Good governance as key to the flow of foreign development aid: the sub-Saharan Africa perspective

A Dissertation

presented to

The Development Finance Centre (DEFIC),
Graduate School of Business
University of Cape Town

In partial fulfilment
of the requirements for the degree
Master of Commerce in Development Finance

by

Robinson Gezimati

(GZMROB001)

February 2018

Supervisor: **Dr. Abdul Latif Alhassan**

PLAGIARISM DECLARATION

Declaration

1. I know that plagiarism is wrong. Plagiarism is to use another's work and pretend that it is one's own.

2. I have used the APA convention for citation and referencing. Each contribution to, and quotation in, this dissertation from the work(s) of other people has been attributed, and has been cited and referenced.

3. This dissertation is my own work.

4. I have not allowed, and will not allow, anyone to copy my work with the intention of passing it off as his or her own work.

5. I acknowledge that copying someone else's assignment or essay, or part of it, is wrong, and declare that this is my own work.

Signed by candidate

Robinson Gezimati (GZMROB001)

ABSTRACT

The aim of this study was to evaluate the importance of good governance to the flow of foreign development aid. The researcher used the sub-Saharan Africa region to accomplish the aim of his study. The study examined the extent to which foreign development aid has been targeted at countries with sound governance systems, that is, strong institutions and policies. This study therefore determined whether the flow of foreign development aid in sub-Saharan African developing countries has changed since the endorsement of the "Monterrey Consensus" by targeting those countries with sound economic institutions and policy environments.

Empirical and theoretical literature was reviewed on foreign development aid as well as governance systems especially the Ibrahim Index of African Governance (IIAG), which was discussed and used in this study as the governance indicator system. The study's results and findings were deduced from secondary data which addressed the governance indicators in sub-Saharan Africa for 2010 to 2015, gathered from the IIAG assessment reports of 12 selected sub-Saharan African countries as well as the amount of foreign development aid received by each of the countries during the same period gathered from OECD and World Bank statistics.

Additionally, inferential analysis was undertaken using the Spearman's correlation test as well as a multiple linear regression analysis to establish the relationships and/or impact of the governance indicators on the flow of foreign development aid to sub-Saharan Africa. The study concluded that the combined effect of all the governance indicators have a statistical significant effect on the flow of foreign development aid to developing countries in sub-Saharan Africa. Individually, Participation and Human Rights indicators as well as Sustainable Economic Opportunities indicators have a positive effect or impact on the flow of foreign development aid in sub-Saharan African countries, with Sustainable Economic Opportunities indicators having the highest impact.

However, Safety and Rule of Law indicators were discovered to have a negative effect on the flow of foreign development aid in sub-Saharan Africa whilst Human Development indicators were discovered not to have any effect or impact. On the other hand, the study also noted that in further determining allocations funding agencies may consider a country's Safety and Rule of Law indicators as well as Human Development indicators whilst Participation and Human Rights indicators and Sustainable Economic Opportunity indicators were seen not have any significant effect on determination of funding allocations.

TABLE OF CONTENTS

LIST OF FIGURES AND TABLES

GLOSSARY OF TERMS

DAC	Development Assistance Committee
FDI	Foreign Direct Investment
Foreign Development Aid	The donation of funds by rich nations to poor nations so that poor nations can sufficiently meet the needs of its people (Hoy, 1998). Also referred to as Official Development Assistance.
GDP	Gross Domestic Product
Governance	The way power is exercised in the management of a country's social and economic resources for development (World Bank, 1998)
ICRG	International Country Risk Guide
IIAG	Ibrahim Index of African Governance
NGO	Non-Governmental Organisation
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
UN	United Nations
USA	United States of America

ACKNOWLEDGEMENT

I would like to express my deepest gratitude to the University of Cape Town, Graduate School of Business (GSB) for affording me an opportunity to study at this highly rated educational institution. I am especially indebted to my supervisor Dr. Abdul Latif Alhassan for his unwavering support, collegiality and mentorship throughout this project. As my mentor and teacher, he has taught me a lot, more than I could ever give him credit for here.

My sincere gratitude goes to my family whose support kept me going during this tough journey. Many thanks to my parents, Mr and Mrs Gezimati, for laying the foundation and believing in me. I am always assured of your love and guidance in whatever that I pursue. To my loving wife, Faith, and son, Rukudzo, thank you for all the encouragement and the prayers - this is especially for you!

Above all, I would like to give thanks to My Lord and Saviour, Jesus Christ, for giving me the strength to persevere, the knowledge, wisdom and understanding to bring this work to completion. Glory and honour be unto your Name with the publication of this work.

CHAPTER 1
INTRODUCTION

1.1 Background to the study

Official Development Assistance (ODA) or foreign development aid plays a significant role in complementing other sources of financing for development (Dollar and Levine, 2006). A study carried out by the World Bank dubbed "Assessing Aid" (1998), argued that foreign aid would have greater impact on poverty reduction if it was targeted on the poorest countries and among them those with strong economic institutions and policies. The "Monterrey Consensus" which was derived from the United Nations Conference on Financing for Development held in Mexico in 2002, concluded that developing countries' own institutions and policies are key in ensuring sustainable development and that sound policies and good governance at all levels of government are fundamental in ensuring ODA effectiveness (United Nations, 2002)

Several types of evidence have been derived to prove that effectiveness of foreign development aid is influenced by the recipient country's economic institutions and policies. This is evidenced by several country examples where the existence of sound institutions and policies have produced good results. According to a study carried out by Dollar and Levine (2006), the Marshall Plan is one famous example and other examples include South Korea (1960's - 1970's), China (1980's) as well as Uganda and Vietnam (1990's). Studies carried out have also proven that development projects tend to succeed more in jurisdictions where there are sound institutions and policy environments as opposed to those with weak institutions and policies (Kaufmann et. al., 1999; Dollar and Levin, 2005).

Dollar and Levine (2005) considered the effect of political institutions and they determined the relationship that exists between democracy and project outcomes and concluded that structural adjustment loans were more successful in democracies than they are in autocratic governments. Burnside and Dollar (2000) found that there is an indirect relationship between foreign aid and growth hence it is difficult to argue that foreign aid works the same in all institutional/policy environments. However, they also found that growth is correlated to the interaction of foreign aid and an index of institutions and policies. According to Dollar and Levine (2006), this interaction is consistent with the argument that the effectiveness of foreign aid resources

significantly depends of the recipient country's institutions and policies. There is, however, an ongoing debate regarding these different theories.

As opposed to the Dollar and Levin (2006) study, which has considered separately the impact of the institutional selectivity and poverty indices in determining the level of allocation for foreign aid by donors, this study will consider the impact of the overall country's quality of governance to the actual flow of foreign development aid with specific focus on countries in the sub-Saharan African region.

The study builds on the existing literature on how aid allocations are influenced by the soundness of a country's economic institutions and policies. It explores the impact of the overall quality of governance system, as determined by the Ibrahim Index of African Governance (IIAG) annual assessments, to the flow of foreign development aid within sub-Saharan African developing countries. The IIAG assesses governance under four main conceptual categories namely; safety and rule of law, participation and human rights, sustainable economic opportunity and human development. The study further analyses the effect of each of these indicators on the flow development aid to determine whether donors consider specific governance indicators when determining aid allocations for developing countries.

According to Dollar and Levine (2006), most studies that have been carried out around this topic have either estimated a decision model for donor agencies using regression analysis (Maizels and Nissanke, 1984; McGillivray, 2004) or evaluate the actual disbursement patterns using indices based on some specific development criteria, such as income of recipients (McGillivray, 2000; Roodman, 2003a; White,1992). Dollar and Levine (2006) further combined the two schools of thought by constructing an index of a donor's optimal aid allocation based on weighted measures of developmental criteria as well as the donor's political and commercial interests and they evaluate each donor's actual aid commitments with respect to the optimal aid allocation (Dollar and Levin, 2006).

As opposed to this donor-oriented approach to foreign aid allocation, in this study focus will be on the actual patterns of foreign aid flows and examining that against the overall governance indices for each of the selected countries. A regression model will be used to determine the impact of governance on the flow of foreign aid to countries within the sub-Saharan Africa

region. Reference will be made to the governance indicators identified by the Ibrahim Index of African Governance (IIAG).

1.2 Problem Statement

Official development assistance (ODA) or foreign development aid seems to open hope for a better future for many developing countries and is therefore considered an essential source of development finance with the potential to turn around developing economies. As the rationale, by donors, for providing foreign aid evolves following the "Monterrey Consensus", more funds are now being channelled to developing countries with the aim to reduce poverty and improve the quality of lives for people living in those countries.

Post-September 11, the perspective of donor agencies on foreign development aid or ODA has changed significantly. In the past, foreign development aid was used to buy the "elites" and influence affairs in third world countries, for example during the Cold War era. The effects on development were considered secondary. According to Akramov (2006), this approach has since changed because of the increasing importance of developing countries to global security, for example, several developing countries in Asia and Africa have served as staging points for terrorist attacks. Industrialised countries have therefore realised the importance of cooperating with developing countries to ensure global security. They have also begun to understand that persistent poverty results in developing countries being vulnerable to security and other threats therefore the importance of foreign aid has increasingly shifted towards addressing the challenges of development (Akramov, 2006).

Akramov (2006) links two contemporary views for the rationale of foreign aid – first, donor's self-interests (political, strategic and economic) and second, the recipient needs (economic empowerment, poverty reduction, education, reduction of maternal and infant mortality, etc) – to come up with an enlightened view that the rationale of foreign aid is donor's self-interests with the recognition that a world with less diseases and poverty and more educated people is likely to be more secure and stable creating opportunities for the rest of the world's population.

The United Nations (UN), in 2002, through the "Monterrey Consensus" further developed on this idea and identified that foreign aid is more effective if targeted on developing countries with sound institutions and economic policies (Dollar and Levine, 2006). Major donor agencies and countries to signed up to this consensus and agreed to use institutional capacity and strength

of economic policies as a basis for determining allocations for foreign development aid to developing countries.

In determining the foreign aid allocations to the various developing countries, donor agencies often consider several factors including the strength of the recipient countries' economic governance structures and policies. The scaling up of foreign development aid in most sub-Saharan African countries also brings challenges to policy makers in governments of the recipient countries in coming up with policies that are more attractive to donors and ensuring that governance structures are robust and are attractive to foreign development aid.

Through analysing selectivity models by donors, studies by Dollar and Levine (2006) sought to examine the extent to which foreign aid allocation by multilateral and bilateral donor agencies has considered poverty reduction but also targeting developing countries with sound institutions and governance structures. The studies concluded that the determinants of foreign aid allocation have evolved significantly over time. Besides targeting poor countries, the studies also concluded that multilateral donor agencies also consider the economic governance of recipient countries in determining foreign aid or ODA allocations (Dollar and Levine, 2006).

Developing on these theories, this study seeks to further dissect the extent to which the strength of governance structures for developing countries in sub-Saharan Africa have contributed to the flow of foreign development aid in the years post the "Monterrey Consensus". The study will focus on all the indicators of governance as determined by the IIAG, namely; safety and rule of law, participation and human rights, sustainable economic opportunity and human development (IIAG, 2016). Furthermore, using correlation testing, the study will also determine whether donors have specific preferences to each of these indicators when making the determination on how much development aid they can allocate to a developing nation. The study will specifically focus on countries within the sub-Saharan Africa region.

1.3 Research Questions and Scope

The study seeks to answer the following questions:

- Is the overall governance quality rating important in determining the flow of foreign aid to developing countries in sub-Saharan Africa?
- What impact does each of the governance indicators have on the flow of foreign aid to developing nations in sub-Saharan Africa?

1.4 Objectives of the Research

The purpose of this study is to determine whether the flow of foreign aid in selected Sub-Saharan African developing countries has changed since the endorsement of the "Monterrey Consensus" by targeting those countries with sound economic institutions and policy environments. We will examine the extent to which foreign development aid has been targeted at countries with sound governance systems, that is, strong institutions and policies. Therefore, the following objectives shall guide this study:

- To determine whether the overall governance quality rating is important in determining the flow of foreign aid to developing countries in sub-Saharan Africa;
- To determine the impact each of the governance indicators have on the flow of foreign aid to developing nations in sub-Saharan Africa; and

1.5 Significance of the Study

As discussed earlier, previous studies have identified multiple factors as having influence on foreign aid allocation and its effectiveness and have concluded that donor agencies and especially multilateral agencies consider the governance structures for the recipient countries when determining the allocations to these countries. Most of the research has focused on the effectiveness of these in determining donor foreign aid allocation policies focusing on the major donor agencies without considering the overall impact of developing nations' quality of governance systems on the overall flow of foreign aid. Therefore, this study would be significant to the researcher as an interested stakeholder in the NGO sector. This is because it would assist him to understand the relationship of governance and the flow of foreign aid as well as how he can use that knowledge in his line of work. Furthermore, the results of this study would also contribute to the body of literature on the subject matters of governance and foreign aid flow especially in sub-Saharan Africa. This knowledge could assist policy makers as well as other strategic stakeholders in sub-Saharan Africa countries who would be seeking ways to improve the flow of foreign aid in their countries. The results of this study could also be used as a template by governments from various sub-Saharan Africa countries in improving their governance performance as well as were they should focus their attention when seeking an improvement in foreign aid flow at their countries. On the other, hand, this study could also assist donors intending to provide foreign aid to sub-Saharan Africa countries. They could use the findings from this study to provide them guidance.

1.6 Research Assumptions

For the purposes of this dissertation, an assumption will be made that major donors have signed up to the "Monterrey Consensus" and have endorsed the idea that sound governance is key in ensuring that foreign development aid is used effectively. In this study, the simple hypothesis is that the governance structures for countries in sub-Saharan Africa play an indispensable role in the flow of foreign aid or ODA to these countries. The research will further apply some empirical analysis between the flow of foreign development aid and each of the four major governance indicators to try and place them on a ranking scale of importance. The null hypothesis will be rejected if there is no positive correlation between the governance structures, as determined by the IIAG, of developing nations in Sub-Saharan Africa to the amount of foreign aid that they receive on an annual basis.

1.7 Organization of the Study

The study was broken down into five chapters. The first chapter (Chapter 1) covered the introduction of the study, background of the study, problem statement, and significance of the study, research objectives, research questions, hypothesis, scope of the study as well as the dissertation structure. Chapter 2 captured the literature review related to the area under review in this study. Chapter 3 presented the methodology of the study, aspects on the study involved, the study sample, data collection methods and data analysis. Chapter 4 covered the results of the study and the discussion of the results thereof. Lastly, was Chapter 5 that focused on conclusions and recommendations of the study and proffer insights to current and future research directions.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter shall identify and examine what has been done by other scholars in relation to the topic. This literature review shall also assist the researcher in limiting the research problem as well as better defining it. This chapter shall also form a framework within which the findings of the research will be interpreted as well as to overcome the limitations from various previous studies.

2.2 Definition and measurement of key variables

2.2.1 Foreign Development Aid

Hoy (1998) defines foreign development aid as the benevolent donation of funds by rich nations to poor nations so that the poor nations can sufficiently meet the needs of its people. The Development Assistance Committee (DAC) defines foreign development aid as Official Development Assistance (ODA); this definition is considered as the technical definition of foreign aid. Foreign aid or ODA is a "transfer of resources on concessional terms (Akramov, 2012) undertaken by official agencies; [which] has the promotion of economic development and welfare as its main objectives; and has a grant element' of 25 percent or more" (Cassen, 1994). The Organization for Economic Cooperation and Development (OECD) identifies foreign aid or ODA as consisting of official grants and loans from donor agencies (multilateral and bilateral) to developing countries with the aim of promoting economic growth and development.

2.2.2 Governance

In their report on Sub-Saharan Africa, the World Bank described the crisis in the region as a "governance crisis" (World Bank, 1998). The World Bank (1998) defines governance as the way power is exercised in the management of a country's social and economic resources for development. A good governance system sets out certain requirements on the process of public policy formulation and decision-making (Jensen, 2013). It therefore implies managing public affairs in an accountable, participatory, equitable and transparent manner. It also entails effective participation in the public policy-making process, prevalence of the rule of law and

an independent judiciary institutional checks and balances through horizontal and vertical separation of powers and effective oversight agencies (Kaufmann, Kraay, and Zoido-Lobaton, 1999). This study shall use the IIAG indicators of governance.

a) Measurement of governance

As indicated in the introduction, the main objective of this study is to examine how the allocation of foreign aid to developing countries in Sub-Saharan Africa, considers the quality of governance, based on the IIAG indicators of governance. According to the Mo Ibrahim Foundation (http://mo.ibrahim.foundation/iiag/), the IIAG provides an annual assessment of the quality of governance and performance of 48 countries in sub-Saharan Africa. The IIAG consists of 90 indicators built into fourteen sub-categories, four categories and one overall measurement of governance performance. The indicators include official data, expert assessments and citizen surveys provided by more than 30 independent global institutions and is considered the most comprehensive collection of data on African governance.

According to Iqbal and Shah (2008) Professor Robert Rotberg, Dr Rachel Gisselquist and their team at the Kennedy School of Government of Harvard University are the producers of this index and Mo Ibrahim Foundation funds this project. The first index came out in 2007 when data for 2000, and 2002 and 2005 were also published to provide a benchmark. Compiled by combining more than 90 variables from more than 30 independent African and global institutions, the IIAG is the most comprehensive collection of data on governance in Africa.
The IIAG provides a framework for citizens, governments, institutions and the private sector to accurately assess the supply of public goods and services and policy outcomes across the continent. In addition to it being a tool to help determine and discuss government performance, the IIAG is a decision-making tool to govern.

The Foundation defines governance as the provision of political, social and economic assets that citizens have the right to expect from their state and that a state has the responsibility to provide to its citizens. The IIAG assesses progress in four main conceptual categories: security and the rule of law, participation and human rights, sustainable economic opportunities and human development. These four pillars are populated with data covering elements of governance ranging from infrastructure to freedom of expression and hygiene to property rights. The IIAG allows users to compare governance performance across a range of sizes at the national, regional and continental levels. Scores and classes are available for all years since

2000, which allows the analysis of temporal trends. All underlying data used in the construction of the IIAG are freely available and published in a transparent manner with a complete methodology.

The Ibrahim Index has been used by civil society and government agencies across the continent to control governance. An example is in South Africa, where the opposition Democratic Alliance used the Ibrahim Index to challenge the government's record of security and safety (www.timeslive.co.za). Furthermore, the IIAG categories are composed of 14 subcategories composed of more than 100 indicators. The IIAG is calculated using data from more than 30 independent sources. Annual improvements have been made to the IIAG, which may be methodological or based on the inclusion or exclusion of indicators. All IIAG data are then retrospectively reviewed in accordance with best practice.

The IIAG assesses progress under four main conceptual categories namely:

1) **Safety and Rule of Law** which captures the extent to which all individuals are protected from both internal and external threats to their peace. The degree to which society is safe and secure is assessed alongside the existence of a robust legal system and transparent, effective and accessible institutions within all branches of the state. There are 23 indicators in the Security and Rule of Law category and they are divided into four sub-categories: Rule of Law, Accountability, Personal Security and National Security. The rule of law subcategory includes five indicators of judicial process measurement, judicial independence, sanctions, the transfer of property rights and power. The liability subcategory includes seven indicators that measure accountability, transparency and corruption in the public sector, accountability, transparency and corruption in the rural sector, corruption and bureaucracy, liability of agents bribes in public offices and public offices, office abuses and misappropriation of public funds. The Personal Security sub-category includes six indicators that measure domestic political persecution, social unrest, personal security, police service reliability, violent crime, and human trafficking. The national security sub-category includes five indicators measuring cross-border tensions, government involvement in armed conflict, national armed conflict, political refugees and internally displaced persons.
2) **Participation and Human Rights** which captures the relationship between government and citizens. It measures, on one hand, the extent to which individuals can participate in, and take ownership of, the political process and, on the other hand, the state's

achievement in guaranteeing the political and social rights of all citizens. There are 19 indicators in the Participation and Human Rights category and they are subdivided into three sub-categories: Participation, Rights and Gender. The subcategory of participation includes five indicators that measure free and fair elections, free and fair elections, political participation, electoral self-determination and effective government power. The rights subcategory includes seven indicators that measure international conventions on human rights, human rights, political rights, workers' rights, freedom of expression, freedom of association and meeting and civil liberties. The gender sub-category includes seven indicators that measure gender equality, primary gender budgeting and secondary education, women's participation in the labour force, equal representation in rural areas, women in parliament, women's rights and legislation on violence against women.

3) **Sustainable Economic Opportunity** which captures whether the state provides the conditions necessary for the pursuit of economic opportunities that contribute to a prosperous and equitable society. It measures the delivery of sound economic policies and the provision of a sustainable economic environment that is conducive to investment and the operation of a business. There are 30 indicators in the sustainable economic opportunities category and they are divided into four subcategories: public management, business environment, infrastructure and rural sector. The public administration sub-category includes 11 indicators of statistical capacity, public administration, inflation, diversification, reserves, fiscal management, ratio of total revenues to total expenditures, tax policy, Foreign Debt Services for Exports, Revenue Collections and Bank Deafness. The Business Environment sub-category includes six indicators that measure the competitive environment, investment climate, investment climate for rural businesses, administrative and administrative burdens, and customs procedures. The infrastructure subcategory includes six indicators measuring electricity, roads, railways, air transport, telephone infrastructure and computing, as well as digital connectivity. The rural sub-category includes seven indicators measuring public resources for rural development and land and water for low-income rural populations, agricultural research and extension services, agricultural and agricultural commodity markets, policy framework and law for rural organizations, dialogue between government and organizations rural areas and the cost of agricultural policy.
4) **Human Development** which captures the success of the state in securing the well-being of its citizens. It measures the extent to which the government provides citizens with

> social protection, comprehensive education provision and a healthy life. There are 22 indicators in the Human Development category and they are divided into three sub categories: well-being, health and education. The welfare sub-category includes nine indicators that measure the social protection system, social protection and employment, social exclusion, social protection services (health and education), equity of use of public resources, access to water, access to health services, environmental policy and environmental sustainability. The sub-category of education includes seven indicators measuring the training and quality of education, the quality of the education system, the ratio of pupils to primary school teachers, completion of the primary cycle, transition to secondary education, education and training. subscription to higher education and literacy. The health sub-category includes six indicators for measuring maternal mortality, infant mortality, vaccination, antiretroviral therapy, illness and malnutrition.
>
> (Mo Ibrahim Foundation, 2016)

The IIAG is designed to be a tool for citizens, governments, institutions and businesses to assess the supply of public goods and services and policy outcomes across Africa. It is an annual publication that receives important media information from across the African continent and international media (Iqbal and Shah, 2008). Although no one questions the validity of the index's ambitions, some researchers have questioned the effectiveness of the index and in particular the need for civil society to participate in its results, the point is that it there is often no one in Africa Civil society strong and effective (Knack, 2010; Iqbal and Shah, 2008). Others argue that this view does not consider the important role that civil society is beginning to play in African politics (Nardo et. al, 2005). Although the IIAG is complete, there are some major breakdowns triggered by the results. One example is the extremely high placement of some countries which are known to have poor political participation and registration of human rights whilst, have relatively high human development indicators.

However, using these indicators, which have been proven to be more stable and are being used by almost all African countries in assessing the quality of their governance, the research will seek to determine how the allocation of foreign aid, to developing countries in Sub-Saharan Africa, is affected by the quality of the governance rating by the IIAG.

2.3 Relationship between Development Aid flows and good governance

2.3.1 Theoretical Framework

According to Akramov (2006) the review of the aid allocation literature suggests that donors seem to be neither entirely altruistic nor completely self-serving, that is, donors' aid allocation aims to promote their own interests as well as oriented towards the needs of recipient countries. He adds that there are four factors which are believed to be key in determining the decisions of donors' aid allocation:

- The needs of the recipient: He states that promotion of economic development as well as welfare appears crucial when making aid allocation decisions for most donors.
- Donors' political and strategic interests: According to Akramov (2012) most of variation in the flows of aid can be due to the donors' strategic and politic interests according to the changing situations internationally.
- Economic interests of the donors: The donors' economic interests also have a significant effect on the variation in aid flows as donors allocate aid in some cases due to a need to expand their own markets, protect their foreign investments or create cheap import sources from developing countries.
- Svensson (2010) argues that there has been a recent drive by some donors to focus on good governance and allocation of more aid to countries with good performance on the various aspects of good governance.

Therefore, the following observations were made upon review of literature on allocation of aid. Firstly, while most empirical studies do not explicitly present the theoretical model embodied in their regressions, it is possible to incorporate them into the theoretical framework proposed by Dudley and Montmarquette (1976) and later extended by Trumbull and Wall (1994). The model is based on the standard microeconomic theory of constrained utility maximization and tries to explain bilateral donors' two decisions: first, whether or not to give aid to a given developing country (eligibility stage), and second, how much aid to grant given a positive decision had been made in first part (level stage). The model assumes that there are only two goods in donors' utility function, that is, the impact of foreign aid and the other good. The donor maximizes the relative impact of its aid on the recipient country, as measured by the ratio of the per capita aid to the per capita income, weighed by the size of recipient's population. The main assumptions of the model are that the donor country may expect that;

i. the recipient country will behave more favourably toward donor country by supporting donor's national political interests;
ii. the recipient country will confer economic benefits towards the donor by buying more of the products from the donor country; and
iii. the lives of people in the recipient country will be better because of donor's assistance (altruistic vision).

While the first two assumptions refer to donor interests, the third assumption refers to recipient needs. By solving the utility maximization problem subject to budget constraint, Dudley and Montmarquette (1976) derive two econometric specifications to test the relative importance of various factors in donors' aid allocation decisions.

The model developed by Dudley and Montmarquette (1976) aimed to explain individual donor's aid allocation decision assuming that different donors have different subjective measures of the impact of aid to a recipient country. Later Trumbull and Wall (1994) extended the model to allow optimization by multiple donors assuming that all donors have the same subjective measure of the impact of aid to a recipient country. In this model, similarly to Dudley and Montmarquette (1976), a donor maximizes the weighted sum of the total impacts of its official development assistance on all recipient's subject to its aid budget.

On the other hand, Alesina and Dollar (2010) control for both donor interests (mostly for strategic and political interests) using such variables as colonial experience, UN voting similarity, the share of Muslims and Roman Catholics in the recipients' population and recipient needs through per capita income. They find considerable evidence that the allocation of bilateral foreign aid is mostly determined by political and strategic considerations, while at the margin, developing countries that support political rights and civil liberties receive more aid, ceteris paribus.

2.3.2 Empirical findings

There were several studies on the development aid flows as well as governance which the researcher shall use to establish the relationship between these two variables. A study by Apodaca and Stohl (2009), exploring U.S. foreign aid allocation, found the support for recipient needs at the eligibility stage and for donor interests and human rights at the eligibility and level stages. The findings of this study suggest that, while the impact of recipient needs, as measured by GDP per capita, on the aid allocation decisions made by U.S. government is positive and statistically significant, U.S. national security interests play a more prominent role in aid

allocation. Noticeably, countries perceived to be of vital importance to U.S. national security along with Latin America receive aid regardless of other factors.

The studies often use the following variables to control for donor interests among others: political similarity, arm transfers, military presence, religious similarity, geographic proximity, proportion of a donor export or imports traded with a recipient country, stock of private direct investment from a donor to a recipient country. While per capita income is often included in empirical analysis to control for recipient needs, other variables such as infant mortality, literacy rate, and life expectancy are also widely used in aid allocation regressions for that purpose.

The earlier study by Dudley and Montmarquette (1976) also found similar differences among donors. Despite the above-mentioned important differences among them, individual donors' aid allocation decisions are influenced by the total amount of aid received from the rest of the donors. This is called a "bandwagon effect" whereby donor might expect that the impact of its aid on recipient country would be higher, the greater the aid the rest of the donors' grants to a recipient country (Dudley and Montmarquette 1976). Literature also suggests that there is some alliance among large donors. For example, Katada (1997) finds that Japanese aid allocation decisions pursue the following simultaneous objectives: own political and economic interests, collaboration with the USA in support of USA maintenance in the developing world, and improvement of the USA-Japan relationship by satisfying US interests in Asia-Pacific region.

Moreover, some studies investigate incentives in donor-recipient relations, and how they might influence the implementation of policy reforms intended to reduce poverty and promote development (Svensson, 2010). Svensson (2010) uses a game theoretic model in which an altruistic donor allocates aid according to recipient needs, and the aid allocation rule adversely affects recipients' incentives to carry out policies to promote human development indicators: infant mortality, life expectancy, and primary school enrolment.

Furthermore, researchers have also recently started to focus on the impact of the recipients' governance on donors' aid allocation decisions. The reviewed studies use various indicators to measure the quality of governance in recipient countries, including personal integrity rights (Apodaca and Stohl 2009), political and civil rights (Alesina and Dollar 2010, Trumbull and Wall 1994, Svensson 2010, Neumayer 2012), rule of law and corruption (Alesina and Dollar

2010, Neumayer 2012). For instance, Alesina and David (2010) explore the impact of the level of corruption of the recipient country on aid flows and find no evidence that corruption negatively affects the amount of foreign aid flows, but the Scandinavian countries appear to reward less corrupt countries with higher amounts of aid and large donors such as U.S., U.K., Japan and others appear indifferent to the level of corruption in a receiving country. According to Neumayer (2012) all aspects of good governance (he controls for democracy, human rights, corruption, rule of law, and regulatory burden) except for the rule of law have statistically significant influence on donors' decisions in eligibility stage. He also finds that democracy, respect for human rights and low regulatory burden are statistically significant determinants of aid flows for some donors. Alesina and Dollar (2010) also find that, at the margin, developing countries that support political rights and civil liberties receive more aid, ceteris paribus.

Knack (2010) examines the interdependence between foreign aid and the quality of governance by relating the quality of governance, as measured by indexes of bureaucratic quality, the rule of law, corruption and their simple combination (the paper calls it the quality of governance index, which is created by a simple summation of the first three indicators) to aid variable, as measured by the total foreign aid as percentage of GDP and percentage of government expenditures. The paper finds that higher levels of foreign aid erode the quality of governance. In addition to explaining the impact of donor interests, recipient needs and recipients' governance on donors' aid allocation policies, previous studies have revealed some population bias in the allocation of foreign aid. For example, Dudley and Montmarquette (1976) found a strongly significant correlation between per capita aid and the population of recipient countries. Trumbull and Wall (1994) also found some evidence of population bias.

2.4 Other determinants of development aid flows

A lot of literature has been written on the factors determining the flow of foreign aid. Political factors as well as the progress of development thinking have been considered to make a significant impact on the evolution of modern era foreign aid policy (Kanbur, 2006). According to Akramov (2006), this new era of development thinking is more complicated and non-linear in nature; the central geopolitical factors behind foreign aid were the Cold War until 1990s, the collapse of Soviet Union, and the events of September 11, 2001.

The traditional motive for ODA is to foster economic growth in developing nations and this has been the driving economic objective of aid for decades. Chenery and Strout (1966) established

this in their "two-gap" model whereby they identify investment as the cornerstone of growth which requires, at least initially, imported capital goods. In this approach, aid is given to low-income countries thus aid is much higher for countries with small populations. Besides economic growth, a large body of literature has also addressed the issue of donor interests as a determinant to foreign aid allocation, Maizels and Nissanke (1984), Frey and Schneider (1986) and Trumbull and Wall (1994). These authors have found evidence that donors' strategic interests play a significant role in the allocation of foreign aid. Frey and Schneider (1986) identified that the World Bank's commitment to assistance is largely associated with good policies conditionality such as lowering the rate of inflation.

Attempts by donors during the 1980s and 1990s to force recipient countries to conform to their imposed conditions attached to loans and grants are considered to have failed (Collier and Dollar, 2002). According to Jensen (2013), failure by donors, to apply conditionality in inducing economic, political and institutional reforms in recipient countries resulted in the introduction of ex-post selectivity whereby more foreign development aid is allocated to countries with a proven track record of ownership and commitment towards comprehensive reform and good governance.

According to Dollar and Levine (2006), there is a broad agreement among economists and development specialists that countries' institutions and economic policies are essential determinants of long-term growth and poverty reduction. Hall and Jones (1999) define institutions as norms, rules and behaviour or what they refer to as "social infrastructure". Dollar and Levine (2006) further state that a government that provides a sound framework for growth and poverty reduction is also one that is more likely to use financial resources well to complement policies with necessary public investments in roads, schools, and the like. They determined that donor agencies tend to use institutional selectivity in allocating foreign aid, that is, channelling more aid resources to countries that have the institutional and policy framework to use the resources effectively (Dollar and Levine, 2006).

Akramov (2012) analyses the impact of governance systems to the effectiveness of official development assistance (ODA). He categorises development aid into three categories namely:
(1) economic;
(2) social; and
(3) other including emergency and food aid.

He concludes that the degree of a recipient country's democratic governance has a significant impact to donors' aid allocation decisions. The study concluded that countries with better democratic governance are more likely to receive higher amounts of aggregate per capita foreign aid and disaggregated, donors seem to provide relatively more social aid to "partially free" and "free" countries. However, the study also determined that there seems to be no difference among these three groups of countries in the per capita aid allocated for economic use (Akramov, 2012).

The study by Akramov (2012) also found out that democratic governance does not guarantee the effectiveness of foreign development aid in promoting economic growth in recipient countries. In support of the findings by Dollar and Levine (2006) highlighted above, Akramov (2012) also concurs that economic development and growth can be promoted through ODA even under nondemocratic but pro-market regimes as long as they secure property rights and invest the ODA received in physical capital accumulation and economic infrastructure.

Jensen (2013) and Ahlquist (2016) concur that more democratic countries attract more FDI than authoritarian countries because democracies tend to reduce the political risks of nationalization and expropriation and increase the credibility of the host country for foreign investors. On the other hand, Li and Resnick (2003) argues that democracy in the host country has a negative impact on FDI inflows due to the impact of the provision of labour at a lower cost, the repression of the unions, the entry treatment and the access to work in authoritarian regimes. Moreover, Daude and Stein (2017) are also assessed what to measure the quality of impact on investment decisions of institutions of foreign government investors, and they believe that unpredictable policies, excessive regulatory burden and lack of commitment of the Government to prevent the flow of FDI. Gani (2017) shows that improving the control of corruption, political stability, regulatory quality and the efficiency of government has a positive effect on the entry of FDI in some Latin American countries. Similarly, Buchanan et al. (2012) argue that, although the institutional quality index positively affects FDI flows, it negatively affects the volatility of FDI flows. More recently, Asiedu (2013) found evidence that the risk variable that FDI is the viability of contracts, repatriation of benefits and indicators of delinquency, has no significant effect on FDI flows.

Some scholars, such as Alesina and Dollar (2010) and Neumayer (2003), argue that donor governments prioritize geostrategic or economic considerations over human rights that it is

unlikely that aid workers will systematically punish beneficiary governments for violations human rights. On the other hand, there are scholars who argue that some governments of donor countries sanction human rights violations by reducing foreign aid, although the cuts are limited to specific types and sectors of assistance (Lebovic and Voeten, 2009: Nielsen, 2013).

A study conducted by Kurul and Yalta (2017) showed that not all governance indicators have a significant impact on the decisions of foreign investors in developing countries. They noted that corruption control, government effectiveness and voice and accountability had a significant positive impact on the flow of development assistance from abroad. To them, this discovery has shown that reducing corruption and excessive bureaucracy, improving the political system, transparency and accountability could lead to an increase in the flow of Foreign Development Aid. Furthermore, the implementation of policies to increase citizen participation in the political system, for example, by selecting their own government, as well as the protection of civil rights, can also increase Foreign Development Aid inflows. These findings may lead to the conclusion that countries that reflect the weakness of corruption control, effective governance, transparency in public policies, responsible bureaucracy, trust and participation in the political system must begin to reform their institutional policies and mechanisms to attract more Foreign Development Aid inflows. Therefore, improving the governance factors for a favourable investment environment should be an important policy guideline for developing countries.

and2.5 Other sources of Governance Indicators

There remains an ambiguity in the definition of the term governance and it is particularly challenging to measure the quality of governance. In recent years, different indicators have been developed to measure the quality of governance. Kaufmann et. al (1999), combine the measures of governance into six indicators corresponding to the three dimensions of governance namely:

i. Voice and Accountability measuring whether citizens participate in the selection and monitoring of their governments
ii. Political stability which measures whether the government is vulnerable to change through violence
iii. Government effectiveness which examines the capacity of civil servants, the quality of public servants, public service provision and the credibility of government commitment to policies
iv. Regulatory quality which indicates whether the policies promoted are “market friendly” in the areas of trade and business

v. The rule of law which focuses on the enforcement of property rights and predictability of rules governing social and economic interactions and
vi. Control of corruption which is determining whether there is the "exercise of public power for private gain"

Kaufmann et. al (1999)

The six indicators are composite considering that they were constructed using the unobserved components method, from more than 200 measures of governance from 37 different databases and have been widely used by academia and the development community. However, Arndt and Oman (2006) determine that the methodology used and the changing nature of these indicators over time makes them unreliable in comparing levels of governance over time, be it in a single country of between countries. These indicators also tend to measure the outcomes as opposed to permanent characteristics of governance institutions that tend to improve with per capita income (Glaeser et al, 2004).

Akramov (2012) further identifies another source of governance indicators which is the Freedom House, whose annual ratings of political rights and civil liberties have been used to measure the strength of democratic governance in more than 190 countries throughout the world. The political rights index captures the extent to which citizens can participate in the political process by competing for public office and exercising a right to vote while the civil liberties index measures whether the citizens have freedom to develop opinions and personal autonomy without the interference of the state (Akramov, 2012).

Another commonly used governance indicator is ICRG rating system produced by the Risk Services (PRS) Group. This is based on a set of 22 components grouped into three major categories namely political risk, financial risk and economic risk (PRS Group, 2011). The financial and economic risk assessments are based on objective data such as the country's foreign debt, debt service ratio, international liquidity, current account and budget deficits, inflation, growth rates and so on. Political risk assessments however rely on subjective expert assessments of the prespecified risk components (Akramov, 2012).

According to Dixit (2009), these widely used governance indicators relate to governance institutions which craft order and reshape incentives, thus building the governance structure of a country and leading to the formation of a national government. It is also evident that these

governance indicators capture two sides of governance: democratic or political governance and economic governance. Political governance refers to political institutions such as political rights, political stability and civil liberties whilst economic governance refers to the social and legal institutions that support economic activity by protecting property rights, enforcing contracts and promoting collective action to provide physical and organisational infrastructure (Dixit, 2009).

Various arguments have been created that link democratic to economic governance and democracies tend to make the quality of economic governance better in the long run by allowing people to regularly and peacefully get rid of inefficient and incompetent governments while keeping efficient and competent governments. Nondemocratic regimes, on the other hand, can sometimes provide efficient and competent governments such as China, Singapore, South Korea and Malaysia in the 1980's. However, if nondemocratic regimes do not provide competent and efficient governments, people find it easy to peacefully get rid of them thus it is broadly agreed, from the evidence gathered, that stronger democratic institutions are closely associated with better quality governance (Rivera-Batiz, 2002).

From this existing literature, there is some wide agreement that the quality of governance significantly affects economic outcomes but however, there are some serious disputes regarding the mechanisms by which governance affects economic outcomes. For example, various researchers have concluded that the governance indicators are positively correlated to the measure of per capita income across countries. However, the findings regarding the direction of causality between quality of governance and the level of per capita income in a country have not been conclusive. According to Arndt and Oman (2006), the results are very sensitive to changes in the specifications of the econometric model and the variables included. They conclude in this study that the relationship between the quality of governance and per capita income is complicated (Arndt and Oman, 2006). Kaufmann and Kraay (2002), concluded that although better governance tends to promote growth in per capita income, the growth in per capita income *per se* does not tend to promote better governance.

2.6 Effectiveness of Foreign Development Aid

It has been long argued that foreign aid helps economic development through helping to complete and foster missing or incomplete markets in developing economies. Official development assistance (ODA) has been a major source of development finance in most

developing countries over the last couple of decades. A lot of literature has been generated on the effectiveness of aid though it remains inconclusive. There is however overwhelming evidence that foreign development aid has a positive impact in developing countries, but only under certain conditions. This has led to selectivity criteria being applied by donors in coming up with their allocation policies. Most authors seem to concur that sound governance structures and economic policies are essential to the effectiveness of foreign development aid and these play a significant role in foreign aid allocation. The point of disagreement in foreign aid literature is the extent to which the governance systems for developing countries are considered by donors in coming up with their foreign aid allocation policies.

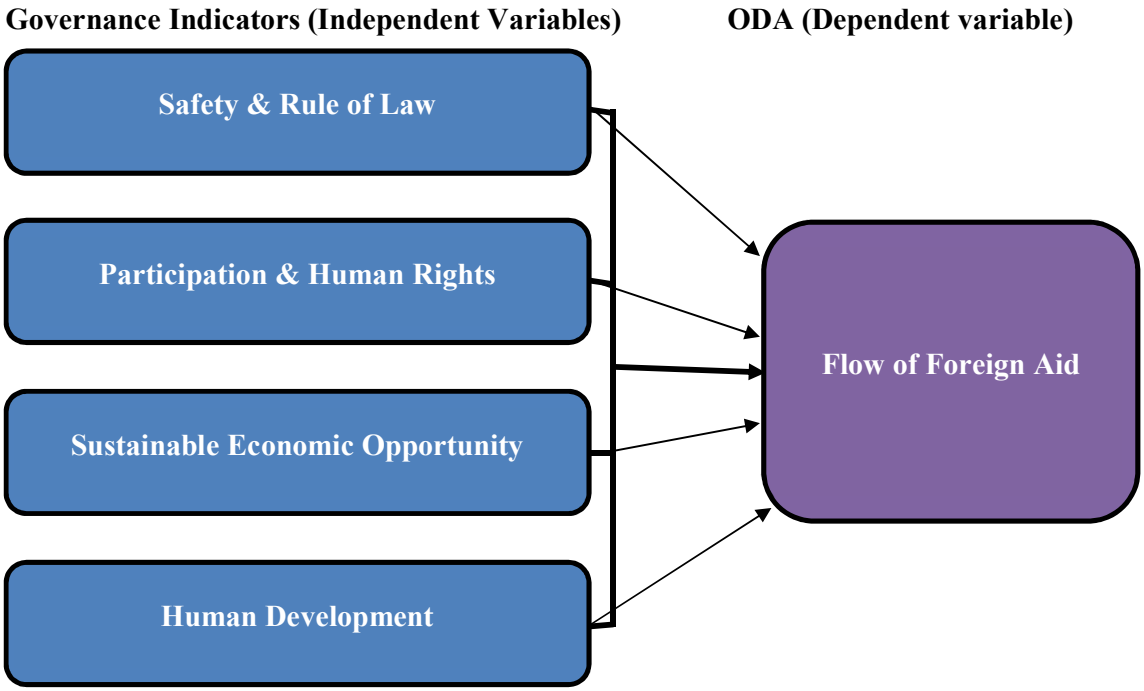
2.7 Conclusion

As noted in the literature reviewed of previous studies on ODA, there are multiple factors that influence the allocation of foreign aid as well as its effectiveness. It was also noted that donors' aid allocation could be guided by evaluation of the results of previous policies. However, past researches on the topic rarely linked governance of African countries to the allocation of foreign aid. Therefore, this study addresses this weakness by linking recipients'' quality of governance, using the IIAG indicator scores, to the allocation of foreign aid. The figure 2.1 below illustrates the conceptual framework for the understanding of the relationship between governance indicators and the allocation of foreign aid in Sub-Saharan African countries. The arrows in the figure below represent the links among the respective variables as well as the potential direction of the causal linkage. The conceptual framework illustrates that IIAG governance indicators might influence the allocation of foreign aid in Sub-Saharan African countries.

As illustrated in figure 2.1 below the first transmission channel is through **Safety and Rule of Law** indicators' potential impact on the allocation of foreign aid to a Sub-Saharan African country. The level of a country's governance performance, in terms of **Safety and Rule of Law** as well as according to IIAG scores, is hypothesized by the researcher to have an impact donors' allocation of foreign aid in Sub-Saharan Africa; the second channel is posited to be the interrelationship between **Participation and Human Rights** indicators and the allocation of foreign aid to a Sub-Saharan African country. The level of a country's governance performance, in terms of **Participation and Human Rights** as well as according to IIAG scores, is hypothesized by the researcher to have an impact donors' allocation of foreign aid in Sub-Saharan Africa. Furthermore, the third transmission channel is through the potential impact of **Sustainable Economic Opportunity** indicators on the allocation of foreign aid to a Sub-

Saharan African country. The level of a country's governance performance, in terms of **Sustainable Economic Opportunity** as well as according to IIAG scores, is hypothesized by the researcher to have an impact donors' allocation of foreign aid in Sub-Saharan Africa; and the fourth channel is posited to be the interrelationship between **Human Development** indicators and the allocation of foreign aid to a Sub-Saharan African country. The level of a country's governance performance, in terms of **Human Development** as well as according to IIAG scores, is hypothesized by the researcher to have an impact donors' allocation of foreign aid in Sub-Saharan Africa.

Figure 2.1 Conceptual Framework



Source: Researcher (2017)

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter shall provide the research methodology used for this study. It covered such as the research approach and strategy adopted in this study, choice of data and sampling, data analysis methods chosen as well as research reliability and validity.

3.2 Research Approach and Strategy

In this study, a descriptive, cross-sectional sample survey was applied to answer the research objectives and test the hypotheses. One advantage of this design is that it enabled the researcher to target a specific area that is good governance as key to the flow of foreign development aid in Sub Saharan Africa. According to Saunders et al (2009) the survey is a popular and common strategy in business and management research and is usually associated with the deductive approach. Resultantly, this allowed for collection of large amounts of data from a relatively large population in a relatively economic way. For instance, the use of secondary data in this instance, allowed easy comparison through standardization of data. This study used a quantitative and structured descriptive survey method as the tool for primary data collection. The survey method was deemed most applicable for the purpose considering the public nature of the participants and the size of the population and the sample involved. A survey was carried out through the accessing records of the selected countries in Sub Sahara Africa regarding development aid flow.

3.3 Choice of Data and Sampling

The secondary data that was discussed and analysed were the results of the indicator scores for the years 2010 to 2015 showed in IIAG annual reports for each of the Sub-Saharan countries named below. Panel data was collected from the World Bank reports as well as from the IIAG annual reports that showed the trends in foreign aid reception as well as the quality of the governance rating of the IIAG.

A sample is a smaller more manageable set of elements or a subset of a population selected to represent the population as a whole from which it is drawn (Langdridge & etal, 2013), Frey et al. (2000) define a sample as a "subgroup of a population" and (Kaplan & Duchon, 1988) describe it as a representative "taste" of a group. The process of selecting a portion of the population to represent the entire population is known as sampling (Polit & Hungler, 1999).

The purpose of a sample is to select a few members of the population to reach a conclusion about the population. This study used purposive sampling whereby he chose the countries mainly because they exhibited the variables and characteristics understudy. In Sub Saharan Africa the researcher chose the following 12 countries to participate in this survey. Angola, Botswana, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe. The rationale for choosing these 12 countries was because they were all from the Southern African Region and they share almost homogenous characteristics, in terms of; weather, culture, religion, political stability and resources. Thus, the researcher believes that under such a scenario it would be prudent to use these 12 countries.

3.4 Data Analysis Methods

The study collected its data from secondary sources especially the web and the IIAG document. Findings from the secondary data which addressed the governance indicators in Sub-Saharan Africa for 2010 to 2015 according to IIAG as well as their Foreign Development Aid flow during the same period according to OECD and World Bank statistics were also discussed and presented in the form of tables. Furthermore, inferential analysis was undertaken using correlation test as well as regression to establish the relationships and/or impact of the governance indicators on the flow of Foreign Development Aid in Sub-Saharan Africa.

The correlation analysis was undertaken to quantify the strength and type of relationship/association between the independent variables (Safety and Rule of Law; Participation and Human Rights; Sustainable Economic Opportunities and Human Development) and the dependent variable (Foreign Development Aid). The multiple regression analysis was also done to establish the effect and impact of independent variables (Safety and Rule of Law; Participation and Human Rights; Sustainable Economic Opportunities and Human Development) on the dependent variable (Flow of Foreign Development Aid).

The following regression model was used for this study:

$$Y_{i,t} = \beta_0 + \beta_1 X1_{i,t} + \beta_2 X2_{i,t} + \beta_3 X3_{i,t} + \beta_4 X4_{i,t} + \mu_i + \varepsilon_{i,t}$$

Where: i and t denotes countries and years respectively;

Y = Dependent variable (Flow of Foreign Development Aid)

X = Independent governance variables (Governance)

$X1$ = Safety and Rule of Law (SRL)

$X2$= Participation and Human Rights (PHR)

$X3$= Sustainable Economic Opportunities (SEO)

$X4$= Human Development (HD)

μ = Unobserved firm specific effect

ε = Error term

3.4.1 Dependent variable

Flow of Foreign Development Aid was the dependent variable for this study. Foreign development aid flow for the years 2010 to 2015 was extrapolated from OECD statistics for each of the following Sub-Saharan African countries, namely; Angola, Botswana, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe (OECD, 2016).

3.4.2 Independent variables

The independent variable for this study was the level of governance and it was measured by capturing the indicator scores for the four IIAG governance indicators for the years 2010 to 2015 from the following Sub-Saharan African countries, namely; Angola, Botswana, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe (IIAG, 2016). The four IIAG indicators were Safety and Rule of Law; Participation and Human Rights; Sustainable Economic Opportunities and Human Development.

Moreover, in terms of calculations, the indicators are designated that are consistent with the definition of fund management and meet certain quality, periodicity and coverage standards of the country, and the missing values of initial data are estimated. Source data is supplied in different scales from the source. For comparison and combination, data is converted to a standardized range of 0-100, where 100 is the best score possible. When 95 indicators have been converted to a common scale, a simple aggregation method is used to compute scores. The total score is the average score of the base category; the category calculates the average of the subcategories and subcategories - the average of their constituent indicators.

All digits of the IIAG outputs are mapped to a decimal point. The calculation method for obtaining these estimates is as follows:

- Estimates per country are based on full-precision data values (using exact values as they are collected from the source). All points are rounded to a decimal.
- Average values for the group are calculated based on rounded estimates, with a decimal.
- Both trends in time and rank are calculated based on estimates with a decimal accuracy.

Four hundred indicators have been formed by combining several basic sub-indicators, each of which measures the same size or similar concept. For each indicator, the sub-indicators may

come from one or more sources. The value of the cluster indicator is the average of the underlying indicators.

3.5 Estimation Techniques

Numerous techniques are available to estimate panel data studies and according to Park (2011) these models exist to evaluate group-specific or individual effects. However, in this study three regression model techniques were used to empirically examine the effects of the selected independent variables of governance on the dependent variable, of foreign development aid inflows into Sub-Saharan Africa. These models were Ordinary Least Squares Model, Random Effects Model and Fixed Effects Model. These shall be discussed in detail below in this section.

3.5.1 Ordinary Least Squares (OLS) Model

This is the simplest regression model form and it is a multiple regression model that is applied to panel data. It is expressed as follows:

$$Y_{it} = \beta_0 + \beta_1 X_1 + ... + \beta_2 X_2 + \mu_{it}$$

Whereby:

- Y_{it} is the dependent variable where i= entity and t= time
- X_k represents the independent variable/s
- β_k is the coefficient for the independent variable/s
- μ_{it} is the overall error term
- k is variable 1, 2, 3, 4 n

The advantage of using a pooled OLS Regression estimator is that it approximates the population sample with greater accuracy, as compared to the other two models (i.e. the Fixed and Random Effect models), which are prone to omitted variable bias. On the other hand, the main disadvantage it has is that it disregards the time and individual dimensions of panel data as well as assuming that the relationship must hold for all observations for that variable across time. Hence this model could be considered as consistent (as they closely approximate the population) but not efficient.

3.5.2 Fixed Effect Model

This model explores the relationship between predictor and outcome variables within an entity (country, person, company, etc.). Furthermore, each entity has its own individual characteristics that may or may not influence the predictor variables. When using this model, it should be assumed that something within the individual may impact or bias the predictor or outcome variables and there is need to control for this. This is the rationale behind the assumption of the

correlation between entity's error term and predictor variables. Moreover, fixed effect model removes the effect of those time-invariant characteristics so one can assess the net effect of the predictors on the outcome variable.

Another important assumption of the fixed effect model is that those time-invariant characteristics are unique to the individual and should not be correlated with other individual characteristics. Each entity is different therefore the entity's error term and the constant (which captures individual characteristics) should not be correlated with the others. If the error terms are correlated, then fixed effect model is no suitable since inferences may not be correct and one may need to model that relationship (probably using random-effects), this is the main rationale for the Hausman test.

The equation for the fixed effects model becomes:

a) Equation 1

$$Y_{it} = \beta_1 X_{it} + \alpha_i + \mu_{it} \quad \textbf{[eq.1]}$$

Where

- α_i (i=1….n) is the unknown intercept for each entity (n entity-specific intercepts).
- Y_{it} is the dependent variable where i = entity and t = time.
- X_{it} represents one independent variable,
- β_1 is the coefficient for that independent variable,
- μ_{it} is the error term

b) Equation 2

Another way to see the fixed effects model is by using binary variables. The equation for the fixed effects model therefore becomes:

$$Y_{it} = \beta_0 + \beta_1 X_{1,it} + \ldots + \beta_k X_{k,it} + \gamma_2 E_2 + \ldots + \gamma_n E_n + \mu_{it} \quad \textbf{[eq.2]}$$

Where

- Y_{it} is the dependent variable where i = entity and t = time.
- $X_{k,it}$ represents independent variables,
- β_k is the coefficient for the independent variables,
- μ_{it} is the error term
- E_n is the entity n. Since they are binary (dummies) you have n-1 entities included in the model.
- γ_2 is the coefficient for the binary repressors (entities)

c) Equation 3

Time effects could be added to the entity effects model to have a time and entity fixed effects regression model:

$$Y_{it} = \beta_0 + \beta_1 X_{1,it} + \ldots + \beta_k X_{k,it} + \gamma_2 E_2 + \ldots + \gamma_n E_n + \delta_2 T_2 + \ldots + \delta_t T_t + \mu_{it} \quad \textbf{[eq.3]}$$

Where

- Y_{it} is the dependent variable where i = entity and t = time.
- $X_{k,it}$ represents independent variables,
- β_k is the coefficient for the independent variables,
- μ_{it} is the error term
- E_n is the entity n. Since they are binary (dummies) you have n-1 entities included in the model.
- γ_2 is the coefficient for the binary repressors (entities)
- T_t is time as binary variable (dummy), so we have t-1 time periods.
- δ_t is the coefficient for the binary time regressors.

Control for time effects whenever unexpected variation or special events my affect the outcome variable.

3.5.3 Random Effect Model

The rationale behind random effects model is that, unlike the fixed effects model, the variation across entities is assumed to be random and uncorrelated with the predictor or independent variables included in the model. According to Green (2008, p.183) "…the crucial distinction between fixed and random effects is whether the unobserved individual effect embodies elements that are correlated with the regressors in the model, not whether these effects are stochastic or not." If there is a reason to believe that differences across entities have some influence on the dependent variable then one should use random effects. An advantage of random effects is that it can include time invariant variables (i.e. gender). However, in the fixed effects model these variables are absorbed by the intercept. The random effects model is:

$$Y_i = \beta_1 X_i + \beta_2 X_i + \beta_3 X_i + \beta_4 X_i + \alpha + \mu_i + \varepsilon_i$$

Where

- Y_i is the dependent variable where i = entity
- X_i represents one of the independent variables,

3.6 Limitations

Data gathering, and processing is very expensive. The researcher faced this constraint and therefore could not afford to conduct extensive surveys physically in each country to gather primary data, whatever the potential benefits, and lacked the funds to pay specialist research agencies to gather such data for him. This forced the researcher to rely on data that is less than 'perfect' but that could be accessed more cheaply, like that from secondary sources. There were also time constraints faced in carrying out this study.

CHAPTER FOUR
DISCUSSION OF FINDINGS

4.1 Introduction

This chapter provides a discussion of the results and findings from the secondary data which addressed the governance indicators in Sub-Saharan Africa for 2010 to 2015 according to IIAG as well as their Foreign Development Aid flow during the same period according to OECD and World Bank statistics. Furthermore, inferential analysis will be undertaken using correlation test as well as regression to establish the relationships and/or impact of the governance indicators on the flow of Foreign Development Aid in Sub-Saharan Africa. The chapter shall be divided in to three sections were by Section A shall analyse and discuss the indicators of Governance, Section B shall analyse and discuss whilst Section C shall provide an analysis and discussion of the inferential analysis results and findings. At the end of the chapter a conclusion of the chapter shall be provided.

Indicators of Governance

This section shall focus on all the indicators of governance as determined by the IIAG, namely; safety and rule of law, participation and human rights, sustainable economic opportunity and human development (IIAG, 2016) in the following Sub-Saharan countries, namely; Angola, Botswana, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe. The secondary data to be discussed and analysed were the results of the indicator scores for the years 2010 to 2015 showed in IIAG annual reports for each of the Sub-Saharan countries named above.

4.2 Safety and Rule of Law

This section discusses the results of the indicator scores on the Safety and Rule of Law indicator for the years 2010 to 2015 for each of the Sub-Saharan countries, namely; Angola, Botswana, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe. The scores are shown in Table 4.1 and 4.2.

Table 4.1 Safety and Rule of Law Indicator Scores for Sub-Saharan Africa Countries (2010-2015)

	2010	2011	2012	2013	2014	2015	Trend 2010-2015
Angola	43.7	44.8	45.4	45.1	44.5	44.3	*0.6*
Botswana	84.6	85.1	84.2	83.9	82.1	81.9	*-2.7*
Lesotho	64.9	66.1	66.9	66.3	67.1	67.1	*2.2*

Madagascar	46.9	45	46.5	49.6	51.5	55	*8.1*
Malawi	65.6	63.2	64.6	64.4	62.5	62.2	*-3.4*
Mauritius	83.8	84	84.4	82.2	82.3	80.8	*-3*
Mozambique	60.7	62	60	54.9	54.2	54	*-6.7*
Namibia	75.2	76.1	74.8	74.5	74.8	76.1	*0.9*
South Africa	69.2	69.7	65.7	66.6	66.9	67.1	*-2.1*
Swaziland	58.7	60	58.6	60.6	60.2	60.8	*2.1*
Zambia	65	67	68.4	67.1	66.3	66.5	*1.5*
Zimbabwe	36.1	36.4	38.8	42.4	43.5	43.8	*7.7*

Source: IIAG (2016)

Table 4.1 above shows the Safety and Rule of Law indicator scores for the years 2010 to 2015 according to the IIAG annual reports for each of the Sub-Saharan countries. According to the table above shows that the Safety and Rule of Law indicators for Botswana, Malawi, Mauritius, South Africa as well as Mozambique have decreased throughout the years from 2010 to 2015 with Mozambique (-6.7) deteriorating the most followed by Malawi (-3.4). On the other hand, the Safety and Rule of Law indicators for Angola, Namibia, Swaziland, Zambia, Lesotho, Madagascar and Zimbabwe have increased throughout the same period. Furthermore, in terms of Safety and Rule of Law indicators the biggest gainers during the period 2010 to 2015 were Madagascar (8.1) and Zimbabwe (7.7).

4.2.1 Descriptive statistics for Safety and Rule of Law indicator in Sub-Sahara

Furthermore, there is a descriptive statistics table which shows the means, minimum, maximum scores for the overall region as well as for each country. This is shown in table 4.2 below:

Table 4.2 Descriptive Statistics for Safety and Rule of Law Indicator

	Mean	**Min.**	**Max.**	**Std. Dev.**	**Count**
Overall for Sub-Saharan region	*63.1278*	*36.10*	*85.10*	*13.48765*	*6*
Botswana	83.6333	81.90	85.10	1.32916	*6*
Mauritius	82.9167	80.80	84.40	1.38046	*6*
Namibia	75.2500	74.50	76.10	0.69498	*6*
South Africa	67.5333	65.70	69.70	1.56801	*6*
Zambia	66.7167	65.00	68.40	1.11609	*6*
Lesotho	66.4000	64.90	67.10	0.84617	*6*
Malawi	63.7500	62.20	65.60	1.32929	*6*
Swaziland	59.8167	58.60	60.80	0.94745	*6*
Mozambique	57.6333	54.00	62.00	3.64783	*6*
Madagascar	49.0833	45.00	55.00	3.72098	*6*
Angola	44.6333	43.70	45.40	0.60553	*6*
Zimbabwe	40.1667	36.10	43.80	3.51833	*6*

Source: Researcher

The table 4.2 above shows that the average Safety and Rule of Law indicator for Sub-Saharan countries was 63.13 which is more than half with the country recording the highest indicator being Botswana with 85.10 whilst the lowest was Zimbabwe. Furthermore, the top 5 countries with the highest average Safety and Rule of Law ratings in Sub-Sahara were Botswana (83.63); Mauritius (82.92); Namibia (75.25); South Africa (67.53) and Zambia (66.71). on the other hand, there were three countries which had average scores on Safety and Rule of Law which were below half (50/100) and these were Madagascar (49.08); Angola (44.63) and lastly Zimbabwe (40.17).

Therefore, these results show that according to IIAG (2016) in terms of Safety and Rule of Law the countries ranked the best in Sub-Saharan Africa were Botswana, Mauritius, Namibia, South Africa and Zambia whilst those ranked as the worst were Madagascar, Angola and Zimbabwe. However, the Safety and Rule of Law indicator scores for Madagascar and Zimbabwe seem to have improved the most whilst those for Botswana, Malawi, Mauritius and Mozambique have been on a downward trend during the 2010-2015 period.

4.3 Participation and Human Rights

This section discusses the results of the indicator scores on the Participation and Human Rights indicator for the years 2010 to 2015 for each of the Sub-Saharan countries, namely; Angola, Botswana, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe. The scores are shown in Table 4.3 and 4.4.

Table 4.3 Participation and Human Rights Indicator scores for Sub-Saharan Africa Countries (2010-2015)

	2010	2011	2012	2013	2014	2015	Trend 2010-2015
Angola	37.8	36.4	37.1	37	35.5	35.5	*-2.3*
Botswana	72.3	72.5	72.4	71.9	68.4	69.3	*-3*
Lesotho	62.8	62.2	65.1	66.6	63.6	64.6	*1.8*
Madagascar	54.3	52.9	51.8	54.2	58.8	64.7	*10.4*
Malawi	62.3	62.7	64.4	65.5	64	65.8	*3.5*
Mauritius	75.2	76.6	76.9	76.4	74	76	*0.8*
Mozambique	57.6	55.9	57.2	57.9	58.6	58.3	*0.7*
Namibia	69.8	70.9	71	70.9	75.1	76.1	*6.3*
South Africa	71.4	71.6	71.1	70.8	72.2	71.4	*0*
Swaziland	31.9	31.2	32.5	32.1	29.1	27.6	*-4.3*
Zambia	60.9	62.2	61.4	59.7	59.5	61.4	*0.5*
Zimbabwe	32.1	33.8	34.6	37.9	41.3	45.1	*13*

Source: IIAG (2016)

According to the table 4.3 above shows the Participation and Human Rights indicator for the years 2010 to 2015 according to the IIAG annual reports for each of the Sub-Saharan countries. The table above shows that the Participation and Human Rights indicators for Angola, Botswana and Swaziland have been decreasing throughout the years from 2010 to 2015 with Swaziland (-4.3) deteriorating the most followed by Botswana (-3). On the other hand, the Participation and Human Rights indicators for Lesotho, Mauritius, Swaziland, Zambia, Madagascar, Malawi, Mozambique, Namibia and Zimbabwe were on an increase throughout the same period. Additionally, in terms of Participation and Human Rights indicators the biggest gainers during the period 2010 to 2015 were Zimbabwe (13), Madagascar (10.4) and Namibia (6.3).

4.3.1 Descriptive statistics for Participation and Human Rights indicator in Sub-Sahara

In addition, a descriptive statistics table showing the means, minimum, maximum scores for the overall region as well as for each country were derived from the Participation and Human Rights scores for the period 2010 to 2015. The results are shown in table 4.4 below:

Table 4.4 Descriptive Statistics for Participation and Human Rights Indicator

	Mean	**Min.**	**Max.**	**Std. Dev.**	**Count**
Overall for Sub-Saharan region	*58.1889*	*27.60*	*76.90*	*14.95496*	*6*
Mauritius	75.85	74	76.9	1.08028	*6*
Namibia	72.30	69.8	76.1	2.61304	*6*
South Africa	71.42	70.8	72.2	0.47504	*6*
Botswana	71.13	68.4	72.5	1.80296	*6*
Lesotho	64.15	62.2	66.6	1.61462	*6*
Malawi	64.12	62.30	65.8	1.42466	*6*
Zambia	62.20	59.5	62.2	1.05594	*6*
Madagascar	56.12	51.8	64.7	4.83380	*6*
Mozambique	57.58	55.9	58.6	0.96212	*6*
Zimbabwe	45.10	32.1	45.1	4.97219	*6*
Angola	36.55	35.5	37.8	0.92682	*6*
Swaziland	32.50	27.6	32.5	1.95209	*6*

Source: Researcher

Table 4.4 above shows that the average Participation and Human Rights indicator for Sub-Saharan countries was 58.19 which is slightly more than half (50/100) and the country recording the highest indicator being Mauritius with 76.9 whilst the lowest was Swaziland with 27.6. Moreover, the top 5 countries with the highest average Participation and Human Rights ratings in Sub-Sahara were Mauritius (75.85); Namibia (72.30); South Africa (71.42); Botswana (71.13) and Lesotho (64.15). However, there were three countries which had average scores for

Participation and Human Rights which were below half (50/100) and these were Zimbabwe (45.10); Angola (36.55) and Swaziland (32.50).

Consequently, these results show that in terms of Participation and Human Rights the countries ranked as the best in Sub-Sahara were Mauritius, Namibia, South Africa, Botswana, Lesotho and Malawi whilst those ranked as having the worst Participation and Human Rights were Zimbabwe, Angola and Swaziland. However, the Participation and Human Rights scores for Madagascar, Namibia and Zimbabwe improved throughout the period whilst those for Angola, Botswana and Swaziland declined during the period.

4.4 Sustainable Economic Opportunity

This section discusses the results of the indicator scores on the Sustainable Economic opportunity indicator for the years 2010 to 2015 for each of the Sub-Saharan countries, namely; Angola, Botswana, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe. The scores are shown in Table 4.5 and 4.6.

Table 4.5 Sustainable Economic Opportunity indicator Scores for Sub-Saharan Africa Countries (2010-2015)

	2010	2011	2012	2013	2014	2015	Trend 2010-2015
Angola	32.2	32	32.4	30.4	29.9	30.4	*-1.8*
Botswana	67.2	67.6	67.6	66.6	66.2	65.2	*-2*
Lesotho	45.6	45.7	46	47	47.2	45.6	*0*
Madagascar	41.9	39.1	38	37.2	34.3	33.1	*-8.8*
Malawi	49.8	48.2	46.6	46.9	44.9	44.1	*-5.7*
Mauritius	79.1	79.6	80.2	80.6	79.8	79	*-0.1*
Mozambique	47.8	47.9	47	46.3	46.1	47.3	*-0.5*
Namibia	61.5	60.1	59	61.6	62.3	62.2	*0.7*
South Africa	69.2	68.7	68.9	68.8	68.8	68.4	*-0.8*
Swaziland	49.5	47.4	48.2	49.9	49.6	49.7	*0.2*
Zambia	44.5	47	48	48.8	48.5	46.4	*1.9*
Zimbabwe	23.4	23.9	25.1	27.2	29.9	34.6	*11.2*

Source: IIAG (2016)

From table 4.5 above, the Sustainable Economic opportunity indicators for Angola, Botswana, Madagascar, South Africa, Mauritius, Mozambique and Zambia dwindled throughout the years from 2010 to 2015 with the worst performers being Madagascar (-8.8), Malawi (-5.7) and Angola (-1.8). On the other hand, the Sustainable Economic opportunity indicators for Namibia, Swaziland, Zambia and Zimbabwe rose during the same period with the most improved countries being Zimbabwe (11.2) and Zambia (1.9).

4.4.1 Descriptive statistics for Sustainable Economic opportunity indicator in Sub-Sahara

Furthermore, a descriptive statistics table showing the means, minimum, maximum scores for the overall region as well as for each country were derived from the Sustainable Economic opportunity scores for the period 2010 to 2015. The results are shown in table 4.6 below:

Table 4.6 Descriptive Statistics for Sustainable Economic Opportunity Indicator

	Mean	Min.	Max.	Std. Dev.	Count
Overall for Sub-Saharan region	*50.7042*	*23.40*	*80.60*	*15.21549*	*6*
Mauritius	79.72	79	80.6	0.62102	*6*
South Africa	68.8	68.4	69.2	0.26077	*6*
Botswana	66.73	65.2	67.6	0.93524	*6*
Namibia	61.12	59	62.3	1.30141	*6*
Swaziland	49.05	47.4	49.9	1.00946	*6*
Malawi	46.75	44.1	49.8	2.09261	*6*
Zambia	47.2	44.5	48.8	1.60375	*6*
Mozambique	47.07	46.1	47.9	0.75011	*6*
Lesotho	46.18	45.6	47.6	0.72778	*6*
Madagascar	37.27	33.1	41.9	3.21040	*6*
Angola	31.22	29.9	32.4	1.09985	*6*
Zimbabwe	27.35	23.4	34.6	4.28147	*6*

Source: Researcher

Table 4.6 above shows that the average Sustainable Economic opportunity indicator for Sub-Saharan countries was 50.70 which is marginally above half (50/100) and the country that recorded the highest score was Mauritius with 80.60, which was in 2013, whilst the lowest was Zimbabwe with 27.6, which was in 2010. Moreover, there were only four countries in Sub-Sahara that had an average Sustainable Economic opportunity rating above half (50/100) namely Mauritius (79.72); South Africa (68.8); Botswana (66.73) and Namibia (61.12). On the other hand, the rest of the other countries had average scores for Sustainable Economic opportunity which were below half (50/100) with the worst three being Madagascar (37.22); Angola (31.22) and lastly Zimbabwe (27.35).

Subsequently, these results show that in terms of Sustainable Economic opportunity the countries ranked as the best in Sub-Sahara were Mauritius, South Africa, Botswana and Namibia whilst the rest of the other countries had average scores for Sustainable Economic opportunity which were below half (50/100) with the worst three being Madagascar, Angola and Zimbabwe. Conversely, the Sustainable Economic opportunity scores for Namibia,

Swaziland, Zambia and Zimbabwe seem to have improved whilst those for Madagascar, Malawi and Angola deteriorated the most during the 2010-2015 period.

4.5 Human Development

This section discusses the results of the indicator scores on the Human Development indicator for the years 2010 to 2015 for each of the Sub-Saharan countries, namely; Angola, Botswana, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe. The scores are shown in Table 4.7 and 4.8.

Table 4.7 Human Development Indicator Scores for Sub-Saharan Africa Countries (2010-2015)

	2010	2011	2012	2013	2014	2015	Trend 2010-2015
Angola	43	45.1	46.3	45.6	46.7	46.7	*3.7*
Botswana	76.7	77.8	79.1	79.4	78.5	78.5	*1.8*
Lesotho	53.3	53.4	51.9	52.8	52.4	53.8	*0.5*
Madagascar	49.6	47.1	45	44.2	42.5	49.1	*-0.5*
Malawi	53.4	54.5	54.5	54.8	53.2	54.3	*0.9*
Mauritius	83.1	84.2	84.2	84.1	83.8	83.7	*0.6*
Mozambique	50.7	50.1	50	49.4	49.5	49.5	*-1.2*
Namibia	61.4	61.8	62.8	65.1	66.5	64.7	*3.3*
South Africa	69.9	70.9	71	71.2	70.1	70.6	*0.7*
Swaziland	58.3	58.3	58.5	59.8	60.7	60.7	*2.4*
Zambia	55.7	56	58.5	60.1	60.6	61	*5.3*
Zimbabwe	49.7	53.5	54.9	53.9	53.4	53.8	*4.1*

Source: IIAG (2016)

The table 4.7 above shows the Human Development indicator for the years 2010 to 2015 according to the IIAG annual reports for each of the Sub-Saharan countries. The table above shows that Madagascar (-0.5) and Mozambique's (-1.2) Human Development indicators could be considered to have decreased throughout the 2010 to 2015 period. On the other hand, the Human Development indicators for Angola, Swaziland, Botswana, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, South Africa, Namibia, Zambia and Zimbabwe experienced an upturn throughout the same period. The countries that experienced the highest upturn during the 2010 to 2015 period were Zambia (5.3), Zimbabwe (4.1) and Angola (3.7).

4.5.1 Descriptive statistics for Human Development indicator in Sub-Sahara

As an addition, a descriptive statistics table showing the means, minimum, maximum scores for the overall region as well as for each country were derived from the Human Development scores for the period 2010 to 2015. The results are shown in table 4.8 below:

Table 4.8 Descriptive Statistics for Human Development Indicator

	Mean	Min.	Max.	Std. Dev.	Count
Overall for Sub-Saharan region	*59.7069*	*42.50*	*84.20*	*11.93538*	*6*
Mauritius	83.85	83.1	84.2	0.42308	*6*
Botswana	78.33	76.7	79.4	0.97297	*6*
South Africa	70.62	69.9	71.2	0.51929	*6*
Namibia	63.72	61.4	66.5	2.02526	*6*
Swaziland	59.38	58.3	60.7	1.16347	*6*
Zambia	58.65	55.7	61	2.33131	*6*
Malawi	54.12	53.2	54.8	0.65549	*6*
Zimbabwe	53.2	49.7	54.9	1.79555	*6*
Lesotho	52.93	51.9	53.8	0.70333	*6*
Mozambique	49.87	49.4	50.7	0.50067	*6*
Madagascar	46.25	42.5	49.6	2.82471	*6*
Angola	45.57	43	46.7	1.40807	*6*

Source: Researcher

Table 4.8 above shows that the average Human Development indicator for Sub-Saharan countries was 59.71 which is more than half (50/100) and the country recording the highest indicator was Mauritius with 84.2, which was in 2011 and 2012, whilst the lowest was Madagascar with 42.5, which was recorded in 2014. Moreover, the top 5 countries with the highest average Human Development ratings in Sub-Sahara were Mauritius (83.85); Botswana (78.33); South Africa (70.62); Namibia (63.72) and Swaziland (59.38). On the other hand, there were three countries which had average scores for Human Development which were below half (50/100) and these were Mozambique (49.87); Madagascar (46.25) and lastly Angola (45.57).

As a result, these results show that Mauritius, Botswana, South Africa, Namibia and Swaziland in terms of Human Development are the countries ranked as the best in Sub-Sahara whilst those ranked as having the worst Human Development were Mozambique, Madagascar and Angola. Conversely, the Human Development scores for Angola, Zambia and Zimbabwe improved the most whilst those for Madagascar and Mozambique declined the most during the 2010-2015 period.

4.6 Overall Governance

This Overall Governance indicator for the years 2010 to 2015 for each of the Sub-Saharan countries, namely; Angola, Botswana, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe are shown in table 4.9 and 4.10.

Table 4.9 Overall Governance Indicator Scores for Sub-Saharan Africa Countries (2010-2015)

	2010	2011	2012	2013	2014	2015	Trend 2010-2015
Angola	39.2	39.6	40.3	39.5	39.2	39.2	*0*
Botswana	75.2	75.8	75.8	75.5	73.8	73.7	*-1.5*
Lesotho	56.6	56.9	57.5	58.2	57.6	57.8	*1.2*
Madagascar	48.2	46	45.3	46.3	46.7	48.5	*0.3*
Malawi	57.8	57.2	57.5	57.9	56.2	56.6	*-1.2*
Mauritius	80.3	81.1	81.5	80.8	80	79.9	*-0.4*
Mozambique	54.2	53.9	53.5	52.1	52.1	52.3	*-1.9*
Namibia	67	67.2	66.9	68	69.7	69.8	*2.8*
South Africa	69.9	70.2	69.2	69.4	69.5	69.4	*-0.5*
Swaziland	49.6	49.2	49.5	50.6	49.9	49.1	*-0.5*
Zambia	56.5	58	59.1	58.9	58.7	58.8	*2.3*
Zimbabwe	35.3	36.9	38.4	40.4	42.1	44.3	*9*

Source: IIAG (2016)

The table 4.9 above shows the Overall Governance indicator for the years 2010 to 2015 according to the IIAG annual reports for each of the Sub-Saharan countries. The table above shows that the Overall Governance scores for Botswana, Malawi, Mauritius, Mozambique, South Africa and Swaziland dwindled throughout the 2010 to 2015 period with worst affected being Mozambique (-1.9), Botswana (-1.5) and Malawi (-1.2). However, the Overall Governance scores for Lesotho, Namibia, Madagascar, Zambia and Zimbabwe rose throughout the same period with the most improved countries being Zimbabwe (9), Namibia (2.8) and Zambia (2.3).

4.6.1 Descriptive statistics for Overall Governance indicator in Sub-Sahara

Furthermore, a descriptive statistics table showing the means, minimum, maximum scores for the overall region as well as for each country were derived from the Overall Governance scores for the period 2010 to 2015. The results are shown in table 4.10 below:

Table 4.10 Descriptive Statistics for Overall Governance Indicator

	Mean	Min.	Max.	Std. Dev.	Count
Overall for Sub-Saharan region	*57.9000*	*35.30*	*81.50*	*12.84850*	*6*
Mauritius	80.6	79.90	81.50	0.63875	*6*
Botswana	74.7667	73.70	75.80	0.96885	*6*

South Africa	69.6	69.20	70.20	0.37417	*6*
Namibia	68.1	66.90	69.80	1.33566	*6*
Zambia	58.33	56.50	59.10	0.97297	*6*
Lesotho	57.433	56.60	58.20	0.58878	*6*
Malawi	57.200	56.20	57.90	0.67823	*6*
Mozambique	53.0167	52.10	54.20	0.96003	*6*
Swaziland	49.65	49.10	50.60	0.54681	*6*
Madagascar	46.833	45.30	48.50	1.26438	*6*
Zimbabwe	39.566	35.30	44.30	3.35241	*6*
Angola	39.5	39.20	40.30	0.42895	*6*

Source: IIAG (2016)

Table 4.10 above shows that the average Overall Governance indicator for Sub-Saharan countries was 57.9 which is above half (50/100) and the country that recorded the highest score was Mauritius with 81.50, which was in 2012, whilst the lowest was Zimbabwe with 35.30, which was in 2010. Moreover, the top 5 countries with the highest average Overall Governance rating where namely Mauritius (80.6); Botswana (74.77); South Africa (69.6) and Namibia (68.1). On the other hand, there were four other countries that had average scores for Overall Governance which were below half (50/100) namely Swaziland (49.65); Madagascar (46.83); Zimbabwe (39.57) and lastly Angola (39.5).

Consequently, these results show that in terms of Overall Governance the countries ranked as the best in Sub-Sahara were Mauritius, Botswana, South Africa and Namibia whilst the countries that had average scores for Overall Governance which were below half (50/100) were Swaziland, Madagascar, Zimbabwe and Angola. On the contrary, the Overall Governance scores for Botswana, Malawi and Mozambique declined the most during the period whilst for Namibia, Zambia and Zimbabwe they were the countries that improved the most throughout the same period.

4.7 Flow of Foreign Development Aid in Sub-Saharan Africa

This section shall focus on the flow of foreign development aid (OECD, 2016) in the following Sub-Saharan African countries, namely; Angola, Botswana, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe. The secondary data to be discussed and analysed were the foreign development aid flow for the years 2010 to 2015 showed in OECD statistics for each of the Sub-Saharan African countries named above.

4.7.1 Foreign Development Aid

This discusses the flow of foreign development aid for the years 2010 to 2015 for each of the Sub-Saharan African countries, namely; Angola, Botswana, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Zambia and Zimbabwe. The scores are shown in table 4.11 and 4.12 below.

Table 4.11 Flow of Foreign Development Aid for Sub-Saharan Africa Countries (2010-2015)

	2010	2011	2012	2013	2014	2015	Trend 2010-2015
Angola	218.23	186.62	222.67	255.14	768.54	835.6	*617.37*
Botswana	144.12	645.18	121.41	12.65	122.35	-21.32	*-165.44*
Lesotho	232.9	261.52	280.18	322.18	99.88	83.14	*-149.76*
Madagascar	599.65	552.27	350.69	364.29	404.32	520.05	*-79.6*
Malawi	946.01	711.5	1068.49	1030.1	841.06	1048.48	*102.47*
Mauritius	423.09	221.57	134.05	320.08	133.89	71.96	*-351.13*
Mozambique	1867.61	1861.23	1963.98	2240.6	1956.96	1895.25	*27.64*
Namibia	361.28	254.05	215.23	219.95	264.54	162.02	*-199.26*
South Africa	1875.3	2193.31	2700.41	1775.53	1787.53	1665.51	*-209.79*
Swaziland	67.99	101.42	75.04	104.12	81.09	98.82	*30.83*
Zambia	729.17	938.22	908.96	1026.59	919.99	861.66	*132.49*
Zimbabwe	682.5	655.81	943.89	759.19	690.99	765	*82.5*

Source: OECD statistics (2016) and World Bank (2016)

The table 4.11 above shows the flow of foreign development aid for the years 2010 to 2015 to each of the Sub-Saharan countries. The table above shows that Botswana, Lesotho, Madagascar, Mauritius, Namibia and South Africa's flow of foreign development aid could be considered to have decreased during the 2010 to 2015 period with the worst affected countries being Mauritius (-US$351.13m), South Africa (-US$209.79m) and Namibia (-US$199.26). On the other hand, the flow of foreign development aid in Angola, Malawi, Mauritius, Mozambique, Swaziland, Zambia and Zimbabwe experienced an upturn throughout the same period. Furthermore, the countries that recorded the highest upturn in foreign development aid flow were Angola (US$617.37m), Malawi (US$102.47m) and Zimbabwe (US$82.5m).

4.7.2 Descriptive statistics for Flow of Foreign Development Aid in Sub-Saharan Africa

Additionally, a descriptive statistics table showing the means, minimum, maximum scores for the overall region as well as for each country were derived from the flow of foreign development aid for the period 2010 to 2015. The results are shown in table 4.12 below:

Table 4.12 Descriptive Statistics for Flow of Foreign Development Aid

	Mean	Min.	Max.	Std. Dev.	Count
Overall for Sub-Saharan region	*697.2678*	*-21.32*	*2700.41*	*156.98*	*6*
South Africa	1999.60	1665.51	2700.41	387.53	*6*
Mozambique	1964.27	1861.23	2240.60	142.22	*6*
Malawi	940.94	711.50	1068.49	140.31	*6*
Zambia	897.43	729.17	1026.59	98.57	*6*
Zimbabwe	749.56	655.81	943.89	104.70	*6*
Angola	414.46	186.62	835.60	301.76	*6*
Madagascar	465.21	350.69	599.65	105.52	*6*
Botswana	170.73	-21.32	648.18	241.85	*6*
Namibia	246.18	162.02	361.28	66.90	*6*
Mauritius	217.44	71.60	423.09	132.62	*6*
Lesotho	213.30	83.14	322.18	98.84	*6*
Swaziland	88.08	67.99	104.12	15.32	*6*

Source: Researcher

Table 4.12 above shows that the average flow of foreign development aid for Sub-Saharan Africa was US$697 million and the country which received the highest foreign development aid was South Africa with US$2.7 billion, which they received in 2012, whilst the lowest was Botswana with –US$21.32 million, which was received in 2015. Furthermore, the countries with the highest average foreign development aid flow in Sub-Saharan Africa were South Africa (US$1.999 billion); Mozambique (US$1.964 billion); Malawi (US$940 million); Zambia (US$897 million); Zimbabwe (US$749 million); Angola (US$414 million) and Madagascar (US$465 million). On the other hand, those countries which received the lowest average foreign development aid were Botswana (US$170 million); Namibia (US$246 million); Mauritius (US$217 million); Lesotho (US$213 million) and finally Swaziland (US$88 million).

Consequently, these results show that South Africa, Mozambique, Malawi, Zambia, Zimbabwe, Angola and Madagascar in terms of foreign development aid flow are the countries ranked as receiving the most foreign development aid in Sub-Saharan Africa whilst those ranked to have received the least foreign development aid flow were Botswana, Namibia, Mauritius, Lesotho and Swaziland. Furthermore, there was a decreasing trend in foreign development aid flow mainly for South Africa, Mauritius and Namibia whilst during the same period it increased for Angola, Malawi and Zimbabwe.

SECTION C: INFERENTIAL ANALYSES

This section provides the inferential analyses which involved the use of Spearman's coefficient of correlation as well as regression analysis. The correlation analysis was undertaken to quantify the strength and type of relationship/association between the independent variables (Safety and Rule of Law; Participation and Human Rights; Sustainable Economic Opportunities and Human Development) and the dependent variable (Foreign Development Aid). The multiple regression analysis was also done to establish the effect and impact of independent variables (Safety and Rule of Law; Participation and Human Rights; Sustainable Economic Opportunities and Human Development) on the dependent variable (Flow of Foreign Development Aid).

4.8 Correlation Analysis

Below in table 4.13 are the results of the correlation analysis undertaken to quantify the strength and type of relationship/association between the dependent variable and the independent variables. The independent variables were namely: Safety and Rule of Law; Participation and Human Rights; Sustainable Economic Opportunities and Human Development: whilst the dependent variable which was the Flow of Foreign Development Aid in Sub-Saharan Africa.

Table 4.13 Correlations Test

		Foreign Development Aid	Safety and Rule of law	Participation	Sustainable Economic opportunities	Human Development	Overall Governance
Spearman's rho Foreign Development Aid	Correlation Coefficient	1.000	-.258*	-.027	-.159	-.237*	-.115
	Sig. (2-tailed)	.	.029	.820	.181	.045	.338
	N	72	72	72	72	72	72

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 4.13 above shows that there is a correlation coefficient of -0.258 between Foreign Development Aid and Safety and Rule of Law. Furthermore, the sig-value for the two variables was 0.029 which is less than the significance level of 0.05. This entails that there is a statistically significant weak but negative relationship between Safety and Rule of Law and Foreign Development Aid Flow in Sub-Saharan Africa.

On the other hand, the table above also shows that there is a correlation coefficient of -0.027 between Foreign Development Aid and Participation and Human Rights. In addition, the sig-value for the two variables was 0.820 which is more than the significance level of 0.05. This means that there is a weak but negative relationship between Participation and Human Rights and Foreign Development Aid Flow in Sub-Saharan Africa however it is not statistically significant.

Moreover, according to the table above there is a correlation coefficient of -0.159 between Foreign Development Aid and Sustainable Economic Opportunities. Additionally, the sig-value for the two variables was 0.181 which is more than the significance level of 0.05. This means that even though the correlation coefficient value entail that there is a weak but negative relationship between Sustainable Economic Opportunities and Foreign Development Aid Flow in Sub-Saharan Africa however the sig-value above 0.05 shows that the association and relationship between the two variables is not statistically significant.

The table above also highlights that there is a correlation coefficient of -0.237 between Foreign Development Aid and Human Development. Furthermore, the sig-value for the two variables was 0.045 which is less than the significance level of 0.05. This entails that there is a statistically significant weak but negative relationship between Human Development and Foreign Development Aid Flow in Sub-Saharan Africa.

Furthermore, in terms of the correlation between Overall Governance and Flow of Foreign Development Aid the table above shows that there is a correlation coefficient of -0.115 and a sig-value of 0.338 which is greater than the significance level of 0.05. This means that even though the correlation coefficient value entail that there is a weak but negative relationship between Overall Governance and Foreign Development Aid Flow in Sub-Saharan Africa the sig-value above 0.05 however shows that the association and relationship between the two variables is not statistically significant.

Therefore, the findings show that there is no statistically significant relationship or association between the Participation and Human Rights and Sustainable Economic Opportunity indicators and the Flow of Foreign Development Aid. This could mean that Participation and Human Rights indicators like political participation, human rights and gender issues as well as Sustainable Economic Opportunity indicators like the state of a country's public management,

business environment, infrastructure and rural sector have no relationship or association with the flow of Foreign Development Aid in Sub-Saharan Africa.

On the other hand, the findings from the correlation analysis also show that there is a statistically significant but negative relationship or association between Safety and Rule of Law and Human Development and the Flow of Foreign Development Aid. This might mean that Safety and Rule of Law indicators like rule of law, accountability, personal safety and national security as well as Human Development indicators like the state of a country's welfare, education and health sector have a negative relationship or association with the flow of Foreign Development Aid in Sub-Saharan Africa.

However, the findings show that there is no statistically significant relationship or association between Overall Governance and the Flow of Foreign Development Aid. This could mean that a country's Overall Governance score has no relationship or association with the flow of Foreign Development Aid in Sub-Saharan Africa.

Therefore, these findings are in line with Kurul and Yalta (2017) who postulate that not all governance indicators have a significant impact on the Flow of Foreign Development Aid in developing countries. They noted that corruption control, government effectiveness and voice and accountability had a significant positive impact on the flow of development assistance from abroad. Furthermore, this discovery has shown that reducing corruption and excessive bureaucracy, improving the political system, transparency and accountability could lead to an increase in the flow of Foreign Development Aid. Furthermore, the implementation of policies to increase citizen participation in the political system, for example, by selecting their own government, as well as the protection of civil rights, can also increase Foreign Development Aid inflows.

4.9 Regression Analysis – Governance Indicators

The section below shows that in table 4.14 there are the results of the regression analysis undertaken to establish the effect and impact of the governance indicators namely: Safety and Rule of Law; Participation and Human Rights; Sustainable Economic Opportunities and Human Development: and the Flow of Foreign Development Aid in Sub-Saharan Africa.

Table 4.14 Coefficients for Governance Indicators - Dependent Variable: Foreign Development Aid

	B	Std. Error	Standardized Coefficients	t	Sig.
Constant	2179.9	459.191		4.747***	0.0000
Safety and Rule of law	-65.962	12.461	-1.343	-5.294***	0.0000
Participation	25.978	7.585	0.587	3.425***	0.0010
Sustainable Economic opportunities	50.542	13.691	1.161	3.692***	0.0000
Human Development	-23.329	13.469	-0.42	-1.732*	0.0880
R2	0.379;				
F test	10.232;				
Prob > F	0.0000				

*Note: *** and * denotes significance at 1% and 10% respectively*

Table 4.14 above shows that there is a R^2 value of 0.379 which means that the proportion of the Flow of Foreign Development Aid that can be explained by all the governance indicators, namely, Safety and Rule of Law; Participation and Human Rights; Sustainable Economic Opportunities and Human Development, is 37.9%. The R-squared percentage is only 37.9% because there could be numerous other factors and issues that have an effect on the Flow of Foreign Development Aid to countries in Sub-Saharan Africa besides the four governance indicators. The table above also shows that the independent variables statistically and significantly predict the dependent variable, F (4, 67) = 10.232, p=0.000 which is $p<0.05$. Hence these results entail that the data for this regression model is robust and a good fit.

The table above shows that the constant had a p-value of 0.000, which was less than 0.05, entailing that all the governance indicators (Safety and Rule of Law; Participation and Human Rights; Sustainable Economic Opportunities and Human Development) combined have a statistically significant impact on the Flow of Foreign Development Aid in Sub-Saharan African countries.

According to the table 4.15 above the beta value for Safety and Rule of Law (β= -1.343; $p<0.05$) was negative and statistically significant which means that Safety and Rule of Law indicators have a negative effect on the Flow of Foreign Development Aid in Sub-Saharan African countries. Furthermore, the B-coefficient was -65.962 which entails that an increase in the Safety and Rule of Law indicators like rule of law, accountability, personal safety and national security by one unit could lead to a decrease in the Flow of Foreign Development Aid in Sub-Saharan Africa by US$65.962 million per year. This could be because most Foreign Development Aid in Sub-Saharan Africa is directed towards addressing safety and rule of law issues for example funding of programs and projects that enhance rule of law, accountability, personal safety and national security. Therefore, an increase or improvement in a country's rule of law, accountability, personal safety and national security could also lead to a reduction in

the Flow of Foreign Development Aid that addressed safety and rule of law issues/programs or projects. This in turn would also reduce the total amount of Foreign Development Aid to that country as well. However, these results are in line with Li and Resnick (2003) believe that an improvement in safety and rule of law in the host country has a negative impact on FDI inflows as compared to those with undesirable safety and rule of law levels who use authoritarian means to repress workers unions, provision of a lower cost work force, entry deals, as well as operation affordance. On the other hand, they are contrary to Jensen (2013) and Ahlquist (2016) who argue that more democratic countries attract more FDI than authoritarian countries because democracies tend to reduce the political risks of nationalization and expropriation and increase the credibility of the host country for foreign investors.

Furthermore, the table above also shows that the beta value for Participation and Human Rights (β= 0.587; $p<0.05$) was positive and statistically significant which means that Participation and Human Rights indicators have a positive effect on the Flow of Foreign Development Aid in Sub-Saharan African countries. Additionally, the B-coefficient was 25.978 which entails that a single score improvement in Participation and Human Rights indicators like political participation, human rights and gender issues could lead to an increase in the Flow of Foreign Development Aid in Sub-Saharan Africa by US$25.978 million per year. This is because some governments of donor countries sanction human rights violations by reducing foreign aid, and reward those with good human rights and free political participation with higher Flow of Foreign Development Aid (Lebovic and Voeten, 2009: Nielsen, 2013). These findings are also in line with Jensen (2013) who states that failure by donors, to apply conditionality in inducing political and institutional reforms in recipient countries resulted in the introduction of ex-post selectivity whereby more foreign development aid is allocated to countries with a proven track record of ownership and commitment towards comprehensive reform and good governance. However, the findings are contrary to some scholars, such as Alesina and Dollar (2010) and Neumayer (2013), who argue that donor governments prioritize geostrategic or economic considerations over human rights that it is unlikely that aid workers will systematically punish beneficiary governments for violations human rights.

Table 4.15 above also show that the beta value for Sustainable Economic Opportunities indicators (β= 1.161; $p<0.05$) was positive and statistically significant which means that Sustainable Economic Opportunities indicators have a positive effect on the Flow of Foreign Development Aid in Sub-Saharan African countries. Moreover, the B-coefficient was 50.542 which entails that an increase in Sustainable Economic Opportunities indicators by one score

could lead to an increase in the Flow of Foreign Development Aid in Sub-Saharan Africa by US$50.542 million per year. This could be because that donor governments prioritize economic considerations (Alesina and Dollar, 2010; Neumayer, 2013). These findings are also agreed to by Daude and Stein (2017) who believe that unpredictable policies, excessive regulatory burden and lack of commitment of the Government to prevent the flow of FDI. Moreover, Gani (2017) adds that improving the control of corruption, regulatory quality and the efficiency of government has a positive effect on the entry of FDI.

The table above also shows that the beta value for Human Development (β= -1.343) was negative, but, its p-value was 0.088 ($p>0.05$) which means that the results are statistically insignificant. Therefore, these findings show that Human Development indicators like the state of a country's welfare, education and health sector do not have an effect or impact on the Flow of Foreign Development Aid in Sub-Saharan African countries.

Therefore, these findings entail that the combined effect of all the governance indicators could lead to a positive inflow of over US$2.179 billion per year Foreign Development Aid to Sub-Saharan Africa. Furthermore, it was also noted that only Participation and Human Rights as well as Sustainable Economic Opportunities indicators as individual governance indicators have a positive effect or impact on the Flow of Foreign Development Aid in Sub-Saharan African countries, with Sustainable Economic Opportunities indicators having the most individual effect (US$50.542 million per year) on Foreign Development Aid flow.

However, Safety and Rule of Law indicators were discovered to have a negative effect on the Flow of Foreign Development Aid in Sub-Saharan African countries. On the other hand, the analysis also noted that Human Development indicators do not have an effect or impact on the Flow of Foreign Development Aid in Sub-Saharan African countries.

4.10 Regression Analysis - Overall Governance Scores

The results of the regression analysis undertaken to establish the effect and impact of the overall governance score on the Flow of Foreign Development Aid in Sub-Saharan Africa are discussed in this section and the results are shown in table 4.15 below:

Table 4.15 Coefficients for Overall Governance Scores

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	795.798	365.060		2.180	.033
	Overall Governance	-1.702	6.157	-.033	-.276	.783

a. Dependent Variable: Foreign Development Aid; R^2=0.033; F=0.076; P=0.783

According to table 4.15 above there is a R^2 value of 0.001 which means that the proportion of variance in the Flow of Foreign Development Aid that can be explained by a country's Overall Governance score is only 3.3%. Furthermore, the table above shows that the beta value for Overall Governance score (β= -0.033) was negative, whilst, the p-value was 0.783 (p>0.05) which means that the results are statistically insignificant. Consequently, these findings show that a country's Overall Governance score does not have an effect or impact on the Flow of Foreign Development Aid in Sub-Saharan African countries.

CHAPTER FIVE
RESEARCH CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The previous chapter analysed and discussed the results and findings from the secondary data which addressed the governance indicators in Sub-Saharan Africa for 2010 to 2015 according to IIAG as well as their Foreign Development Aid flow during the same period according to OECD and World Bank statistics. This chapter shall provide the conclusions for this study brought about from the research findings, analysis and discussion in the previous chapter. These conclusions shall address the research questions of this study that were proposed in the first chapter.

5.2 Summary of Findings

The study established that South Africa, Mozambique, Malawi, Zambia, Zimbabwe, Angola and Madagascar are the countries ranked as receiving the most foreign development aid whilst those that received the least foreign development aid flow were Botswana, Namibia, Mauritius, Lesotho and Swaziland. However, foreign development aid flow for South Africa, Mauritius and Namibia was on a downward trend during the 2010 to 2015 period but it was on an upward trend for Angola, Malawi and Zimbabwe.

Furthermore, in terms of Overall Governance the countries ranked as the highest were Mauritius, Botswana, South Africa and Namibia whilst the countries that had average Overall Governance scores which were the lowest were Swaziland, Madagascar, Zimbabwe and Angola. On the contrary, the Overall Governance scores for Botswana, Malawi and Mozambique declined the most during the period whilst Namibia, Zambia and Zimbabwe improved the most throughout the same period.

According to IIAG (2016) in terms of Safety and Rule of Law the countries ranked the best were Botswana, Mauritius, Namibia, South Africa and Zambia whilst those ranked as the worst were Madagascar, Angola and Zimbabwe. However, the Safety and Rule of Law indicator scores for Madagascar and Zimbabwe seem to have improved the most whilst those for Botswana, Malawi, Mauritius and Mozambique have been on a downward trend during the 2010-2015 period.

Moreover, in terms of Participation and Human Rights the countries ranked as the best were Mauritius, Namibia, South Africa, Botswana, Lesotho and Malawi whilst those ranked as having the worst Participation and Human Rights were Zimbabwe, Angola and Swaziland. However, the Participation and Human Rights scores for Madagascar, Namibia and Zimbabwe improved whilst those for Angola, Botswana and Swaziland throughout the period.

The study also established that in terms of Sustainable Economic opportunity the countries ranked as the best were Mauritius, South Africa, Botswana and Namibia whilst the rest of the other countries had average scores which were below half (50/100) with the worst being Madagascar, Angola and Zimbabwe. Conversely, the Sustainable Economic opportunity scores for Namibia, Swaziland, Zambia and Zimbabwe seem to have improved whilst those for Madagascar, Malawi and Angola deteriorated the most during the 2010-2015 period.

Furthermore, it was also noted that Mauritius, Botswana, South Africa, Namibia and Swaziland in terms of Human Development were the countries ranked as the best whilst Mozambique, Madagascar and Angola had the worst Human Development average scores for the 2010-2015 period. On the other hand, the Human Development scores for Angola, Zambia and Zimbabwe were the ones which improved the most whilst those for Madagascar and Mozambique declined the most during the 2010-2015 period.

5.2.1 Regression Analysis Results

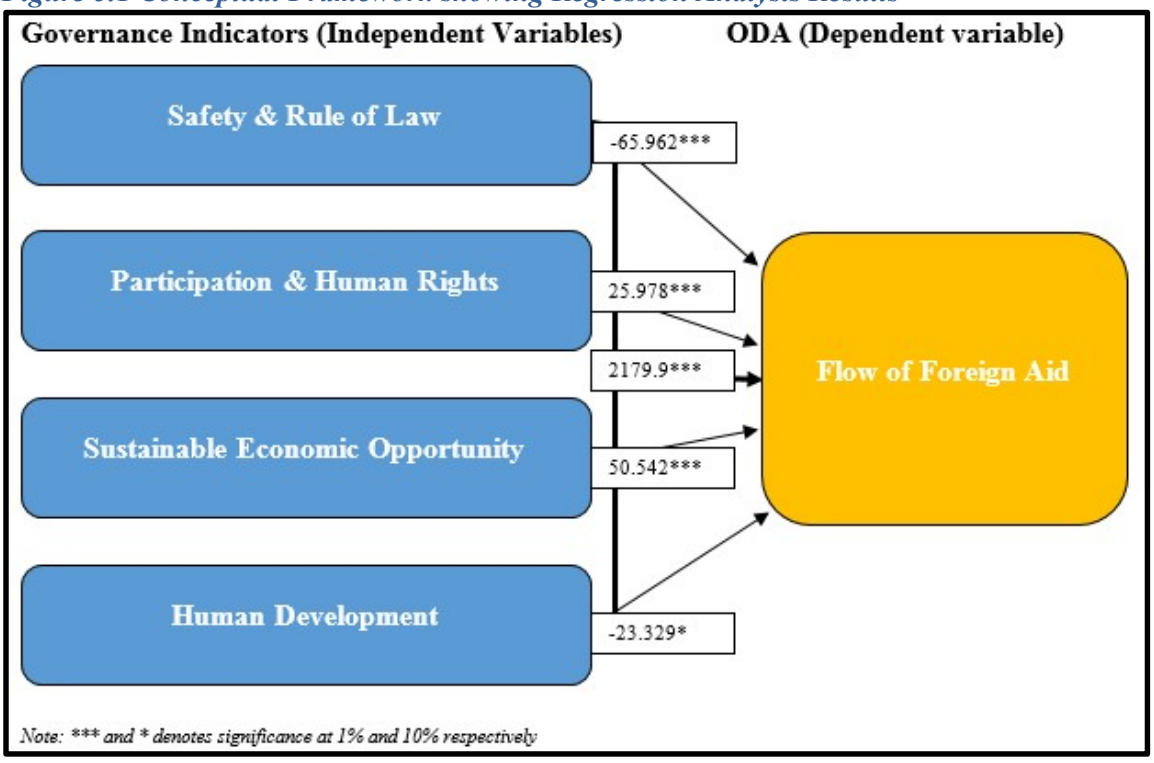
The regression analysis results show that the combined effect of all the governance indicators led to an increase in the inflow of Foreign Development Aid of over US$2.179 billion per year in Sub-Saharan Africa. This is in line with the conceptual framework which was proposed in Chapter 2 and also illustrated with the regression analysis results in the figure 5.1 below.

Furthermore, it was also noted that only Participation and Human Rights indicators as well as Sustainable Economic Opportunities indicators as individual governance indicators have positive effect or impact on the Flow of Foreign Development Aid in Sub-Saharan African countries, with Sustainable Economic Opportunities indicators having the most individual effect (US$50.542 million per year) on Foreign Development Aid flow. Furthermore, this is in line with the conceptual framework which was proposed in Chapter 2 and illustrated with the regression analysis results in the figure 5.1 below.

However, Safety and Rule of Law indicators were discovered to have a negative effect on the Flow of Foreign Development Aid in Sub-Saharan African countries. Whilst it was also noted that Human Development indicators do not have an effect or impact on the Flow of Foreign Development Aid in Sub-Saharan African countries. Moreover, though the results show a negative effect for Safety and Rule of Law the impact was still noted to be statistically significant at $p<0.05$. Therefore, this is in line with the conceptual framework which was proposed in Chapter 2 and also illustrated with the regression analysis results in the figure 5.1 below. On the other hand, Human Development indicators do not have an effect or impact on the Flow of Foreign Development Aid in Sub-Saharan African countries which is contrary to the conceptual framework which was proposed in Chapter 2 and also illustrated with the regression analysis results in the figure 5.1 below.

The findings also showed that a country's Overall Governance score does not have an effect or impact on the Flow of Foreign Development Aid in Sub-Saharan African countries. This unfortunately is contrary to the conceptual framework which was proposed in chapter 2 and also illustrated in the figure 5.1 below with the regression analysis results.

Figure 5.1 Conceptual Framework showing Regression Analysis Results



Source: Researcher and study results from regression analysis (2017)

5.3 Conclusions

5.3.1 Is the overall governance quality rating important in determining the flow of foreign aid to developing countries in sub-Saharan Africa?

The correlation and regression analysis results showed that the overall governance quality rating was not important in determining the flow of foreign aid to developing countries in sub-Saharan Africa. The analyses showed that there was no statistical significant relationship between overall governance quality rating and the flow of foreign aid to developing countries in sub-Saharan Africa nor did the overall governance quality rating a statistical significant effect on the flow of foreign aid to developing countries in sub-Saharan Africa. Furthermore, one can note that the only countries with a high overall governance quality rating that also had a high flow of foreign aid were South Africa and Zambia.

On the other hand, the regression analysis results showed that the combined effect of all the governance indicators has a statistical significant effect on the flow of foreign aid to developing countries in sub-Saharan Africa. The study established that all the governance indicators combined could lead to a positive inflow of over US$2.179 billion per year Foreign Development Aid to Sub-Saharan Africa.

5.3.2 What impact does each of the governance indicators have on the flow of foreign aid to developing nations in sub-Saharan Africa?

According to the regression analysis tests only Participation and Human Rights indicators as well as Sustainable Economic Opportunities indicators have a positive effect or impact on the Flow of Foreign Development Aid in Sub-Saharan African countries, with Sustainable Economic Opportunities indicators having the highest impact (average of US$50.542 million per year) on Foreign Development Aid flow whilst Participation and Human Rights indicators' impact was an average of US$50.542 million per year.

However, Safety and Rule of Law indicators were discovered to have a negative effect on the Flow of Foreign Development Aid in Sub-Saharan African countries decreasing by an average of US$65.962 million per year. Furthermore, it was also established that Human Development indicators do not have an effect or impact on the Flow of Foreign Development Aid in Sub-Saharan African countries.

On the other hand, the regression analysis results showed that the combined effect of all the governance indicators has a statistical significant effect on the flow of foreign aid to developing countries in sub-Saharan Africa. The study established that all the governance indicators combined could lead to a positive inflow of over US$2.179 billion per year Foreign Development Aid to Sub-Saharan Africa.

5.4 Policy Implications of the Findings

Given the results of the study summarised above, it is essential for Sub-Saharan African countries to revisit their governance structures and policies to attract foreign development aid. Specifically, it is essential for countries to implement policies that promote Safety and Rule of Law as well as Human Development if they are to attract more foreign development aid which is a significant source of finance for development especially in Sub-Saharan Africa.

It is evident from the results of the study that donor agencies allocate most of their funding to governments that are more accountable and that respect the rule of law, personal safety of citizens and national security. It is therefore important for governments in Sub-Saharan Africa to implement national policies and government systems that promote these aspects. Furthermore, most donors are interested in funding human development projects such as welfare, education and health. It is therefore important for governments in Sub-Saharan Africa to implement economic policies that foster human development if they are to tap into this very essential source of development finance.

5.5 Recommendations for future research

The research was focused on Good governance, using IIAG indicators, as key to the flow of foreign development aid: sub-Saharan Africa perspective. Furthermore, the regression analysis also established that the proportion of the Flow of Foreign Development Aid that can be explained by all the governance indicators, namely, Safety and Rule of Law; Participation and Human Rights; Sustainable Economic Opportunities and Human Development, is 37.9%. Hence the researcher recommends that a study be done to determine the other factors and/or indicators used by the funding agencies in determining allocations. The literature in this area is limited particularly from the Sub-Saharan Africa perspective.

REFERENCES

1. Ahlquist, J. S. 2016. "Economic policy, institutions, and capital flows: portfolio and direct investment flows in developing countries." *International Studies Quarterly* 50: 681–704.
2. Akramov, K. T. 2006. Governance and Foreign Aid Allocation. (Research Report). Pardee Rand Graduate School. USA.
3. Akramov, K. T. 2012. *Foreign Aid Allocation, Governance, and Economic Growth*. Philadelphia, Pennsylvania: University of Pennsylvania Press (UPP)
4. Alesina, A. and David, D. 2010. "Who Gives Foreign Aid to Whom and Why?" *African Studies Review* 5:33–63.
5. Alesina, A., and D. Dollar. 2010. "Who Gives Foreign Aid to Whom and Why?" *Journal of Economic Growth* 5 (1): 33–63.
6. Apodaca, C., and M. Stohl. 2009. "Human Rights Policy and Foreign Assistance." *International Studies Quarterly* 43 (1): 185–198.
7. Arndt, C., and C. Oman. 2006. *Uses and Abuses of Governance Indicators.* Development Centre Study. Paris: Organization for Economic Cooperation and Development.
8. Asiedu, E. 2013. "Foreign Direct Investment, Natural Resources and Institutions." London: *International Growth Centre*.
9. Buchanan, B. G., Quan V. L, and Meenakshi R. 2012. "Foreign direct investment and institutional quality: Some empirical evidence." *International Review of Financial Analysis* 21: 81–89.
10. Burnside, C., and D. Dollar. 2000. "Aid, Policies, and Growth." *American Economic Review* 90 (4): 847–868.
11. Cassen, R. 1994. *Does Aid Work (2nd. ed.).* Oxford, UK: Oxford University Press.
12. Chenery, H. and Strout. A. 1966. Foreign Assistance and Economic Growth. *American Economic Review.* 56 (3): 679-733
13. Collier, P., and Dollar, D. 2002. Aid allocation and poverty reduction. *European Economic Review*. 46(8): 1475–1500.
14. Daude, C, and Stein. E. 2017. "The quality of institutions and foreign direct investment." *Economics and Politics Journal* 19: 317–44.
15. Dixit, A. 2009. "Governance Institutions and Economic Activity." *American Economic Review* 99 (1): 5–24.

16. Dollar, D., and Levin, V. 2005. “Sowing and reaping: institutional quality and project outcomes in developing countries.” *World Bank Policy Research Working Paper No. 3524.*
17. Dollar, D., and Levin, V. 2006. “The Increasing Selectivity of Foreign Aid, 1984-2003.” *Journal of World Development* 34 (12): 2034–2046.
18. Easterly, W., Levine, R., Dudley, L., and C. Montmarquette. 1976. “A Model of the Supply of Bilateral Foreign Aid.” *American Economic Review* 66 (1): 132–142.
19. Frey, R. and McNeil, A. J. 2000. “Estimation of Tail-Related Risk Measures for Heteroscedastic Financial Time Series: An Extreme Value Approach.” *Journal of Empirical Finance. 7: 271-300*
20. Frey, R. K., and Schneider, C. 1986. “Changing Aid Regimes? U.S. Foreign Aid from the Cold War to the War on Terror.” *Journal of Development Economics* 91: 185–197.
21. Gani, A. 2017. “Governance and foreign direct investment links: evidence from panel data estimations.” *Applied Economics Letters* 14: 753–56.
22. Glaeser, E., R. La Porta, F. L. de Silanes, and A. Shleifer. 2004. *Do Institutions Cause Growth?* NBER Working Paper 10568. Cambridge, MA, US: National Bureau of Economic Research.
23. Hall, R. E., and Jones, C. I. 1999. Why do some countries produce so much more output per worker than others? *Quarterly Journal of Economics*, 114(1): 83–116.
24. Hoy, P. 1998. Players and Issues in International Aid. West Hartford. CT: Kumarian Press
25. Iqbal, K. and Shah. A. 2008. “How do Worldwide Governance Indicators Measure Up?” *Paper presented at a World Bank Seminar. Washington DC. March, 26*
26. Jensen, N. M. 2013. “Democratic governance and multinational corporations: Political regimes and inflows of foreign direct investment.” *International Organization* 57: 587–616.
27. Kanbur, R. 2006. “Aid, Conditionality, and Debt in Africa.” In *Foreign Aid and Development,* edited by F. Tarp, 409–422. London: Routledge.
28. Kaplan, B. and Duchon, D. 1988. “Combining Qualitative and Quantitative Methods in Information Systems Research: A Case Study.” *MIS Quarterly Journal Vol. 12. 4: 576-581*
29. Katada, N., Saori. 1997. “Two Aid Hegemons: Japanese-US Interaction and Aid Allocation to Latin America and the Caribbean.” *World Development Journal*. 25. 931-945.

30. Kaufmann, D., A. Kraay, and P. Zoido-Lobaton. 1999. *Aggregating Governance Indicators.* Policy Research Working Paper 2195. Washington, DC: World Bank.
31. Kaufmann, D., and A. Kraay. 2002. *Governance Matters.* Policy Research Working Paper 2196. Washington, DC: World Bank.
32. Knack, S. 2010. *Aid Dependence and the Quality of Governance: A Cross-Country Empirical Analysis.* Policy Research Working Paper 2396. Washington, DC: World Bank.
33. Kurul, Z. and Yalta, A. Y. 2017. "Relationship between Institutional Factors and FDI Flows in Developing Countries: New Evidence from Dynamic Panel Estimation." *Department of Economics*, Hacettepe University, Ankara Turkey
34. Langdridge, D. and Hagger-Johnson, G. 2013. "Introduction to Research Methods and Data Analysis in Psychology (3rd ed.)." *New York, USA: Pearson Education Limited*
35. Lebovic, J. H. and Erik V. 2009. "The Cost of Shame: International Organizations and Foreign Aid in the Punishing of Human Rights Violators." *Journal of Peace Research* 46:79–97.
36. Levine, R., and D. Renelt. 2006. "A Sensitivity Analysis of Cross-Country Growth Regressions." *American Economic Review* 82 (4): 942–963.
37. Li, Q, and Resnick, A. 2003. "Reversal of fortunes: Democratic institutions and foreign direct investment inflows to developing countries." *International Organization* 57: 175–211.
38. Maizels, A., and M. Nissanke. 1984. "Motivations for Aid to Developing Countries." *World Development* 12 (9): 879–900.
39. McGillivray, M. 2004. "Descriptive and Prescriptive Analyses of Aid Allocation: Approaches, Issues, and Consequences." *International Review of Economics and Finance* 13 (3): 275–292.
40. McGillivray, M., and O. Morrissey. 2000. "Aid Fungibility in *Assessing Aid:* Red Herring or True Concern?" *Journal of International Development* 12 (3): 413–428.
41. Mo Ibrahim Foundation. IIAG Reports. 2016. Retrieved from *http://mo.ibrahim.foundation/media/events/2016-iiag-decade-african-governance/*
42. Nardo, M., Saisana, M., Saltelli, A., Tarantola, S., Hoffman, A., Giovannini, E. 2005. "Handbook on Constructing Composite Indicators: Methodology User Guide." *OECD Publishing. Paris*
43. Neumayer, E. 2013. "Is Respect for Human Rights Rewarded? An Analysis of Total Bilateral and Multilateral Aid Flows." *Human Rights Quarterly* 25(2):510–527.

44. Neumayer, E. 2012. *The Pattern of Aid Giving: The Impact of Good Governance on Development Assistance.* London: Routledge Studies in Development Economics.
45. Nielsen, R. 2013. "Rewarding Human Rights? Selective Aid Sanctions Against Repressive States." *International Studies Quarterly* 52(9):1–13.
46. OECD (Organisation for Economic Co-operation and Development). 2016. *Reporting Directives for the Credit Reporting System.* Paris.
47. Park, H. M. (2011). "Practical guides to panel data modeling: a step-by-step analysis using stata." *Tutorial Working Paper. Graduate School of International Relations, International University of Japan.*
48. Polit, D. and Hungler, P. 1999. "Nursing Research: Principles and Methods Study Guide. (6th ed.)" *Mishawaka, Indiana: Lippincott Williams and Wilkins Publishers*
49. Rivera-Batiz, F. L. 2002. "Democracy, Governance, and Economic Growth: Theory and Evidence." *Review of Development Economics* 6 (2): 225–247.
50. Roodman. G 2003. "Aid, Policies, and Growth: Comment." *American Economic Review* 94 (3): 774–780.
51. Saunders, M. and Lewis, P. and Thornhill, A. 2009. "Research Methods for Business Students." *New Jersey, USA: Prentice Hall*
52. Svensson, J. 2010a. "When Is Foreign Aid Policy Credible? Aid Dependence and Conditionality." *Journal of Development Economics* 61 (1): 61–84.
53. The Political Risk Services (PRS) Group. "International Country Risk Guide (ICRG) Annual Report." *Retrieved from http://epub.prsgroup.com/products/international-country-risk-guide-icrg*
54. Trumbull, W. N., and H. Wall. 1994. "Estimating Aid Allocation Criteria with Panel Data." *Economic Journal* 104 (425): 876–882.
55. United Nations. 2002. Final outcome of the international conference on financing for development: note by the secretariat. A/CONF.198/3. Adopted by acclamation at the Summit Segment of the International Conference on Financing for Development on March 22, 2002 in Monterrey, Mexico.
56. White, H. 1992. "Macroeconomic Impact of Development Aid." *Journal of Development Studies* 28 (2): 163–240.
57. World Bank. 1998. *Assessing Aid: What Works, What Doesn't, and Why?* Washington, DC.

APPENDICES

Appendix 1 – IIAG 2010 Annual Assessment

Ibrahim Index of African Governance (IIAG) annual assessment for 2010					
Country	Overall Governance	Safety & Rule of law	Participation	Sustainable Economic opportunities	Human Development
Angola	39.2	43.7	37.8	32.2	43
Botswana	75.2	84.6	72.3	67.2	76.7
Lesotho	56.6	64.9	62.8	45.6	53.3
Madagascar	48.2	46.9	54.3	41.9	49.6
Malawi	57.8	65.6	62.3	49.8	53.4
Mauritius	80.3	83.8	75.2	79.1	83.1
Mozambique	54.2	60.7	57.6	47.8	50.7
Namibia	67	75.2	69.8	61.5	61.4
South Africa	69.9	69.2	71.4	69.2	69.9
Swaziland	49.6	58.7	31.9	49.5	58.3
Zambia	56.5	65	60.9	44.5	55.7
Zimbabwe	35.3	36.1	32.1	23.4	49.7

Appendix 2 – IIAG 2011 Annual Assessment

Ibrahim Index of African Governance (IIAG) annual assessment for 2011					
Country	Overall Governance	Safety & Rule of law	Participation	Sustainable Economic opportunities	Human Development
Angola	39.6	44.8	36.4	32	45.1
Botswana	75.8	85.1	72.5	67.6	77.8
Lesotho	56.9	66.1	62.2	45.7	53.4
Madagascar	46	45	52.9	39.1	47.1
Malawi	57.2	63.2	62.7	48.2	54.5
Mauritius	81.1	84	76.6	79.6	84.2
Mozambique	53.9	62	55.9	47.9	50.1
Namibia	67.2	76.1	70.9	60.1	61.8
South Africa	70.2	69.7	71.6	68.7	70.9
Swaziland	49.2	60	31.2	47.4	58.3
Zambia	58	67	62.2	47	56
Zimbabwe	36.9	36.4	33.8	23.9	53.5

Appendix 3 – IIAG 2012 Annual Assessment

Ibrahim Index of African Governance (IIAG) annual assessment for 2012					
Country	Overall Governance	Safety & Rule of law	Participation	Sustainable Economic opportunities	Human Development
Angola	40.3	45.4	37.1	32.4	46.3
Botswana	75.8	84.2	72.4	67.6	79.1
Lesotho	57.5	66.9	65.1	46	51.9
Madagascar	45.3	46.5	51.8	38	45
Malawi	57.5	64.6	64.4	46.6	54.5
Mauritius	81.5	84.4	76.9	80.2	84.2
Mozambique	53.5	60	57.2	47	50
Namibia	66.9	74.8	71	59	62.8
South Africa	69.2	65.7	71.1	68.9	71
Swaziland	49.5	58.6	32.5	48.2	58.5
Zambia	59.1	68.4	61.4	48	58.5
Zimbabwe	38.4	38.8	34.6	25.1	54.9

Appendix 4 – IIAG 2013 Annual Assessment

Ibrahim Index of African Governance (IIAG) annual assessment for 2013					
Country	Overall Governance	Safety & Rule of law	Participation	Sustainable Economic opportunities	Human Development
Angola	39.5	45.1	37	30.4	45.6
Botswana	75.5	83.9	71.9	66.6	79.4
Lesotho	58.2	66.3	66.6	47	52.8
Madagascar	46.3	49.6	54.2	37.2	44.2
Malawi	57.9	64.4	65.5	46.9	54.8
Mauritius	80.8	82.2	76.4	80.6	84.1
Mozambique	52.1	54.9	57.9	46.3	49.4
Namibia	68	74.5	70.9	61.6	65.1
South Africa	69.4	66.6	70.8	68.8	71.2
Swaziland	50.6	60.6	32.1	49.9	59.8
Zambia	58.9	67.1	59.7	48.8	60.1
Zimbabwe	40.4	42.4	37.9	27.2	53.9

Appendix 5 – IIAG 2014 Annual Assessment

Ibrahim Index of African Governance (IIAG) annual assessment for 2014					
Country	Overall Governance	Safety & Rule of law	Participation	Sustainable Economic opportunities	Human Development
Angola	39.2	44.5	35.5	29.9	46.7
Botswana	73.8	82.1	68.4	66.2	78.5
Lesotho	57.6	67.1	63.6	47.2	52.4
Madagascar	46.7	51.5	58.8	34.3	42.5
Malawi	56.2	62.5	64	44.9	53.2
Mauritius	80	82.3	74	79.8	83.8
Mozambique	52.1	54.2	58.6	46.1	49.5
Namibia	69.7	74.8	75.1	62.3	66.5
South Africa	69.5	66.9	72.2	68.8	70.1
Swaziland	49.9	60.2	29.1	49.6	60.7
Zambia	58.7	66.3	59.5	48.5	60.6
Zimbabwe	42.1	43.5	41.3	29.9	53.4

Appendix 6 – IIAG 2015 Annual Assessment

Ibrahim Index of African Governance (IIAG) annual assessment for 2015					
Country	Overall Governance	Safety & Rule of law	Participation	Sustainable Economic opportunities	Human Development
Angola	39.2	44.3	35.5	30.4	46.7
Botswana	73.7	81.9	69.3	65.2	78.5
Lesotho	57.8	67.1	64.6	45.6	53.8
Madagascar	48.5	55	64.7	33.1	49.1
Malawi	56.6	62.2	65.8	44.1	54.3
Mauritius	79.9	80.8	76	79	83.7
Mozambique	52.3	54	58.3	47.3	49.5
Namibia	69.8	76.1	76.1	62.2	64.7
South Africa	69.4	67.1	71.4	68.4	70.6
Swaziland	49.1	60.8	27.6	49.7	60.7
Zambia	58.8	66.5	61.4	46.4	61
Zimbabwe	44.3	43.8	45.1	34.6	53.8

Appendix 7 - Foreign Development Aid for Sub-Saharan countries (2010-2015)

Foreign Development Aid for Sub-Saharan countries from 2010-2015 (in US$ millions)

	2010	2011	2012	2013	2014	2015
Angola	218.23	186.62	222.67	255.14	768.54	835.6
Botswana	144.12	645.18	121.41	12.65	122.35	-21.32
Lesotho	232.9	261.52	280.18	322.18	99.88	83.14
Madagascar	599.65	552.27	350.69	364.29	404.32	520.05
Malawi	946.01	711.5	1068.49	1030.1	841.06	1048.48
Mauritius	423.09	221.57	134.05	320.08	133.89	71.96
Mozambique	1867.61	1861.23	1963.98	2240.6	1956.96	1895.25
Namibia	361.28	254.05	215.23	219.95	264.54	162.02
South Africa	1875.3	2193.31	2700.41	1775.53	1787.53	1665.51
Swaziland	67.99	101.42	75.04	104.12	81.09	98.82
Zambia	729.17	938.22	908.96	1026.59	919.99	861.66
Zimbabwe	682.5	655.81	943.89	759.19	690.99	765

Source: OECD statistics (2016) and World Bank (2016)