989 to 1997 and found a positive and significant relationship between political rights and FDI. No significant relationship between civil liberties and FDI was found.

Wei and Shleifer (2000) found that corruption negatively impacts FDI inflows to emerging markets. This was explained as FDI being vulnerable to the direct interferences of MNCs' operations in these host countries. Corruption was broadly defined as poor public governance in terms of policies and implementation as opposed to bureaucratic corruption which related to bribery and financial dishonesty in various forms. However, it is contended that using one variable such as corruption to determine the relationship to FDI inflows is not suitable as it does not take into account that the results could be influenced by omitted variable bias. A range of factors in relation to governance could determine the impact it would have on FDI flows. Countries which reflected a higher degree of corruption, reduced transparency and less developed property rights were found to reduce FDI inflows and the willingness of MNCs to invest (Anyanwu, 2011). Al-Sadig (2009) indicated that the prevalence of corruption was a deterrent to foreign investors as it was perceived to undermine economic and social development. Poor governance, lack of regulatory certainty and restrictions on foreign ownership and equity holdings were all found to have a significantly negative impact on FDI (Dupasquier & Osakwe, 2006). The increase in political risk negates financial development and this coupled with frequent policy changes, price and wage controls, and excessive bureaucracy is negatively correlated with FDI inflows.

A different view was found per Li (2005) in the linkage between corruption and FDI, namely that corruption aided FDI inflows to China. This is in contrast to other literature which found that corruption should be a deterrent and should result in a negative relationship between macro-level governance and FDI. China, despite its poor legal system, corruption, lack of property rights, and not being a democracy, is one of the world's largest recipients of FDI. While this is initially thought to be as a result of investors and MNCs attracted to the country due to its vast market opportunities, Li (2005) explained that this is the result of a relation-based governance system

where personal loyalty and relationships govern social and economic decisions. The form of investment (e.g. FDI) can be effectively institutionalised and controlled. This is different from the rule-based governance which is prevalent in the more democratic states and institutionalised by the judiciary and policies governing these countries. A panel data study on FDI inflows to SSA countries by Ezeoha and Cattaneo (2011) revealed that market size of the host country, infrastructure development and financial development were the main determinants of FDI. This is in contrast with other studies where corruption was deemed as an enabler and had a positive effect in attracting FDI. Stein and Daude (2001) studied 58 countries using a cross-section regression model and found corruption, as measured by the International Country Risk Group Index of 2000, not to have any impact on FDI inflows.

There have been limited studies on the direct relationship between macro-level corporate governance and FDI on a broad corporate governance level due to the lack of quality comparative information over multiple cross sections of countries. Macro-level corporate governance as a determinant of FDI has only recently received prominence. There have been no studies to date that have investigated the link between macro corporate governance and FDI for SSA countries. Previous studies have done this for emerging market economies which included some SSA countries but have not explored it at a regional basis. Most of the studies for corporate governance in the African context, such as Okeahalam (2004), focused on firm level micro corporate governance and investment in these companies. It found that firm level corporate governance within the African countries positively correlated with firm performance and the ability of firms to attract investment. One would thus reasonably expect that countries which have a strong and focused macro corporate governance framework would favourably attract FDI. According to Kaufmann *et al.* (1998), good macro corporate governance could result in a 300 percent dividend in terms of development and FDI inflows. Fan, Morck, Yeung and Xu (2007) measured the impact of two of the governance indicators used by Kaufmann *et al.* (2008) for FDI inflows to China and revealed that the impact of rule of law is negative and that control of corruption is positive but insignificant in attracting FDI flows. Asiedu and Lien (2004), who studied the determinants of FDI inflows for 22 SSA countries using panel data regression, found that there is a strong and significant relationship between efficient institutions, strong regulatory policies and political certainty and FDI inflows. SSA countries which have implemented reforms and actively improved elements of macro corporate governance resulted in greater economic development and an increase in overall investment for the period of 1984–2000, irrespective of whether they were naturally endowed or not.

Anghel (2005) focused on five of the Kaufmann governance indicators (Kaufmann, Kraay & Mastruzzi, 2008) using cross-sectional data which examined developed and developing countries over the period of 1996 to 2000, and found that all five indicators had a significant and positive relationship with FDI inflows. Adeoye (2009) analysed 33 emerging market countries from 1997 to

2003 using a panel data regression model and aggregating Kaufmann governance indicators (Kaufmann *et al.*, 2008). The findings revealed that the overall macro-level corporate governance as an index does have a positive and significant impact on FDI flows. It was concluded that governments should focus on enhancing policies and macro-level governance institutions to attract and promote FDI inflows. Farooque and Yarram (2010) studied 173 countries for the period 1996 to 2007 using an OLS regression model. They found there is interdependence between macro level corporate governance and the degree of FDI inflows. This two-way relationship was explained and means that the level of FDI drives the corporate governance climate and that in turn the level of governance impacts the number of FDI flows to specific destinations. They also concluded that there is a positive and significant interrelation between the governance indicators as used by Kaufmann *et al.* (2008) and lagged FDI inflows.

A study by Ewestrand (2010) used a panel data random effects model of 37 emerging countries for the period 1996–2008. The study used the individual governance indicators as developed by Kaufmann *et al.* (2008) to determine the relationship and significance to FDI inflows. The study results reflect that the two most significant indicators which positively influence FDI inflows are control of corruption and regulatory quality.

### 2 . 3 . C H A P T E R S U M M A R Y

The empirical literature reveals that the relevant individual indicators as developed by Kaufmann *et al.* (2011) have a significant and positive impact in attracting FDI inflows. Macro-level corporate governance indicators have only been tested for emerging market countries (Adeoye, 2009 and Ewestrand, 2010) which, as expected, indicates the level of country overall governance does have a positive effect in attracting FDI. From the literature it is apparent that the control of corruption or lack of corruption and the level of policies and systems to implement regulatory quality are two of the most significant indicators to promote FDI.

## CHAPTER 3

### OVERVIEW OF FOREIGN DIRECT INVESTMENT AND MACRO-LEVEL CORPORATE GOVERNANCE

#### 3.1. FOREIGN DIRECT INVESTMENT TRENDS

Over the last two decades Africa's share of the global FDI inflows have remained very low compared to overall global flows. During 2014, Africa received 4.3 percent of FDI versus Asia's 37.8 percent. The reasons for Africa's lag in FDI inflows relative to the rest of the world has been ascribed to lack of infrastructure, poor macro-economic policies, lack of human capital availability and issues linked to macro-level corporate governance performance and perceived political risks (Olatunji & Shahid, 2015). Factors which are provided as a bias against investing in Africa relate to governance failures (democracy and rule of law), weak institutions, lack of policy credibility and political instability. Improved levels of macro-level corporate governance should enable SSA countries to provide greater confidence to investors in terms of legal protection, stable and predictable regulations, and laws governing foreign business interest.

**Table 3.1: FDI flows by region, 1970–2009 (billions of \$)**

Region	1970	1990	2000	2007	2008	2009
World	13.3	207.7	1401.5	2100	1770.9	1197
Developed economies	9.5	172.5	1138	1444	1018.3	566
Developing economies	3.9	35.2	256.5	564.9	630	478.3
Africa	1.3	2.8	9.8	63.1	72.2	54
America	1.6	8.9	97.7	163.6	183.2	116.6
Asia	0.9	22.6	148.7	336.9	372.7	301.4

Source: Sichei and Kinyodo, 2012 as adapted from UNCTAD/TNC database.

Data from the World Bank (2011) and information from various international institutional entities reflect that FDI inflows to emerging countries are the major contributor in terms of net capital formation. FDI has rapidly increased over the last two decades and this increase has been due to overall structural changes in the world economy and globalisation of international trade and investment. Africa's share of FDI, while it has grown in absolute values, is however very low compared to other regions. As can be seen from Table 3.1, Africa's FDI has grown from \$1.3bn in 1970 to \$54b in 2009. Asian developing countries' FDI has grown from \$0.9bn to a staggering \$301.4bn over the same period. This reflects that in real terms Africa's percentage of FDI inflows have declined over this period. The impact of the financial crises is also clearly evident as FDI inflows have significantly declined from the 2007 levels.

For the first time during 2014, FDI flows for developing countries exceeded those of its developed counterparts and were approximately 55 percent of total inflows (UNCTAD, 2015). In 2014, Africa received \$54 billion representing 4.3 percent per cent of global FDI inflows. Africa's overall percentage performance over the period 2009–2014 can be observed as per Table 3.2.

**Table 3.2: Percentage share of World FDI inflows by region, 2009–2014 (US \$bn)**

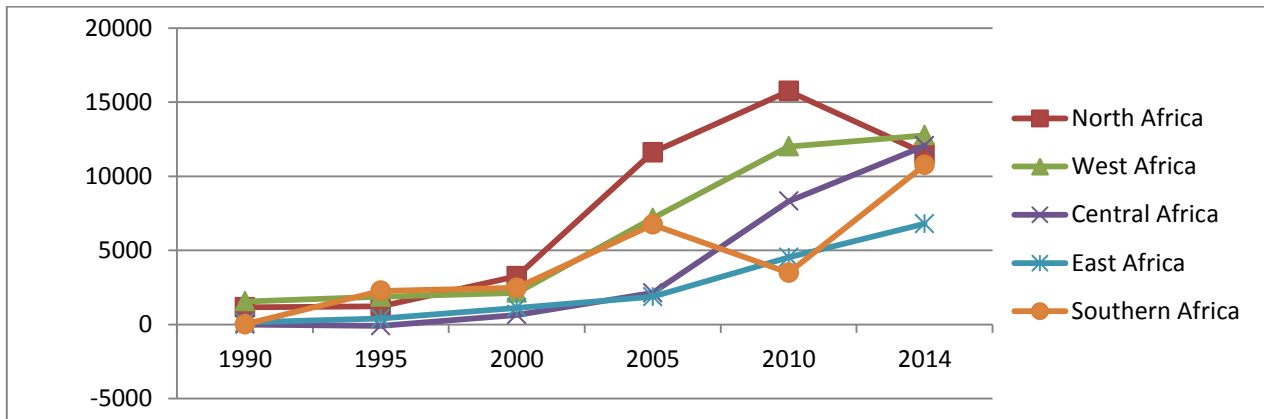
Region	2009	2010	2011	2012	2013	2014
World	1197	1309	1524	1403	1467	1228
Developed economies	50.6	47.2	49.2	48.3	47.5	40.6
Developing economies	43.3	46.7	44.9	45.5	45.7	55.4
Africa	4.3	3.3	2.8	4.0	3.7	4.3
Asia	26.2	29.3	27.8	28.6	29.0	37.8
Transition economies	3.5	2.4	3.6	2.2	3.1	2.9

Source: UNCTAD, 2015.

Over the last six years the Africa and SSA percentage of overall global FDI inflows remained relatively small and Asian developing countries have received most of the FDI inflows in terms of world global percentage of total FDI inflows. In general, from 2009 to 2014, there has been no growth in real terms of FDI inflows to SSA countries. Notwithstanding this, there have been various attempts by governments of these countries to improve FDI determinants such as economic reform, overall socio-economic stability, openness of trade and overall improvements in terms of democracy. FDI inflows are also still mainly focused on natural resource exploitation and primary industries. There is general consensus that Africa as a continent has huge potential although this is yet to be reflected in terms of overall global FDI flows to SSA.

The major driver of FDI inflows to Africa is the region's natural resource endowment and the predominant investment to the region is resource-seeking FDI. This has resulted in the extraction of Africa's natural resources resulting in an uneven spread of FDI to the continent and a few countries account for almost 75 percent of FDI flows to the region. As per Figure 3.1, the FDI flows when disaggregated by sub-region reveal that since 2009 North African FDI inflows have declined (primarily due to political instability and Arab spring) and that SSA Africa FDI inflows have increased over the same period. The major drivers of FDI inflows to SSA countries were infrastructure and market-seeking investments for 2014. Southern Africa compensated for the Northern African decline ensuring that FDI for the year remained flat. This was largely due to resource-seeking and infrastructure investment in Mozambique (gas sector) and South Africa (energy). FDI inflows into Africa remain concentrated among a relatively small number of countries. The SSA region's top five FDI recipients for 2013, mainly concentrated in energy and infrastructure development, are as follows (Standard Bank, 2013):

- South Africa (USD6.4bn)
- Nigeria (USD6.3bn)
- Mozambique (USD4.7bn)
- Ghana (USD3.3bn)
- Sudan (USD2.9bn)



**Figure 3.1: FDI inflows to Africa by region 1990–2014 (millions of dollars)**

Source: UNCTAD, 2015.

FDI flows to SSA are widely dispersed, volatile and biased towards countries with mineral reserves and specific assets. The most recipient countries are Angola, Chad, Ghana, Nigeria, Sudan, Equatorial Guinea, Democratic Republic of Congo, South Africa, Mozambique and Angola (UNCTAD, 2013). It is expected that FDI flows will predominantly flow to these countries over the next couple of years, due to considerable investment in gas exploration in West Africa and Mozambique and the continued investment into the two major SSA countries by gross domestic product (GDP) (South Africa and Nigeria). In the case of Nigeria, the FDI flows are primarily due to continued development within the oil and gas sector as well as to tap into Nigeria's growing services and manufacturing markets. In the case of South Africa, it is based on continued investment in energy infrastructure, mineral wealth and the country's relative financial sophistication which is well integrated into the world economy (Bissoon, 2011).

Over the last five years, since the financial crises, FDI flows to SSA have been less volatile than previously. This is partly due to a change in FDI flows from traditional investors such as the European Union, Japan and the US, which in 2012 accounted for 41 percent of total FDI inflows. There have been more diversified sources of FDI inflows from China, India and Brazil. This change is partly due to the significant increase in trade to these countries and growth rates far exceeding that of the developed world. These markets also gain access to SSA countries' abundance of natural resources (UNCTAD, 2012). Intra-African investments are also growing as MNCs led by South African, Kenyan and Nigerian corporations that expand operations within the region. This



FDI investment is market-seeking, predominantly in the retail, telecommunications and banking sectors. Especially for landlocked SSA countries which are non-oil exporting, intraregional FDI is a significant source of foreign capital. These investments are mostly Greenfield projects and focused on manufacturing and services (UNCTAD, 2015).

### 3 . 2 . M A C R O - L E V E L C O R P O R A T E G O V E R N A N C E T R E N D S

Despite growing consensus amongst various role players, there have been mixed results and tangible reforms to improve governance and fight corruption within SSA countries. Various studies over the last couple of decades have provided clear evidence that there is a significant and positive relationship between governance, FDI and sustained economic growth. There is growing evidence that the dividend from implementing improved public sector institutions, judiciary, property rights and overall rule of law has resulted in poverty alleviation and economic development. Despite this, many countries within the SSA region have failed to make meaningful improvements and implemented tangible reforms to improve overall governance. Governance indicators are mixed and vary across the region. While there are improvements even considering the low base as starting point, the changes on average and overall have been limited and in many countries there have been no changes (Kaufmann *et al.*, 2008).

Countries such as Botswana and Mauritius provide good examples of how governance enhancements can result in positive economic growth and development. These countries are examples of SSA countries which have adopted a good governance framework and good policies and their performance exceeds that of some developed countries such as Greece and Italy. Good governance is thus not unique to the more developed countries. Based on The World Bank governance index as developed by Kaufmann *et al.* (2008), below is a summary of the SSA country performance. There are more than 212 countries included in this index and for each of the six individual governance indicators a percentile rank is provided (0–100). Macro-level corporate governance was used as it is the average of all six governance indicators combined.

Table 3.3 below represents SSA's top five countries in terms of macro-level corporate governance based on the 2011 average aggregate level as per six individual indicators. The number reflects each country's overall governance performance relative to all countries as measured by the World Bank Governance index. It reflects that the SSA country with the best macro-level governance performance is Mauritius and that the country scored an average percentile rank of 75 percent, which means that 75 percent of the countries performed worse than Mauritius and that 25 percent performed better in terms of the overall average combined score for the six indicators.

Table 3.4 below represents SSA's bottom five countries in terms of macro-level corporate governance based on the 2011 average aggregate level as per six individual indicators. The number reflects that the country overall governance performance for the Democratic Republic of

Congo would be one of the worst of all countries as profiled by The World Bank governance index as developed by Kaufmann *et al.* (2011). On a macro governance level, the Democratic Republic of Congo would be at the bottom of the rankings for all countries as it is worse than 96 percent of countries being measured. According to the 2011 macro-level governance score for the 45 SSA countries profiled (as per Appendix 2), only eight of the 50 countries had a percentile rank of higher than 50 percent which is indicative that in general terms the overall governance within the SSA countries is below par. Many of the countries within the region therefore require significant improvements in macro-level corporate governance compared to the rest of the world.

From Table 3.5 below, there is evidence that certain SSA countries have made significant improvements in their overall macro governance performance, including countries such as Liberia, Rwanda, Burundi, Sierra Leone and Niger.

However, Table 3.6 below illustrates that while there have been huge strides made by many African countries, there are as many countries within Africa which have digressed since the governance indicators have been developed. Examples of countries that have digressed are Zimbabwe, Cote d'Ivoire, Eritrea, Mauritania and Chad. As per Appendix 2, close to half of African countries have failed to improve overall macro-level governance over the period 1996–2011. This may perhaps explain SSA countries' performance in terms of attracting FDI relative to other countries of the world.

Table 3.3: SSA's top five countries in terms of macro-level corporate governance for the period 1996–2011

	<b>(SSA TOP 5 AS AT 2011) AGGREGATE AVERAGE MACRO-LEVEL CORPORATE GOVERNANCE</b>												
<b>Country/Territory</b>	<b>Avg 1996</b>	<b>Avg 1998</b>	<b>Avg 2000</b>	<b>Avg 2002</b>	<b>Avg 2003</b>	<b>Avg 2004</b>	<b>Avg 2005</b>	<b>Avg 2006</b>	<b>Avg 2007</b>	<b>Avg 2008</b>	<b>Avg 2009</b>	<b>Avg 2010</b>	<b>Avg 2011</b>
MAURITIUS	70.46	74.52	73.58	74.29	75.10	74.36	73.07	70.85	74.08	76.18	73.89	73.39	74.98
BOTSWANA	72.09	73.06	71.28	71.30	76.85	74.02	73.86	70.46	71.37	71.35	70.56	71.14	71.53
CAPE VERDE	#N/A	63.32	68.37	59.51	61.77	62.72	58.70	66.04	67.31	66.98	66.80	66.20	67.02
NAMIBIA	67.26	60.95	56.88	57.66	59.82	60.06	58.52	60.76	62.90	67.14	63.08	62.18	61.68
SOUTH AFRICA	62.64	60.92	62.38	61.66	61.99	64.48	62.86	64.30	61.89	60.54	59.47	60.09	60.43

Source: Adapted from The World Bank, 2011.

Table 3.4: SSA's bottom five countries in terms of macro-level corporate governance for the period 1996–2011

Country / Territory	(SSA BOTTOM 5 AS AT 2011) AGGREGATE AVERAGE MACRO-LEVEL CORPORATE GOVERNANCE												
	Avg 1996	Avg 1998	Avg 2000	Avg 2002	Avg 2003	Avg 2004	Avg 2005	Avg 2006	Avg 2007	Avg 2008	Avg 2009	Avg 2010	Avg 2011
CENTRAL AFRICAN REPUBLIC	10.82	14.05	11.94	10.24	7.52	7.51	9.43	10.02	9.42	10.14	10.32	10.63	11.25
CHAD	17.04	16.74	19.39	16.88	12.11	10.99	8.23	7.37	6.44	5.47	7.15	7.69	8.97
ZIMBABWE	32.47	27.63	13.81	7.83	8.95	6.94	6.05	7.01	6.11	5.37	5.39	5.69	8.65
SUDAN	5.83	6.41	8.28	8.90	5.91	7.20	4.37	7.61	7.09	4.99	6.28	5.24	5.82
DEMOCRATIC. REP. CONGO	2.02	0.89	1.29	2.99	3.47	3.72	3.71	4.53	5.15	5.31	4.28	3.72	3.62

Source: Adapted from The World Bank, 2011.

**Table 3.5: SSA countries which have improved the most for the period 1996–2011**

	<b>(SSA TOP 10 Improvement (1996-2011) AGGREGATE AVERAGE MACRO-LEVEL CORPORATE GOVERNANCE % CHANGE (POSITIVE))</b>													
<b>Country/Territory</b>	<b>Avg 1996</b>	<b>Avg 1998</b>	<b>Avg 2000</b>	<b>Avg 2002</b>	<b>Avg 2003</b>	<b>Avg 2004</b>	<b>Avg 2005</b>	<b>Avg 2006</b>	<b>Avg 2007</b>	<b>Avg 2008</b>	<b>Avg 2009</b>	<b>Avg 2010</b>	<b>Avg 2011</b>	<b>% Change</b>
LIBERIA	2.50	5.23	4.76	4.20	4.44	6.04	13.60	21.76	22.85	17.44	20.30	23.74	23.27	830.86
RWANDA	8.51	12.56	15.40	18.62	21.59	24.44	19.55	32.67	36.16	38.03	38.87	44.42	45.69	436.87
BURUNDI	3.64	4.61	5.92	9.14	8.00	7.94	13.70	14.82	13.18	14.96	15.46	13.16	13.61	274.14
SIERRA LEONE	12.58	10.02	7.53	17.18	17.88	20.46	18.51	20.36	24.02	24.00	24.17	26.03	26.57	111.13
NIGER	16.43	18.22	27.61	26.57	29.07	28.78	31.40	30.32	28.62	28.57	28.90	28.39	32.87	100.13
CONGO, DEM. REP.	2.02	0.89	1.29	2.99	3.47	3.72	3.71	4.53	5.15	5.31	4.28	3.72	3.62	79.07
ANGOLA	8.26	4.44	3.71	7.91	10.48	10.08	11.21	12.73	12.38	14.85	14.98	15.50	14.78	78.94
ETHIOPIA	12.71	20.96	21.46	18.24	19.37	19.54	13.47	18.47	19.54	23.86	21.62	22.71	21.89	72.25
GUINEA-BISSAU	9.88	7.27	16.35	18.16	15.71	15.94	17.30	18.78	16.32	14.78	14.83	15.83	15.50	56.77
ZAMBIA	28.04	33.31	30.96	31.02	33.99	33.76	30.44	34.55	37.70	36.38	35.47	35.18	41.53	48.10

Source: Adapted from The World Bank, 2011.

Table 3.6: SSA countries which have declined the most for the period 1996–2011

(SSA TOP 10 Decline (1996-2011) AGGREGATE AVERAGE MACRO-LEVEL CORPORATE GOVERNANCE % CHANGE (NEGATIVE))														
Country/Territory	Avg 1996	Avg 1998	Avg 2000	Avg 2002	Avg 2003	Avg 2004	Avg 2005	Avg 2006	Avg 2007	Avg 2008	Avg 2009	Avg 2010	Avg 2011	% Change
ZIMBABWE	32.47	27.63	13.81	7.83	8.95	6.94	6.05	7.01	6.11	5.37	5.39	5.69	8.65	-73.35
CÔTE D'IVOIRE	41.55	35.02	19.02	17.44	12.07	9.22	8.43	9.40	10.32	10.23	12.71	11.89	13.62	-67.21
ERITREA	26.97	33.38	27.79	19.64	14.53	12.20	19.38	15.44	12.49	14.66	13.42	12.35	11.50	-57.35
MAURITANIA	44.16	41.65	41.90	49.66	45.85	37.60	37.51	33.33	31.21	21.41	24.14	20.93	23.22	-47.42
CHAD	17.04	16.74	19.39	16.88	12.11	10.99	8.23	7.37	6.44	5.47	7.15	7.69	8.97	-47.34
MADAGASCAR	39.44	34.87	43.06	44.32	49.69	47.36	46.75	46.18	46.27	38.72	30.90	27.44	27.63	-29.94
SÃO TOMÉ AND PRINCIPE	53.08	43.35	51.05	45.54	38.90	40.40	37.01	38.17	40.41	39.45	37.83	36.24	38.06	-28.30
GUINEA	16.13	20.63	15.81	18.03	19.79	15.44	14.06	8.49	6.77	7.34	9.30	10.63	12.12	-24.85
TOGO	26.17	22.62	22.42	20.53	18.62	21.47	18.04	18.57	21.10	23.48	20.05	20.33	20.91	-20.10
COMOROS	23.48	20.55	14.24	27.86	18.18	19.21	17.85	20.67	17.11	15.66	16.40	17.94	19.09	-18.78

Source: Adapted from The World Bank, 2011.

### 3 . 3 . C H A P T E R S U M M A R Y

This chapter has provided an overview of SSA countries' FDI trends relative to global trends as well as overall SSA countries' macro corporate governance performance according to the World Bank governance index as developed by Kaufmann *et al.* (2011). While there has been absolute growth in FDI flows to SSA countries since the 1990s, Africa's relevant FDI share as opposed to other developing countries has declined in real terms. There is also a concentration of FDI to resource-seeking markets. In respect of macro-level corporate governance performance of SSA countries, there are encouraging signs and various countries have over a short period demonstrated tangible improvements in implementing overall governance reforms. Many countries within the region have deteriorated and some reflect no significant improvement at all and these in many instances from a low base in terms of overall percentile ranking relative to global macro-level governance standing.

## CHAPTER 4

### METHODOLOGY

#### 4.1. THE MODEL

The control variables influencing FDI are heterogeneous and change from country to country. The researcher thus used panel data regression to allow for parameters which included cross-sectional and time series identifiers. This provides for a larger set of data points which should reduce co linearity between the control variables and improve the overall efficiency of the estimator. Panel data is the pooling of observations over a cross section of units of observations over time. One of the major advantages of panel data over the standard estimators like the OLS method is the ability to control for individual and specific, time-invariant, unobserved heterogeneity, the presence of which could lead to bias.

The impact of the main independent variable, macro-level corporate governance on FDI inflows, was estimated using a panel regression model including other explanatory variables. Panel data results in an increase in the number of observations specifically as data for SSA countries are at times incomplete and yield better and more representative estimation results compared to time series or cross-section studies (De Wet & Van Eyden, 2005). The ability to analyse and estimate more complex and dynamic equations and the impact on the estimators can be better modelled using panel data regression (Baltagi, 2005). The major disadvantage of panel data versus time series and cross-sectional data is that it requires more extensive data which could result in gaps in the data and observations to be dropped.

##### 4.1.1. The model specification

The baseline specification was adapted from Adeoye (2009). To test the impact of macro-level corporate governance on FDI inflows for SSA countries, the following model was specified:

$$FDI_{it} = \beta_0 + \beta_1 MGOV_{it} + \beta_2 GDPPC_{it} + \beta_3 TRDOPE_{it} + \beta_4 FOPE_{it} + \beta_5 CPI_{it} + \beta_6 HCDSE_{it} + \beta_7 INFRAINT_{it} + \varepsilon_{it}$$

Macro-level data from 2002 to 2011 was used.

Variables for the research were defined as follows:

- i.  $FDI_{it}$  – Inwards FDI (as % of GDP) of country  $i$  at year  $t$
- ii.  $MGOV_{it}$  – Macro governance (mean World Bank governance indicators percentile rank) of country  $i$  at year  $t$
- iii.  $GDPPC_{it}$  – Gross domestic product per capita (2005 constant US\$) of country  $i$  at year  $t$



- iv.  $\text{TRADEOPE}_{it}$  – Trade openness (Sum of exports and imports as % of GDP) of country  $i$  at year  $t$
- v.  $\text{FOPE}_{it}$  – Financial openness (Ratio of foreign assets and foreign liabilities as a ratio of GDP) of country  $i$  at year  $t$
- vi.  $\text{CPI}_{it}$  – Inflation rate (Consumer price index, annual % increase) of country  $i$  at year  $t$
- vii.  $\text{HCDSE}_{it}$  – Secondary school enrolment both sexes as % of country  $i$  at year  $t$
- viii.  $\text{INFRAINT}_{it}$  – Internet users (per 1 000 people), proxy for infrastructure development (Information Technology) of country  $i$  at year  $t$

## 4.2. DATA GATHERING

The following section defines and describes the variables as well as provides the sources.

FDI inflow data was the dependent variable obtained from the World Bank Development Indicators (World Bank, 2015). FDI inflows are defined as net inflows of investment to acquire a lasting management interest in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. This series shows net inflows (new investment inflows less disinvestment) in the reporting economy from foreign investors, and is divided by the GDP.

### 4.2.1. Governance indicators

The World Wide governance indicators as per Kaufmann *et al.* (1999, 2008, 2011) were used by the researcher to aggregate overall corporate governance for this period. Prior to 2002, the information on the World Bank governance indicators was only reported every two years and subsequently on an annual basis. The macro-level corporate governance index was aggregated and used as the test variable (mgov). The objective of this aggregated test variable for the SSA 45 countries was to determine if the overall measurement of country-level macro governance quality has a positive impact on attracting FDI relevant to other independent variables which also contributed to FDI flows. It is expected that countries with a higher level of macro-level governance (mgov) performance will positively affect FDI inflows.

This information is published by the World Bank annually and aggregates six areas of measurement in terms of the general governance environment of the macro-economic level for each country. These are based on a range of data sources which includes views from the public and private sectors, non-governmental organisations, multilateral institutions, rating agencies and citizens within those countries. The aggregated governance indicators comprise primarily surveyed information which is built from specific data collected from individually specified variables and which is then combined to measure the six governance indicators. The governance indicators used by the World Bank, as per Kauffmann *et al.* (1999, 2008, 2011), have resulted in a more detailed

comparison of national corporate governance performance as it groups the elements of corporate governance into six categories and measures the perceptions thereof:

- Voice and accountability – Freedom of expression, association and ability of citizens to participate and select their government. It reflects the accountability of government and the degree to which democratic processes are exercised in terms of citizen choice. It also measures freedom of press and association and the ability of civil society to provide checks and balances in terms of government and institutional accountability.
- Political stability and absence of violence – No likelihood of governments being unconstitutionally overthrown and no political violence and terrorism. It reflects the likelihood of transparent, clear and consistent application of macro-economic policies, social policies and political ideals.
- Government effectiveness – The quality of civil and public services and quality of government policy formulation and credibility in implementation thereof. An effective government mechanism exists to execute policies which are credible and unbiased to outside influences.
- Regulatory quality – The ability of government to formulate policies in the promotion and regulation of private sector development. Policies are credible and consistently applied, and this results in promoting the business investment climate.
- Rule of law – The design, implementation and enforceability of contractual rule, property rights, safety and security, judicial system and the likelihood of crime and violence. This must be unbiased and not subject to influence by external forces. There has to be enforceability and fair and transparent application of rule of law which promotes judicial independence.
- Control and corruption – The extent to which public power and office is exercised for private gain or not, and the way the political system is absent or not of all forms of corruption and abuse of power to advance private interests of those in political power. This includes the prevalence of graft and bribery and the extent to which this in practice is managed through appropriate policies and the implementation of active measures to curb and control these activities.

Each country within the dataset was measured in terms of percentile rank (0–100) and assigned a percentile rank relative to other countries for each of the six governance indicators. So for example, Botswana was provided a percentile rank of 65 percent for voice and accountability, indicating that 65 percent of the other countries' (entire dataset) performance was worse than that of Botswana and 35 percent were better in comparison (Adeoye, 2009; Ewstrand, 2010; Kaufmann *et al.*, 2011). The arithmetic mean of the six governance indicators was used to

determine the test variable  $mgov$  for the model as per Adeoye (2009) and Karimi and Gohari (2014).

#### 4.2.2. Macro-economic factors

The control variables that were used are detailed as follows:

1. Market size ( $gdppc$ ) which is measured in terms of constant 2005 US\$ obtained from the World Bank world development indicators (WDI). Countries with a larger population and market are expected to grow faster and positively attract FDI as multinational companies leverage economies of scale, lower production and distribution costs and higher returns and increased profitability. Growth in  $gdppc$  would be indicative of stable growth over time and stability in terms of fiscal and economic policies implemented by countries to support economic growth. It reflects the rate at which a country's purchasing power per person is increased over time and should positively attract FDI. Various empirical studies examined the determinants of FDI and its impact on investor as well as recipient country. These studies, in the form of panel data methodologies (Nonnenberg & Mendonca, 2004; Tsai, 1994) which use  $gdppc$  as a proxy of market size, found a significant positive relationship with FDI. A panel data approach study conducted by Morriset (2000) on 29 African countries on the main determinant of FDI found a positive relationship with good government policy, GDP growth rates and stable and transparent open economic policies. Mutenyo (2008) investigated 32 SSA countries using a cross-sectional panel data approach and found a positive relationship between market size and inward FDI flows.
2. Trade openness ( $trdope$ ) is expected to be a factor in attracting FDI. The ability and receptiveness of a country and the level of trade restrictions and tariff barriers placed by countries in terms of open trade will impact the investors' decision to enter into country. The study used the sum of exports and imports as a percentage share of GDP with the series obtained from the World Bank Development Indicators (WDI). A panel data study conducted by Fowowe (2006) on the effects of trade openness and financial liberalisation policies of 19 SSA countries revealed that there is a positive relationship between trade openness, level of trade exports and economic growth and FDI inflows.
3. Financial openness/capital account openness ( $fope$ ) is expected to positively attract FDI inflows. Following the Lane and Milesi-Ferretti (2007) (updated) database, a *de facto* financial openness indicator was calculated using the ratio of  $\frac{(FA_{it}+FL_{it})}{GDP_{it}}$  with FA (FL) denoting the stock of external assets (liabilities). The choice of a *de facto* financial openness indicator centres on the relative time-invariant character of the popular Chinn-Ito (2008) Index over the study's chosen time frame. Brafu-Insaidoo and Biekpe (2014), using a panel data model for 37 SSA countries, found that the liberalisation of inward FDI, positively attracts FDI to these

countries. Asiedu and Lien (2004), covering 96 developing countries over the period 1970 to 2000, found that capital controls on FDI vary per region and over time and positively attract FDI.

4. Inflation rate (cpi) — countries with stable macro-economic policies and which experience stable levels of inflation are likely to attract FDI as investors feel reassured that underlying economic risks and future outlooks are more certain. For this study, cpi as per World Bank WDI was used. Studies by Adeoye (2009), Nonnenberg and Mendonca (2004) and Vijayakumar *et al.* (2010) have shown that a negative relationship exists between capital flows and the rate of inflation. This is due to the fact that inflation is influenced by monetary and fiscal policy, volatile to exogenous factors and hence is a very significant measure used to determine economic stability and the ability of the host country to absorb price fluctuations. The stability of inflation rates promotes certainty and credibility in terms of future economic prospects in the form of growth forecasts and the ability of investors to recoup and repatriate profits and dividends and thus yield a return on investment commensurate with risk and cost of capital.
5. The level of human capital development, countries which have higher literacy rates and education levels should be able to provide more productive and efficient labour forces in order to attract FDI. Secondary school enrolment is used as a proxy for human capital development (hcdse). The study used secondary school enrolments as obtained from the World Bank Development Indicators (WDI). Nonnenberg and Mendonca (2004) study which investigated 28 developing countries over a period of 14 years, found there to be a positive relationship between the years of schooling and FDI inflows.
6. The level and development of infrastructure to promote economic development and reduction in cost of doing business and improving productivity should positively impact FDI inflows. Roads, rail, information and communication technology (ICT) and communication development will increase labour effectiveness and production capability. For infrastructure the study used the number of internet users per 1000 people as a proxy for infrastructure development (infraint); the data was obtained from World Bank WDI. Infrastructure development provides a platform for host countries to reduce the cost of business, and enhance efficiency and economies of scale, and is crucial to economic development. Studies by Adeoye (2009), Morriset (2000) and Vijayakumar *et al.* (2011) found that there is a significant positive linkage between FDI and infrastructure development. Musila and Sique (2006) confirmed that countries in Africa with a greater infrastructure development are more likely to attract FDI.

**Table 4.1: Summary of variables**

<b>Independent Variables</b>	<b>(A priori expectation)</b>	<b>Data Source</b>
Macro-level governance (Percentile rank)	Positive	World Bank, Kaufmann <i>et al.</i> , average mgov determined by author
Gross domestic product (gdppc)	Positive	World Bank (WDI)
Trade openness	Positive	World Bank (WDI)
Financial openness	Positive	Lane and Milesi-Ferretti (2007) (updated) database
Consumer price index	Negative	World Bank (WDI)
Human capital development (Secondary enrolment)	Positive	World Bank (WDI)
Infrastructure (Internet users per 1000)	Positive	World Bank (WDI)

Source: Data collected for 45 SSA countries as per Appendix 1, 2002–2011.

#### 4.3. DATA ANALYSIS

##### 4.3.1. Specification tests and estimation technique

To determine the most appropriate estimation technique, the study used specification tests to choose between a pooled model (pooled OLS), fixed effects (FE) model or a random effects (RE) model. The base estimate was the pooled model, the most restrictive of all three the prospective models as it does not acknowledge any cross-section heterogeneity within SSA. The *F*-test was used to test the validity of the fixed effects model relative to the pooled model. The *F*-test Prob > F = 0.0000 indicated that the null hypothesis of homogeneity at a one percent level could be rejected and it could be concluded that the presence of individual specific factors drive FDI inflows. The pooled OLS method was thus not appropriate.

The study subsequently proceeded to determine if a fixed effects or random effects model is the most suitable. This was done through the Hausman test. The null hypothesis is that the preferred model is random effects (Green, 2007). As per Table 4.2 below, it can be seen that the Hausman test returned a p-value of 0.0433. The Hausman test's null hypothesis that random effects provide consistent estimates could therefore be rejected at a five percent level of significance.

**Table 4.2: Hausman test (fixed vs random effects)**

Coefficients				
	(b)	(B)	(b-B)	$\sqrt{\text{diag}(V_b - V_B)}$
	fixed	random	Difference	S.E.
mgov	.2212357	.0970842	.1241515	.067114
gdppc	-.002199	-.0022339	.0000349	.0013611
trdope	.0982416	.0669371	.0313045	.0147957
fope	.0605034	.0660494	-.005546	.0056563
cpi	.0380421	.0865226	-.0484806	.0219406
hcdse	.3095851	.1745153	.1350698	.0703047
infraint	-.1837083	-.1714307	-.0122775	.0491839

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b = consistent under Ho and Ha; obtained from xtreg  
B = inconsistent under Ha, efficient under Ho; obtained from xtreg  
Test: Ho: difference in coefficients not systematic

$$\text{chi2}(7) = (b-B)'[(V_b - V_B)^{-1}](b-B)$$

$$= 14.48$$

Prob>chi2 = 0.0433  
(V\_b - V\_B is not positive definite)

Source: Author's own compilation.

A fixed effects model with Driscoll-Kraay standard errors was subsequently used as estimation method. The fixed effect model is the best fit for controlling for unobserved heterogeneity when heterogeneity is constant over time and correlated with independent variables (Baltagi, 2005). The following two conditions were met per the current specified model:

- All the explanatory variables included in the analysis were functionally identical.
- The objective was to compute the common effect size for the identified population, and not to generalise to other populations.

A major assumption of and FE estimator is that the unobservable common factors are uncorrelated with the explanatory variables and while this holds true, the coefficient estimates from these methods will be consistent (but inefficient), and hence the Driscoll Kraay standard errors should provide for more efficient results (Hoechle, 2007).

**Table 4.3: Testing for heteroskedasticity**

```
Modified Wald test for groupwise heteroskedasticity  
in fixed effect regression model  
H0:  $\sigma(i)^2 = \sigma^2$  for all i  
chi2 (37) = 21284.94  
Prob>chi2 = 0.0000
```

Source: Author's own compilation.

Table 4.3 above which is the result from the Modified Wald Test and the p-value of 0.0000, reflects the presence of heteroskedacity which is significant at the one percent level and the null hypothesis of homoskedacity (constant variance) is rejected. According to Baltagi (2005), due to N been only ten years for this study, cross-sectional dependence and serial correlation tests are not applicable and should not pose a problem in terms of estimation of the standard errors of the coefficient.

#### 4 . 4 . C H A P T E R S U M M A R Y

In this chapter the empirical model was specified, the variables defined and described, and the data sources provided. The theoretical underpinning of the model was provided along with the a priori expectations. Subsequently, the most appropriate estimation technique was identified. The following chapter presents the results.

## CHAPTER 5

### RESULTS

#### 5.1. EMPIRICAL RESULTS

**Table 5.1: Descriptive statistics**

Variable	Obs	Mean	Std. Dev.	Min	Max
fdi	449	5.354599	8.603433	-4.61801	91.00733
mgov	450	31.1712	18.59808	2.99	76.85
gdppc	450	1413.568	2241.334	133.1596	13631.76
trdope	448	75.88912	34.74864	21.67383	209.8743
fope	450	222.8449	619.3817	36.59999	7575.743
cpi	427	80.72193	19.8074	15.34757	133.2242
hcdse	261	38.63893	23.64214	6.94822	111.3399
infraint	439	4.758837	6.962679	.0310112	43.16401

Source: Author's own compilation.

**Table 5.2: Correlation matrix**

	fdi	mgov	gdppc	trdope	fope	cpi	hcdse	infraint
fdi	1.0000							
mgov	0.1425	1.0000						
gdppc	0.0852	0.3497	1.0000					
trdope	0.1945	0.1209	0.2035	1.0000				
fope	-0.0016	-0.0793	0.1919	0.1345	1.0000			
cpi	-0.0458	0.0268	0.0722	0.0364	0.1081	1.0000		
hcdse	0.1755	0.4641	0.7975	-0.0164	0.2051	0.0034	1.0000	
infraint	0.2576	0.3521	0.4015	-0.0317	-0.0580	0.2943	0.3780	1.0000

Source: Author's own compilation.



As per Table 5.1 above, fdi, gdppc, fope and infraint are subject to much variability in terms of the range of observations as well as significant variability in terms of the standard deviations for these variables. This is due to the nature of SSA countries' macro-economic variables and the level of development. As per Table 5.4 below, the  $R^2$  values of the different models are very poor (OLS  $R^2 = 0.2375$ , FE  $R^2 = 0.2122$ ) and there is an overall decrease in the fit for the FE model versus the OLS method as chosen. The mgov as a measurement tool for macro-level governance is a relatively new field of study (as per World Bank Governance Index) and this could be subject to time lags as governance improves or information on reporting thereof is incorporated in the investment decision. The number of years is also limited to ten years and if this to be extended over a longer period it could improve the overall fit of the model as the time series element of the model would be extended. Also as per Table 5.3 below, the model has taken into account that explanatory variables which provide problems of multicollinearity have been removed. This reduces the problem of biased estimates and the potential that standard errors may be inflated. Multiple explanatory variables to improve the robustness and ensure sufficient observations which could provide for better estimate results have been included in the model. A correlation coefficient matrix as per table 5.2 and variance inflator factor (VIF) were used to determine the suitability of the explanatory variables and to remove explanatory variables which are highly correlated (Koop, 2006).

**Table 5.3: VIF test for multicollinearity for explanatory variables**

Variable	VIF	1/VIF
gdppc	3.51	0.285159
hcdse	3.06	0.326602
infraint	2.11	0.472946
fope	1.91	0.524260
trdope	1.78	0.561072
mgov	1.47	0.680134
cpi	1.22	0.818044
Mean VIF	2.15	

Source: Author's own compilation.

As per Table 5.3 above, the VIF factor of less than ten indicates that all the variables included in the model are in order and that multicollinearity of the chosen explanatory variables should not present biased estimates.

**Table 5.4: Regression output for OLS, FE and FE with Driscoll Kraay standard errors**

The sample used for the study comprised of 45 SSA countries for the period 2002–2011. The dependent variable is the inflow of FDI as a (% of GDP). The regression coefficients are reported with the probability values for the three different estimations. The fixed effect model has been modified with the Driscoll Kraay standard errors. The coefficients for the Fixed Effects robust model and Driscoll Kraay with standard errors are the same with differences for the respective t values applicable. Denotes level of significance at: \* 1%; \*\* 5%

	OLS		GLS/FE (Std Errors)		FE/Driscoll Kraay (Std Errors)	
fdivol	Coef.	P> t	Coef.	P> t	Coef.	P> t
mgov	0.3114	0.285	0.2212**	0.023	0.2212*	0.007
gdppc	-.0001	0.746	-.0021	0.171	-0.0021	0.268
trdope	-.0064	0.691	-.0982*	0.001	-0.0982*	0.001
fope	0.0533*	0.000	0.0605*	0.000	0.0605*	0.000
cpi	-.0800*	0.003	0.0380	0.308	0.0380	0.308
hcdse	-0.0122	0.713	0.3095*	0.002	0.3095*	0.000
infraint	-0.0049	0.955	-0.1837	0.112	-0.1837	0.232
cons	-8.84*	0.001	-30.31*	0.000	-30.31*	0.000
N	243		243		243	
r2	.2122		.2375			
Prob(F-stats)	0		0		0	

Source: Author's own compilation.

The Driscoll Kraay FE results reveal that macro-level corporate governance, the explanatory variable which was the main subject of this study (mgov), is in line with the a priori expectation that there is a positive effect on inwards FDI. The p-value indicated that mgov is statistically significant at the one percent level. The Driscoll Kraay method was preferred over the standard FE method as it could be more efficient to deal with heteroskedacity and autocorrelation presence, and the robustness of this method was able to provide more reliable coefficient estimates and thus provide for better statistical inference. These findings are in line with previous studies by Farooque and

Yarram (2010), Adeoye (2009) and Karimi and Gohari (2014). These studies focused on the impact of macro-level corporate governance on FDI for worldwide middle income countries, and found that there is a positive and statistically significant relationship between mgov and FDI at the one and five percents significance levels respectively. A study by Ewstrand (2010) focused on global emerging market countries and specifically on the relationship between six individual indicators (as developed by Kaufmann *et al.* (1998, 2008) and FDI inflows. The study found regulatory quality and control of corruption to be positive and statistically significant at the ten percent level. A one percent increase in the mgov percentile rank, will have a 0.2212 increase in the expected FDI inflows.

Three of the other explanatory variables, namely tradeope, fope and hcdse, are significant at the one percent level and two of these variables are in line with the a priori expectation in terms of the impact that these variables would have on FDI inflows. The control variables, hcdse and fope, reflect a positive impact in attracting FDI. This would be indicative that investors will commit to FDI in countries which have sound policies and institutions which promote financial openness and the free flow of capital and investments within the financial system. The ability to leverage from a skilled workforce will also reduce the cost of doing business, increase the ability to be productive and promote economic efficiency and attract FDI. A study by Wint, Densil and Williams (2002), and Globerman and Shapiro (2003) found that human capital development in the form of literacy, and school enrolments measure whether there will be a positive relationship between literacy and FDI.

Trade openness was found to be statistically significant, but with a negative impact on fdi inflows. This is in contrast with the a priori expectation. Studies by Adeoye (2009) and Ewstrand (2010) found that trade openness was both statistically significant and positive in attracting fdi inflows. It was also found in studies conducted by Morriset (2000), Ezeoha and Cattaneo (2011) and Mijiyawa (2010) that countries with more open economies and policies which promote international trade are statistically significant and positive in receiving more FDI.

## 5 . 2 . C H A P T E R S U M M A R Y

This chapter summarised the results from the regression methods applied. A comparison of the results from the OLS and FE methods has been provided in order to reflect the coefficient estimates and statistical significance. The results and specific emphasis on the variable of interest, mgov, and other explanatory variables which are significant were detailed. Mgov was found to be positive and statistically insignificant (p-values) in relation to FDI inflows.

## CHAPTER 6

### CONCLUSION

#### 6 . 1 . S U M M A R Y

Over the last two decades, FDI investment inflows to developing countries have outstripped those of more developed economies. Asian countries, including China, have been the major recipients and have far surpassed any other region. In fact, in percentage terms over the previous five years from 2010–2014, FDI inflows to Africa have remained constant at 4.3 percent of the global overall percentage share, while Asia over the same period has increased from 26 to 36 percent (UNCTAD, 2015). So the question is, what factors drive the decision making of investors when they want to invest and to what extent do the different macro-economic and other factors influence this decision? While there are numerous studies and many literature sources which have focused on the determinants of FDI inflows, very little attention has been devoted to, and no studies have focused specifically on the role and influence of macro-level corporate governance on FDI inflows to SSA countries. There are widespread generalisations and mainstream perceptions held of the SSA region. This includes that the region is to a great extent prone to systemic issues such as lack of government effectiveness, absence of enforceable rules and regulation, political instability and leadership susceptible to widespread corruption and lack of accountability. This study aimed at the very least to establish a baseline analysis of the relationship between macro-level governance performance and FDI inflows for the SSA region.

Studies by Basu and Srinivasan (2002) have sighted that there is a negative correlation between political risk and instability and FDI inflows and a significant deterrent for investors when deciding to make long-term investments within the SSA region. The worldwide governance index as published annually by the World Bank provides for analysis and reporting on overall governance performance. It is the most detailed and objective tangible measurement tool which tries to measure this field of interest. Through the work of Kaufmann *et al.* (1998, 2008 and 2011), huge strides have been taken to put in place objective and systematic measures to monitor and report country-specific governance performance as per the six governance categories that have been refined over the last two decades. This study has used this worldwide governance index to measure the performance of SSA countries relative to their international peers and aggregated the six governance categories to derive and measure overall macro-level corporate governance. Previously, only certain aspects of governance and institutional risk measures and matrixes were available and used in studies to monitor the governance performance of the respective countries and to determine the extent to which this impacted on FDI and economic growth. This study focused on SSA macro governance performance and thus aimed to bridge the gap of previous studies and distinguish between perceptions and factual monitoring and reporting of the region.

Panel data for the period 2002 to 2011 for 45 SSA countries was used to determine the relationship between macro-level corporate governance and FDI inflows. The level of macro governance performance of the majority of countries used for this study proved to be predominantly weak and this weakness could be a contributing factor for the lack of greater FDI inflow volumes to the region. The methodology for this study was to make use of explanatory variables relative to the performance of FDI inflows to the extent that information included was reliably obtainable as well as to ensure that the possibility of multicollinearity amongst the variables had been removed so that robust unbiased estimations could be derived from the regression model.

Panel data fixed effects with Driscoll Kraay standard errors were used to control for individual and specific, time-invariant, unobserved heterogeneity. The study found that macro-level governance has a positive impact on FDI inflows to the region. Secondary school enrolment, which was used as a proxy for human capital development, was found to be positive and significant to attract FDI. This suggests that countries which advance human development and the level of skills will influence potential investors' decisions to invest. The level of trade and financial openness specifically refers to the ability of countries to have stable, predictable and well-implemented fiscal, trade and monetary policies.

The impact of macro-level governance relative to the traditional factors driving the FDI decision should not be understated. The ability of countries to have sound governance structures does not only directly influence the investment confidence and inflows, but the indirect consequences of having a stable country macro-level governance could be the differentiator in terms of where investors are likely to invest due to global market uncertainty and to mitigate against political risk. Improved quality of macro-level governance and in particular strengthening of institutions (legal, political and financial), government effectiveness and policies to enforce and actively pursue graft and corruption will directly and indirectly provide investors with greater certainty and information to make decisions on where to invest. As macro-level governance is receiving more attention, with detailed analysis and monitoring taking place, global investors are forced to acknowledge this particularly when deciding where to invest. The movement to social democracy, the intense scrutiny of shareholder activism, and global advancement of social and human rights equality are shifting the focus from a pure bottom line approach to that of promoting countries which improve all aspects of governance to the betterment of their citizens and all stakeholders including companies, organisations and civil society. Through the implementation of sound policies, establishment of independent institutions and effective government actions, SSA countries have the potential to secure a larger slice of global FDI inflows and transition to export-orientated growth spurred by investment in the region.

Political stability through improved macro-level corporate governance, coupled with stable macro-economic fundamentals, is essential for this to be realised. The implication is that this should be a focus area for SSA countries in terms of establishing institutions, implementing policies and improving overall government accountability which will promote a stable and more attractive investment environment. SSA countries should specifically address the macro governance individual factors to improve the overall performance of governance. The issue is not the conformance to appease foreign investors; instead it is to actively promote and enhance the governance infrastructure which will promote economic development through having sound working of all facets of government with the different spheres of public, private and civil institutions in promoting the countries and the region as a whole as a viable business destination. Countries that have formalised and established regulatory institutions which in itself should limit corruption should thus be a focus area for governments to improve and act as incentives for foreign investors to increase FDI levels. This is also borne out by the study of Asiedu (2000) of SSA countries which indicated the existence of strong institutions and quality regulation policies and frameworks that in turn promoted FDI in the region.

The results of this study reflect that the performance at a macro governance level by SSA developing countries is of importance and significance and can influence FDI investment in the region. It is not merely rhetoric to provide assurance to investors and be politically correct in terms of appeasing foreign stakeholders and international watchdogs, but tangibly in conjunction with other factors an important criteria which influences the investment decision. The importance of a good macro governance infrastructure is to bridge the issue of information asymmetry and be a key measure for investors to mitigate against political risks. It provides stakeholders and investors with greater comfort that the potential of returns could be realised and repatriated in a more certain and predictable manner. In a world economy which is currently rife with political and economic uncertainty, macro-level governance would be the ideal way for SSA countries to provide potential investor suitors with a more business-centric and efficient environment in which to promote their business activities. In this way the SSA countries would promote themselves and reach their development goals and socio-economic challenges.

## 6 . 2 . L I M I T A T I O N S   A N D   P O S S I B L E   F U T U R E S T U D I E S

Data on explanatory variables which could have been included and which past studies indicated to be significant for investors, such as Human Capital Development data, was limited to secondary school enrolment (a proxy for hcdse) and was limited in terms of the data available for the SSA countries. Similarly, there is a lack of complete data for infrastructure development or a reliable composite proxy, due to relative infrastructure underdevelopment and limited reliable information of infrastructure metrics across the region. These are important factors which contribute to FDI

inflows and which would impact the investment decision in the region. The worldwide governance index is fairly new, and governance might require a greater lead time in order to assist MNCs and other investors to make the decision to invest and compare regions and potential economic returns. Future studies should conduct the analysis over a longer time frame to allow for a gradual change in macro-level governance to be compared for different periods. This evaluation will allow the analysis of trends and greater emphasis by host countries to improve macro-level corporate governance and to track the performance of macro governance across the region. In addition, future studies could focus on the individual governance indicators for specific countries and determine whether macro governance at a country level aggregated and individually has any impact on FDI inflows.

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**APPENDIX 1:**  
**SUB SAHARAN AFRICAN COUNTRIES LIST**

Angola, Benin ,Botswana, Burundi, Cameroon, Cape Verde, Central African Republic, Chad,Congo, Congo Democratic Republic, Comoros, Cote d Ivoire, Equatorial, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Mali, Malawi, Mauritius, Mauritania, Mozambique, Namibia, Niger, Nigeria, Rwanda,Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, South Africa, Sudan, Swaziland, Tanzania, Togo, Uganda, Zambia, Zimbabwe.

**APPENDIX 2:**  
**LIST OF SSA COUNTRIES AVERAGE MACRO LEVEL**  
**CORPORATE GOVERNANCE 2002–2011**

	Avg 2002	Avg 2003	Avg 2004	Avg 2005	Avg 2006	Avg 2007	Avg 2008	Avg 2009	Avg 2010	Avg 2011
Country/Territory	MGOV	MGOV	MGOV	MGOV	MGOV	MGOV	MGOV	MGOV	MGOV	MGOV
ANGOLA	7.91	10.48	10.08	11.21	12.73	12.38	14.85	14.98	15.50	14.78
BENIN	45.37	45.06	43.07	37.28	43.53	43.50	43.40	41.63	39.99	41.06
BOTSWANA	71.30	76.85	74.02	73.86	70.46	71.37	71.35	70.56	71.14	71.53
BURKINA FASO	38.48	40.70	40.06	40.13	40.90	41.58	44.01	43.65	42.63	39.66
BURUNDI	9.14	8.00	7.94	13.70	14.82	13.18	14.96	15.46	13.16	13.61
CAMEROON	16.96	21.56	20.35	20.56	20.17	20.12	19.30	20.72	19.34	19.04
CAPE VERDE	59.51	61.77	62.72	58.70	66.04	67.31	66.98	66.80	66.20	67.02
CENTRAL AFRICAN REPUBLIC	10.24	7.52	7.51	9.43	10.02	9.42	10.14	10.32	10.63	11.25
CHAD	16.88	12.11	10.99	8.23	7.37	6.44	5.47	7.15	7.69	8.97
COMOROS	27.86	18.18	19.21	17.85	20.67	17.11	15.66	16.40	17.94	19.09
CONGO, DEM. REP.	2.99	3.47	3.72	3.71	4.53	5.15	5.31	4.28	3.72	3.62
CONGO, REP.	14.38	15.07	15.66	11.70	12.18	11.73	12.36	14.25	15.02	15.88
CÔTE D'IVOIRE	17.44	12.07	9.22	8.43	9.40	10.32	10.23	12.71	11.89	13.62
EQUATORIAL GUINEA	8.69	12.46	10.85	9.40	12.37	12.67	12.48	13.44	12.45	12.89
ERITREA	19.64	14.53	12.20	19.38	15.44	12.49	14.66	13.42	12.35	11.50
ETHIOPIA	18.24	19.37	19.54	13.47	18.47	19.54	23.86	21.62	22.71	21.89
GABON	43.89	41.09	33.44	37.77	28.70	28.04	27.69	27.76	29.12	33.66
GAMBIA, THE	40.86	45.55	38.95	35.14	34.84	35.13	34.32	35.87	34.06	29.85
GHANA	45.26	49.22	48.81	51.32	54.57	53.43	53.68	54.69	55.47	56.17
GUINEA	18.03	19.79	15.44	14.06	8.49	6.77	7.34	9.30	10.63	12.12

GUINEA-BISSAU	18.16	15.71	15.94	17.30	18.78	16.32	14.78	14.83	15.83	15.50
KENYA	25.40	28.70	30.40	28.21	29.91	28.44	26.83	25.74	29.21	28.10
LESOTHO	47.53	45.64	46.03	45.01	44.51	40.70	43.37	47.61	48.38	48.70
LIBERIA	4.20	4.44	6.04	13.60	21.76	22.85	17.44	20.30	23.74	23.27
MADAGASCAR	44.32	49.69	47.36	46.75	46.18	46.27	38.72	30.90	27.44	27.63
MALAWI	30.55	34.98	35.19	36.74	37.70	38.90	41.17	43.39	41.89	41.13
MALI	43.11	44.22	45.27	44.23	44.23	45.09	42.19	37.98	36.50	35.54
MAURITANIA	49.66	45.85	37.60	37.51	33.33	31.21	21.41	24.14	20.93	23.22
MAURITIUS	74.29	75.10	74.36	73.07	70.85	74.08	76.18	73.89	73.39	74.98
MOZAMBIQUE	40.85	38.15	37.58	39.18	39.66	40.05	41.72	44.02	42.68	39.49
NAMIBIA	57.66	59.82	60.06	58.52	60.76	62.90	67.14	63.08	62.18	61.68
NIGER	26.57	29.07	28.78	31.40	30.32	28.62	28.57	28.90	28.39	32.87
NIGERIA	10.64	11.70	11.05	15.69	15.50	15.53	17.72	15.56	15.79	15.81
RWANDA	18.62	21.59	24.44	19.55	32.67	36.16	38.03	38.87	44.42	45.69
SÃO TOMÉ AND PRINCIPE	45.54	38.90	40.40	37.01	38.17	40.41	39.45	37.83	36.24	38.06
SENEGAL	52.57	48.11	50.68	49.07	43.17	39.41	42.73	39.37	35.90	39.34
SEYCHELLES	56.81	56.81	54.30	58.23	54.24	53.46	54.34	55.06	58.20	58.38
SIERRA LEONE	17.18	17.88	20.46	18.51	20.36	24.02	24.00	24.17	26.03	26.57



**APPENDIX 2:**  
**LIST OF SSA COUNTRIES AVERAGE MACRO LEVEL CORPORATE**  
**GOVERNANCE 2002–2011**

	Avg 2002	Avg 2003	Avg 2004	Avg 2005	Avg 2006	Avg 2007	Avg 2008	Avg 2009	Avg 2010	Avg 2011
Country/Territory	MGOV	MGOV	MGOV	MGOV	MGOV	MGOV	MGOV	MGOV	MGOV	MGOV
SOUTH AFRICA	61.66	61.99	64.48	62.86	64.30	61.89	60.54	59.47	60.09	60.43
SUDAN	8.90	5.91	7.20	4.37	7.61	7.09	4.99	6.28	5.24	5.82
SWAZILAND	35.00	29.25	24.21	24.48	29.57	29.46	32.67	33.75	35.82	31.65
TANZANIA		33.88	35.36	36.95	41.83	41.59	40.06	39.98	38.89	37.36
TOGO	20.53	18.62	21.47	18.04	18.57	21.10	23.48	20.05	20.33	20.91
UGANDA	29.13	31.47	33.18	29.02	31.97	33.56	32.44	31.90	32.35	32.31
ZAMBIA	31.02	33.99	33.76	30.44	34.55	37.70	36.38	35.47	35.18	41.53
ZIMBABWE	7.83	8.95	6.94	6.05	7.01	6.11	5.37	5.39	5.69	8.65